

# Release Notes

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## IBM<sup>®</sup> Tivoli<sup>®</sup> Identity Manager SQL Server Adapter

### ***Version 5.0.6***

**First Edition (September 3, 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 SQL Server 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 SQL Server Adapter Installation and Configuration Guide

## Adapter Features and Purpose

The SQL Server Adapter is designed to create and manage accounts on Microsoft SQL Server. The adapter runs in “agentless” mode and communicates using ActiveX Data Objects (ADO) and Microsoft SQL Server APIs to the systems being managed.

IBM recommends the installation of this adapter in “agentless” mode. 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	September 3, 2010
Adapter Version	5.0.6
Component Versions	Adapter Build 5.0.1011 Profile 5.0.1004 ADK 5.19
Documentation	SQL Server Adapter Installation and Configuration Guide SC23-6170-00

## New Features

Enhancement # (FITS)	Description
	<b>Items included in current release</b>
	None
	<b>Items included in release 5.0.5</b>
N/A	Support for adapter on Windows 2008 R2 64 Bit and Windows 7 64/32 Bit
MR0326106750	PMR 02850,001,666 - Unlock account at password change
	<b>Items included in release 5.0.4</b>
MR0824095956	Need secure connection from SQL adapter to SQL server.  Please refer your SQL Server product documentation to setup secure communication (SSL) between SQL Client and SQL Server.
MR1202085222	Support all admin login options for SQL Server adapter
	<b>Items included in release 5.0.3</b>
MR1009086133	Added support for SQL Server 2008
	<b>Items included in release 5.0.2</b>
N/A	This version of adapter is certified for Windows 2008 32 bit and Windows 2008 64 bit.
	<b>Items included in release 5.0.1</b>
	Initial release for Tivoli Identity Manager v5.0

**Closed Issues**

CMVC#	APAR#	PMR# / Description
		<b>Items closed in current version</b>
	IZ78139	02876,001,666 Warning returned by SQL adapter if default DB and DBUser for default database are both defined with the same value.  <b>Functionality change! Please see Configuration Notes for more information.</b>
	IZ78158	02923,001,666 Transaction failure returned when using PreExec with SQL Adapter if no other attributes are passed in the request.
	IZ80899	02940,001,666 MSSQL Adapter 5.0.5 Password Change broken
		<b>Items closed in version 5.0.5</b>
	IZ58983	(Fix in ADK) Certtool unable to list certificate of Verisign Class 3 Secure Server CA – GA.
36607		(Fix in ADK) ADK incorrect return status for multivalued attributes with special characters.
		<b>Items closed in version 5.0.4</b>
		None
		<b>Items closed in version 5.0.3</b>
		None
		<b>Items closed in version 5.0.2</b>
32915 32993 32994	N/A	N/A (internal defects) <ul style="list-style-type: none"> <li>○ SQL Adapter fails to set password related attributes.</li> <li>○ SQL Server adapter crash.</li> <li>○ SQL server Adapter not able to restore account.</li> </ul>
		<b>Items closed in version 5.0.1</b>
		None

## Known Issues

CMVC#	APAR#	PMR# / Description
N/A	N/A	<p><b>SQL Server 2008 support for “DB Alias”</b></p> <p>Alias cannot be created or deleted on SQL server 2008. If you try to create alias (attribute ersqldbalias), SQL Server Adapter will log error message as "ERROR:master:alias:-Microsoft OLE DB Provider for SQL Server :: Error #: 80040e14 Could not find stored procedure sp_addalias".</p> <p>When using this adapter with SQL Server 2008 it is recommended that you remove the ersqldbalias attribute from the account form.</p>
N/A	N/A	<p><b>Editing adapter profiles on UNIX or Linux.</b></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><b>Using the Upgrade Option:</b></p> <p>The Upgrade option is applicable only to 5.0.x maintenance upgrades. The upgrade option is not designed for v4.6 to v5.0 migrations. NOTE: After using "Update Installation" option with higher version of Adapter, an extra folder with name "_uninst2" is created. It can be ignored. To Uninstall the Adapter, use "_uninst" folder.</p>
N/A	N/A	<p><b>Event Notification</b></p> <p>Account status (Active/Inactive) might not be correctly updated on Identity Manager after event notification.</p>
N/A	N/A	<p><b>Class 3 Certificates</b></p> <p>Class 3 secure server CA-G2 certs are not written properly to "DamIACerts.pem" file through CertTool.exe Utility. The certificate data is written twice between BEGIN CERTIFICATE and END CERTIFICATE.</p> <p>Work around: To correct this issue, please follow the below steps and edit</p>

