# **Release Notes**



IBM<sup>®</sup> Tivoli<sup>®</sup> Identity Manager Authentication Manager 7.1 Adapter

### Version 5.0.5

First Edition (August 17, 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 RSA Authentication Manager 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 RSA Authentication Manager Adapter Installation and Configuration Guide

### **Adapter Features and Purpose**

The RSA ACE Adapter is designed to create and manage accounts on Authentication Manager. The adapter can be run in "agentless" or "agent" mode depending on whether you prefer to install the adapter remotely from your Authentication Manager server. The adapter communicates using the Authentication Manager 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 WebSphere cluster. A single copy of the adapter can handle multiple Identity Manager Services. The 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	May 29, 2009				
Adapter Version	5.0.3				
Component Versions	Adapter Build	5.0.103			
	Profile	5.0.1004			
	Connector:	5.103			
	Dispatcher:	5.123 or higher			
Documentation	RSA Authentication Manager 7.1 Adapter Installation and Configuration Guide SC23-6146-00				
	Directory Integrator-Based RSA Authentication Manager 7.1 Adapter User Guide SC23-9967-00				

## **New Features**

Enhancement # (FITS)	Description
	Items included in current release
	None
	Items included in 5.04 release
	Version 5.1.3 of this adapter now support upgrading the connector if a prior version was installed.
	Items included in 5.03 release
MR091608646	Dispatcher Connection Throttling Specify the managed resource on which you want to control the maximum connections by using the dispatcher property Max Connection Count attribute
	Items included in 5.0.2 release
N/A	Supported the Dispacher attribute "AL FileSystem Path". This attribute is used to set path of file System, If AL is loaded from File system instead from ITIM then this property is useful.
N/A	Supported the Dispacher attribute "Max Connection Count". This attribute is used to control maximum Connection to the resource per service.
	Items included in 5.0.1 release
	Initial release for Tivoli Identity Manager v5.0

## Closed Issues

CMVC#	APAR#	PMR# / Description
		NOTE: Many of the closed APARs in this adapter rely on fixes in TDI v6.1.1 FP3. Fix Pack 3 (or later) is a prerequisite for this version of the adapter.
		Items closed in current version
	IZ78264	75349,025,724 Incorrect Service.Def entries in AuthMan 7,1 adapter causing CTGIMU552E error.
	IZ78501	01010,7TD,000 Search assembly (and others) should ignore case for Boolean variables.
		Items closed in 5.0.4version
	N/A	71589,180,000 Incompatibility between RSA and TDI Log4j libraries. Solves Log4j noSuchMethodException.
		Items closed in 5.0.3 version
	IZ50099	50331,025,724 AuthMan Adapter 5.0.1 Recon fails when run on TIM 5.0 FP4.  Note:
		Install TIM 5.0, Fix 5.0.0.4-TIV-TIM-IF0023, if values of attributes are in DN format. TIM5.0's this fixpack escapes DN values while storing it into TIM. Run a full recon after installing this maintenance update.
		Items closed in 5.0.2 version
	IZ45313	50340,025,724 ITIM 5 AuthMan 7.1 adapter LDAP err 92 - no group info – when viewing access entitlements.
		NOTE: the new adapter profile ship with this adapter version must be installed. Several of the attributes have changed from Binary to String datatype.
		NOTE: use of this adapter requires TIM Server IF23 or higher.
		Items closed in 5.0.1 version
		None

## 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.)
		<ul> <li>TDI Application Monitoring Console 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:</li> <li>(1) Change the TIM Service form for the TDI-based adapters to specify port 1099 (instead of the default 16231, or</li> <li>(2) configure the Application Monitoring Console to listen on port 16231 by modifying the api.remote.nameing.port property in the solution.properties file.</li> </ul>
N/A	N/A	Limit on ID Length Attribute User ID (eruid) is supported to maximum of 240 characters.
		Reconciliation Limited by WebLogic Message Maximum Length Reconciliation of the RSA system will be limited by the WebLogic message size parameter. Recons appear to succeed, but only 25,000 RSA accounts may be returned.
		Symptoms:  1) Recon returns only 25,000 accounts 2) The following error is seen in the adapter's ibmdi.log:
		Error while Initialize the connection [status:fail, connectorname:RsaPrincipal, operation:initialize,

exception:com.ibm.di.connector.RsaAuthMgr.exception.RsaAuthMgrException: weblogic.socket.MaxMessageSizeExceededException: Incoming message of size: '10000080' bytes exceeds the configured maximum of: '10000000' bytes for protocol: 't3s',

message:weblogic.socket.MaxMessageSizeExceededException: Incoming message of size: '10000080' bytes exceeds the configured maximum of: '10000000' bytes for protocol: 't3s',

class:com.ibm.di.connector.RsaAuthMgr.exception.RsaAuthMgrException].