		<p>"DamlCACerts.pem" file present in "&lt;Adapter installation path&gt;\data" folder.</p> <p>Step 1. Start the CertTool utility</p> <p>Step 2. Import the class 3 CA certificate by using "F" option from the main menu of CertTool Utility.</p> <p>Step 3. Once the class 3 CA certificate is successfully installed, open "DamlCACerts.pem" file stored in the "&lt;Adapter installed path&gt;\data" folder using text editor.</p> <p>Step 4. Delete the class 3 CA certificate data (i.e. content between BEGIN CERTIFICATE and END CERTIFICATE) from "DamlCACerts.pem".</p> <p>Step 5. Open class 3 CA certificate file using text editor and copy the certificate data (between the BEGIN CERTIFICATE and END CERTIFICATE)</p> <p>Step 6. Paste the certificate data to "DamlCACerts.pem" file between the BEGIN CERTIFICATE and END CERTIFICATE lines of same class 3 CA Certificate. If more than one class 3 certificates are installed then you can identify the certificate using issuer and subject data.</p> <p>Step 7. Save "DamlCACerts.pem" file.</p> <p>Step 8. To verify the "DamlCACerts.pem" file is edited properly, display certificate information by using option "E" from the main menu of CertTool Utility.</p> <p>Note: Please note that this issue is seen after installing class 3 CA certificate. If you correct the DamlCACerts.pem and then install another class 3 CA certificate, the newly installed class 3 CA certificate will show same issue.</p> <p>This issue is also seen when you delete any certificate using option "G" from the main menu of CertTool utility. The delete option will affect all remaining class 3 CA certificate and you have to follow step 1 to 8 to correct the DamlCACerts.pem file.</p>
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## Installation and Configuration Notes

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

### ***Running v4.6 and v5.0 Adapters on the Same Server***

The Identity Manager version 5.0 adapters have enhanced capabilities that are not compatible with older version 4.6 adapters. It is highly recommended that all adapters hosted on an individual server are upgraded at the same time.

Adapters installed on the same server may share common components or run-time environments. The version 4.6 adapters may not be compatible with the version 5.0 component and may no longer operate as expected after installation of a version 5.0 adapter. On Windows servers all adapters must be upgraded simultaneously due to the sharing of DLLs. Check the adapter installation guide for additional information.

### ***Corrections to Installation Guide***

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

NOTE: The Adapter Installation and Configuration Guide lists Windows 2000 as a supported platform, however, Microsoft has recently ended mainstream support for this version. While there are no known issues associated with hosting the adapter on Windows 2000, if a problem does arise that is tracked to the OS, Tivoli Support will ask you to upgrade to the officially supported version, Windows 2003.

NOTE: SQL Server Client version 2000 and 2005 is supported only on the matching SQLServer resource version.

### ***Configuration Notes***

The following configuration notes apply to this release:

NOTE: Database access attribute from old version of the agent is now split into 4 attributes - database roles, user alias, database user and user schema (only for Sql Server 2005 and Sql Server 2008).

NOTE: “BUILTIN\ADMINISTRATORS” and “sa” are returned in a RECON; however, they cannot be deleted. These accounts should not be suspended or managed through the IBM Tivoli Identity Manager system.

Syntax for specifying user's access and roles on the Database Access tab:

Database Role	dbname:dbroleName	For example: master:db_owner
Database User	dbname:dbuser	For example: pubs:vijay
Database Alias	dbname:aliasName	For example: pubs:myalias
Database Schema	dbname:schemaName	For example: pubs:administerSchema

### ***Enabling Encryption of the SQL Administrator Password***

The multi-instance enhancement allows a single adapter process to service requests from multiple ITIM Services. The adapter now requires the SQL Server Name, Administrator Account and Administrator Password on the Service form. This information is sent on each adapter request so that the adapter can connect and process the transaction. This version of the adapter now encrypts these attributes by default. Please note that the name of this attribute has changed from ersql200adminPassword to erServicePwd1.

## New Features in Version 5.0.4 of this Adapter

Earlier version of adapter was using only “SQL Server Authentication” for connecting to SQL Server. From this version “Windows Authentication” can be used for SQL server adapter admin account. Adapter is also enhanced to use SSL communication between adapter and SQL Server.

To support this enhancement schema of SQL Server Adapter is extended.

Following attributes are defined in schema.dsml and are added to “erSQL2000DAMLSERVICE” class

- i. Integer attribute “erSQL2000AuthMethod(OID: 1.3.6.1.4.1.6054.3.61.2.24)”
- ii. Boolean attribute “erSQL2000SSL(OID: 1.3.6.1.4.1.6054.3.61.2.25)”

Following New labels are added in Customlabel.properties file

- i. **Authentication** for attribute **ersql2000authmethod**
- ii. **Use SSL for Adapter to SQL Server Connection** for attribute **ersql2000ssl**
- iii. **SQL Server Authentication** for dropdown item **tag.sqlauthmethod.sql**
- iv. **Windows Authentication** for dropdown item **tag.sqlauthmethod.windows**

If one wants to use same adapter instance to manage multiple SQL servers then all must support SSL and the adapter service must run under a windows account (Active Directory domain account). This account must have required permission on all these instances of SQL server. If any SQL server instance is in different domain then trust between Windows domain must exist. If domain setup does not exist and these are individual servers (e.g. SQL server running on standalone Windows OS say Windows 2003) then you must install one adapter per SQL server.

SQL Admin Account and SQL Admin Password service form attribute values are not required if "Windows Authentication" option is selected for *Authentication* service form attribute.

By default SQL Authentication is used for connection and SSL communication is false.

Note:

1. SQL Admin Account and SQL Admin Password attributes are ignored if provided with "Windows Authentication".
2. Only Windows Authentication can be used with SSL. SSL Communication with SQL authentication is not supported.
3. SSL is not supported with all versions of SQL server. Please refer your SQL server product documentation before configuring adapter to use SSL with SQL server.

## New Features in Version 5.0.5 of this Adapter

### Unlock Account on Password Change

Earlier version of adapter was not supporting UNLOCK option on a SQL user account. From this version SQL Server adapter can be used to unlock SQL user account directly from account form or during password change operation.

New registry key “UnlockOnPasswordChange” is added under “specific” Key, by default value of this registry key is set to FALSE.

Find below table for the functionality of this key:

Value of “UnlockOnPasswordChange”	Adapter Behavior
TRUE	<b>Password Change Operation on a locked account:</b> Adapter changes password and unlocks the account. <b>Restore with Password on a locked account:</b>

	Adapter Restores the account, changes password and unlocks the account.
FALSE	<b>Password Change Operation on a locked account:</b> Adapter changes password and account is not unlocked. <b>Restore with Password on a locked account:</b> Adapter restores the account, changes password and account in not unlocked

To support this enhancement schema of SQL Server Adapter is extended.