#### Resolution:

The problem can be resolved by increasing the Max Message Length on WebLogic. The default size of MaxMessageSize is '10000080' bytes. The max value for this property is 2000000000. Update the MaxMessageSize property as follows:

- 1) Navigate to file ibmdiservice.props which is on timsol directory ==> e.g. E:\Program Files\ibm\TDI\V6.1.1\timsol\ ibmdiservice.props
- Replace "jvmcmdoptions= "to "jvmcmdoptions=-Dweblogic.MaxMessageSize=2000000000 "
- 3) Restart the dispatcher service.
- 4) Rerun the Recon operation.

### **Installation and Configuration Notes**

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

NOTE: Many of the closed APARs in this adapter rely on fixes in TDI v6.1.1 FP3. Fix Pack 3 (or later) is a prerequisite for this version of the adapter.

#### Corrections to Installation Guide

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

NOTE: the new adapter profile ship with this adapter version must be installed. Several of the attributes have changed from Binary to String data-type.

NOTE: use of this adapter requires TIM Server FP4 or higher.

#### Installation Notes for version 5.0.4

- 1) If the installed dispatcher version in TDIV6.1.1 is lower than V5.014, then uninstall the dispatcher and install the Dispatcher Version 5.014 or higher version.
- 2) Do not use "-awt" option with adapter uninstaller in console mode. However, the uninstaller can be run with "-console" and "-silent" options.
- 3) Please replace the log4j-1.2.11rsa-3.jar file in the TDI\_HOME/jvm/jre/lib/ext folder with the log4j-1.2.8.jar file present in the TDI\_HOME/3rdparty/others before installing or upgrading the current adapter release.
- 4) During upgradation the config.properties file is not updated .If the user wishes to do the same he should do the same manually.Also if new properties are added in the config.properties ,the user must add them manually by going to the timsol location.
- 5) Set the environmental variable CLASSPATH to java version 1.5 for adapter installation or upgradation

### **Configuration Notes**

The following configuration notes apply to this release:

#### Recon Limit Parameter

This parameter specified limits on the Recon size for several objects.

It indicates numbers of:

- Groups and users will be reconciled per Identity Source in Realm specified on Service Form.
- Roles, Security Domains and Identity Sources of the Realm will be reconciled.
- Unassigned and assigned tokens will be reconciled.

For example, if there are two identity sources in the realm specified on Service Form and Recon Limit is set to 1000 then, following number of entries will be returned in reconciliation.

- Max 1000 Security Domains in Realm
- Max 1000 Identity Sources in Realm (For current example, just 2 Identity Sources will be reconciled)
- Max 1000 Roles in Realm
- Max 1000 Unassigned Tokens in Realm
- Max 1000 Assigned Tokens in Realm
- Max 1000 Groups in first Identity Source
- Max 1000 Groups in second Identity Source
- Max 1000 Users in first Identity Source
- Max 1000 Users in second Identity Source

#### Data-Type and Profile Changes in Version 5.0.2 of the Adapter

From now onwards service form is changed to a tabbed format.

The newly added attributes are visible on service form under tab "Dispatcher Attributes".

To Support the Dispatcher attributes & get the Server host name: Added the attribute "Server Host Name".

Following is the list of attributes: with their Original as well as Modifies Data types.

Attribute Name		Original Data Type		Modified Data Type	
erRsaAmFirstName	ı	Binary	ı	String{1024}	I
erRsaAmLastName	l	Binary	I	String{1024}	I
erRsaAmCertdn	ı	Binary	ı	String{1024}	I
erRsaAmNotes		Binary	1	String{1024}	
erRsaAmMiddleName		Binary	1	String{1024}	
erRsaAmEmail		Binary	1	String{1024}	
erRsaAmSecurityDomain		Binary		String{255}	1
erRsaAmSDName		Binary	1	String{2048}	
erRsaAmAdmRoleName		Binary		String{2048}	
erRsaAmAdminRole		Binary		String{255}	
erRsaAmT1TokenNotes		Binary		String{1024}	
erRsaAmT2TokenNotes		Binary	1	String{1024}	
erRsaAmT3TokenNotes		Binary		String{1024}	

#### **Profile Change Notes:**

The details in this section are provided to completely describe the profile changes. The <u>recommended</u> solution is to install TIM server Fix Pack IF23, or higher, and to install the adapter profile as packaged. You should not need to refer to these alternate installation options unless you have previously installed the AuthMan 7.1 adapter or you are not willing to install the required TIM v5.0 Fix Pack.