Following attributes are defined in schema.dsml and are added to "erSQL2000DAMLSERVICE" class

- i. Boolean Attribute "erSQLisaccountlocked(OID: 1.3.6.1.4.1.6054.3.61.2.26)"

Following New labels are added in Customlabel.properties file

- i. **Account is Locked** for attribute **erSQLisaccountlocked**
- ii. **True** for attribute **tag.option.True**
- iii. **False** for attribute **tag.option.False**

Note:

1. **Account is Locked** attribute is set to TRUE in add operation, adapter returns warning "WARNING : Account cannot be locked by agent, only unlocked."
2. **Account is Locked** attribute is set to TRUE in Modify operation there are two different behaviors by adapter on locked and unlocked account

**Account is Locked on resource:**  
Adapter returns SUCCESS if the account is locked on the resource

**Account is not Locked on resource:**  
Adapter returns Warning "WARNING : Account cannot be locked by agent, only unlocked." If the account is not locked on resource.
3. **Account is Locked** attribute is set to FALSE, account gets unlocked.

### DAML Read Timeout Registry Key Option

MR0501091918 - ADK changes to DAML for adding timeout on read

From this version a new DAML protocol property "READ\_TIMEOUT" is introduced to the list of DAML Protocol Properties on agentCfg utility. This applies to setups that have a firewall between IBM Tivoli Identity Manager and the adapter. This firewall has a time out value that is less than the maximum connection age DAML property on Tivoli Identity Manager. When your transactions run longer than the firewall's time out, the firewall terminates the connection. The sudden termination of connections might leave the adapter with incorrect connection threads causing the adapter to crash. When the adapter crashes randomly because of the specified setup, change the value for the READ\_TIMEOUT. **The value must be in seconds and less than the firewall's time out value.** The default value is 0 seconds.

Follow the steps listed below to set non-zero seconds values to the "READ\_TIMEOUT" DAML property

- a) From the Start Menu, select Programs > Accessories > Command Prompt.
- b) At the command prompt, change to the \bin directory for the adapter.  
For example, type the following command, if the Active Directory Adapter is in the default location:

cd C:\Tivoli\Agents\ADAgent\bin

- c) Type the following command and Enter configuration key for Agent:  
agentCfg -agent ADAgent
- d) From the Main Menu, select option B "Protocol Configuration".
- e) At the Agent Protocol Configuration Menu, type C. The Configure Protocol Menu is displayed.
- f) At the Configure Protocol Menu, type A. to select DAML protocol. The DAML Protocol Properties menu is displayed.
- g) Type the letter 'K' from the menu option for "READ\_TIMEOUT"
- h) The following prompt is displayed:  
**Modify Property 'READ\_TIMEOUT':**

Type the time out value for Tivoli Identity Manager and the adapter connection in seconds.

Note: After you set a value for READ\_TIMEOUT please restart the adapter service.

## New Features in Version 5.0.6 of this Adapter

### **IZ78139 - WARNING RETURNED BY SQLADAPTER IF DEFAULTDB DEFINED AND DBUSER FOR DEFAULT DATABASE ALSO DEFINED FOR COMPLIANCE**

From this version of adapter, functionality of adding user into SQL Server is changed. In previous version (Before Build Number: 4.6.1008) of SQL Server Adapter, adapter is adding user in the "Default Database" (by default in master database) when adding login in MS SQL Server. In current version of adapter, adapter does not create user in the default database. If you want to add the user in default database then specify it in the attribute Database User.

Example: If you want to add login "ABC" with default database "model", you must specify "Default Database" as "model". If you want to add user in the database also, you have to specify attribute "Database User" as "model:ABC"

## Corrections to Installation Guide

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

### Creating a SQL server service

The SQL server service form contains these additional fields:

**Authentication:** Specify the authentication method to be used for SQL Server adapter administrator account.

**Use SSL for Adapter to SQL Server Connection:** Enable this checkbox if you want to use SSL communication between SQL Server adapter and SQL Server.