1. If the customer is using the TIM 5.0 without any fixpack & want to use the Profile 5.0.1001, they will have to modify the schema.dsml file.

The required modifications are:

Delete the length of all attributes mentioned above.

```
Example :
<!-- erRsaAmFirstName
                                      -->
<attribute-type single-value = "true" >
   <name>erRsaAmFirstName
   <description>First Name</description>
   <object-identifier>1.3.6.1.4.1.6054.3.150.2.1/object-identifier>
   <syntax>1.3.6.1.4.1.1466.115.121.1.15{1024}</syntax>
</attribute-type>
Changed to
<!-- erRsaAmFirstName
<attribute-type single-value = "true" >
   <name>erRsaAmFirstName
   <description>First Name</description>
   <object-identifier>1.3.6.1.4.1.6054.3.150.2.1/object-identifier>
   <syntax>1.3.6.1.4.1.1466.115.121.1.15
</attribute-type>
```

- 2. If the Customer wants to use the Profile 5.0.1001 without making changes in the Schema.dsml, then they will have to upgrade the TIM to "TIM 5.0, Fix 5.0.0.4-TIV-TIM-IF0023".
- 3. If the customer is using the "TIM 5.0, Fix 5.0.0.4-TIV-TIM-IF0023" with Profile 5.0.1000, then they will have to follow the below steps to upgrade the Profile:
  - Delete the Service of the Profile.
  - Import the New Profile
- 4. If the customer wants the attributes length greater than the above mentioned in table, then they will have to modify the schema.dsml file with their required length

```
Example : If customer wants the First Name attribute Length greater
than 1024 say 2000, then changes should be made as followed.
Older Profile:
<!-- erRsaAmFirstName
<attribute-type single-value = "true" >
   <name>erRsaAmFirstName
   <description>First Name</description>
   <object-identifier>1.3.6.1.4.1.6054.3.150.2.1/object-identifier>
   <syntax>1.3.6.1.4.1.1466.115.121.1.15{1024}</syntax>
</attribute-type>
Modified Profile:
<!-- erRsaAmFirstName
<attribute-type single-value = "true" >
   <name>erRsaAmFirstName
   <description>First Name</description>
```

5. If the customer using the TIM50 version from "TIM 5.0, Fix 5.0.0.2-TIV-TIM-IF0012" to "TIM 5.0, Fix 5.0.0.4-TIV-TIM-IF0023" with Identity Source as "Sun One Directory Server" then AL needs to be modified as mentioned below.

#### Steps to modify the AL:

```
- Extract the RsaAuthMgrProfile.jar file to local Drive say C:\.
- Go to folder C:\RsaAuthMgrProfile.
- Open the AuthMgrAdapter.xml & AuthMgrSearch.xml into the textpad.
- Search for the below instance

ret.value="erRsaAmGroupGUID=\""+conn.getString("GROUP_GUID")+"\"";
   and modify the above javascript to:
        ret.value="erRsaAmGroupGUID="+conn.getString("GROUP_GUID");

- Save and close the file.
- Build the jar file with following command
        C:\>jar -cvf RsaAuthMgrProfile.jar RsaAuthMgrProfile
- Import the RsaAuthMgrProfile.jar to TIM.
- Restart the Adapter.
```

6. If the Customer wants to use the Profile 5.0.1001 without making changes (mentioned in step 5) in AL, then TIM needs to be upgraded with fix for "APAR IZ47387 - PMR 50331,025,724 - ITIM v5 AuthMan Adapter 5.0.1 Recon fails".

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

Tivoli Directory Integrator 6.1.1 with Fix Pack 3 (or later)

NOTE: Many of the closed APARs in this adapter rely on fixes in TDI v6.1.1 FP3. Fix Pack 3 (or later) is a prerequisite for this version of the adapter.

NOTE: RSA does not support Authentication Manager on SUSE Linux.

#### Managed Resource:

RSA Authentication Manager v7.1 (base) through SP2. NOTE Service Pack 3 is not supported at this time. Future support is planned.

#### IBM Tivoli Identity Manager:

Identity Manager v5.0 with Fix Pack IF23 or higher (required)

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