### Configuring event notification

#### Modifying Event Notification Context

The following attributes are required to be specified for each event notification context along with the value specified for that attribute on the service form:

1. If SQL Authentication is used for SQL Server adapter administrator account,
  - erSQL2000ServerName : SQL Server Name value
  - erSQL2000AdminAccount : SQL Admin Account value
  - erServicePwd1 : SQL Admin Password value
  - ersql2000authmethod : 0 (for SQL authentication)
  - ersql2000ssl : false (SQL authentication doesn't support SSL Communication)
2. If Windows Authentication is used for SQL Server adapter administrator account,
  - erSQL2000ServerName : SQL Server Name value
  - ersql2000authmethod : 1 (for Windows authentication)
  - ersql2000ssl : true if SSL required, false if non SSL communication

**Note:** erSQL2000ServerName and erSQL2000AdminAccount are mandatory attributes only if used with SQL authentication for SQL Server adapter administrator account

### Installing the SQL Server Adapter by using silent mode

You can install and uninstall the IBM Tivoli SQL Server Adapter by using silent mode. Silent installation suppresses the Wizard and the Launcher User Interfaces (UIs) that do not display any information or require interaction.

You can use the -i silent option to install or uninstall the adapter in silent mode.

Note:

- The adapter installer also installs run time libraries from Microsoft. The user interface of the installer for these run time libraries is also suppressed during silent installation of the adapter. The installer for these run time libraries creates a log file "vcredist\_x86.log" under the temp

directory of the user home directory (%temp%). For example, "C:\Documents and Settings\Administrator\Local Settings\Temp\vcredist\_x86.log". It is recommended that you check this file for any errors.

- If you install adapter in silent mode, the uninstaller runs in silent mode irrespective of whether you are using -i silent option or not.

### Installing the adapter by using the silent mode

#### Installing the adapter with default options

Run the following command from command line to install the SQL Server Adapter by using the -i silent option:

```
setupwin32.exe -i silent -DLICENSE_ACCEPTED=TRUE
```

The adapter is installed with the following default values.

Installation Directory	%SYSTEM_DRIVE_ROOT%\Tivoli\agents\SqlServerAdapter
Installation Type	Full Installation

#### Installing the adapter with command line parameters

You can specify installation options from the command line when you install the adapter by using the silent option. The following table lists the parameters used by the installer.

Note:

1. The -D option is followed by a variable and a value pair without any space after -D.
2. You must wrap arguments with quotation marks when the arguments contain spaces.

Parameter Name	Description	Default Value
DLICENSE_ACCEPTED	The installer uses this parameter to get the license acceptance state. When TRUE is supplied as the value for this parameter, it indicates that you accept the terms in the license agreement of the adapter. If the value of this parameter is FALSE or if this parameter is missing then the installation will not continue. Note: - The parameter is must when you run the installer in silent mode.	FALSE
DUSER_INSTALL_DIR	The value of this parameter overrides the default installation directory path. For example, DUSER_INSTALL_DIR="D:\Tivoli\MyFolder" Note: - The installation path must be wrapped in quotation marks.	%SYSTEM_DRIVE_ROOT%\Tivoli\agents\SqlServerAdapter
DUSER_INPUT_INSTALL_TYPE_1	When the value of this parameter is \"Full Installation\" the installer performs full installation of the adapter. For example, DUSER_INPUT_INSTALL_TYPE_1=\"Full Installation\"	\"Full Installation\"
DUSER_INPUT_INSTALL_TYPE_BOOLEAN_1	This parameter is associated with DUSER_INPUT_INSTALL_TYPE_1. When the value of this parameter is 1 the installer performs full installation of the adapter. You can either use DUSER_INPUT_INSTALL_TYPE_1 or DUSER_INPUT_INSTALL_TYPE_BOOLEAN_1 or both to perform full installation.	1
DUSER_INPUT_INSTALL_TYPE_2	When the value of this parameter is \"Update Installation\" the installer performs update installation of the adapter. For example, DUSER_INPUT_INSTALL_TYPE_2=\"Update	No value, blank

	Installation\" Note:- When \"Update Installation\" is specified as the value for this parameter, the parameter DUSER_INPUT_INSTALL_TYPE_1 should be set to blank or should not be specified at all and you must explicitly override the default value of DUSER_INPUT_INSTALL_TYPE_BOOLEAN_1 to 0.	
DUSER_INPUT_INSTALL_TYPE_BOOLEAN_2	This parameter is associated with DUSER_INPUT_INSTALL_TYPE_2. When the value of this parameter is 1 the installer performs update installation of the adapter. You can use either DUSER_INPUT_INSTALL_TYPE_2 or DUSER_INPUT_INSTALL_TYPE_BOOLEAN_2 or both to perform update installation. Note:- When the value 1 is specified as the value for this parameter, the parameter DUSER_INPUT_INSTALL_TYPE_1 should be set to blank or should not be specified at all and you must explicitly override the default value of DUSER_INPUT_INSTALL_TYPE_BOOLEAN_1 to 0.	0

You can use any of the following commands to perform a full installation of the adapter in silent mode.

*Setupwin32.exe -i silent -DLICENSE\_ACCEPTED=TRUE*

This will install the adapter using Full Installation option and will use the default installation directory %SYSTEM\_DRIVE\_ROOT%\Tivoli\agents\SqlServerAdapter, as stated above.

*setupwin32.exe -i silent -DLICENSE\_ACCEPTED=TRUE -  
DUSER\_INPUT\_INSTALL\_TYPE\_1=\"Full Installation\" -DUSER\_INPUT\_INSTALL\_TYPE\_2= -  
DUSER\_INPUT\_INSTALL\_TYPE\_BOOLEAN\_1=1 -  
DUSER\_INPUT\_INSTALL\_TYPE\_BOOLEAN\_2=0*

This will install the adapter using Full Installation option and will use the default installation directory %SYSTEM\_DRIVE\_ROOT%\Tivoli\agents\SqlServerAdapter.

To select a different installation directory add the -DUSER\_INSTALL\_DIR parameter as:

*setupwin32.exe -i silent -DLICENSE\_ACCEPTED=TRUE -  
DUSER\_INSTALL\_DIR=\"C:\Tivoli\MyFolder\" -DUSER\_INPUT\_INSTALL\_TYPE\_1=\"Full  
Installation\" -DUSER\_INPUT\_INSTALL\_TYPE\_2= -  
DUSER\_INPUT\_INSTALL\_TYPE\_BOOLEAN\_1=1 -  
DUSER\_INPUT\_INSTALL\_TYPE\_BOOLEAN\_2=0*

*setupwin32.exe -i silent -DLICENSE\_ACCEPTED=TRUE -  
DUSER\_INPUT\_INSTALL\_TYPE\_BOOLEAN\_1=1 -  
DUSER\_INPUT\_INSTALL\_TYPE\_BOOLEAN\_2=0*

This will install the adapter using Full Installation option and will use the default installation directory %SYSTEM\_DRIVE\_ROOT%\Tivoli\agents\SqlServerAdapter.

To select a different installation directory add the -DUSER\_INSTALL\_DIR parameter as:

*setupwin32.exe -i silent -DLICENSE\_ACCEPTED=TRUE -  
DUSER\_INSTALL\_DIR=\"C:\Tivoli\MyFolder\" -DUSER\_INPUT\_INSTALL\_TYPE\_BOOLEAN\_1=1 -  
DUSER\_INPUT\_INSTALL\_TYPE\_BOOLEAN\_2=0*

**Installing the adapter in silent mode by using the response file****Generating the response file**

You can use response file to provide inputs during silent installation. Response file can be generated by running the following command.

```
setupwin32.exe -r "Full path of response file"
```

For example:

```
setupwin32.exe -r "C:\Temp\SQLServerInstallParameters.txt"
```

This runs the installer in interactive mode and installs the adapter.

After the installation completes the file specified as "Full path of response file" will be created containing the required parameters.

Note:

- If you are running this command to only generate the response file, you must uninstall the adapter by using the uninstaller.

**Creating the response file manually**

You can also manually create the response file and add the required parameters to the file.

Create a text file, for example C:\SQLServerInstallParameters.txt, with the following content:

```
#Has the license been accepted
#-----
LICENSE_ACCEPTED=TRUE

#Select Install Type
#-----
USER_INPUT_INSTALL_TYPE=\\Full Installation\\,\\
USER_INPUT_INSTALL_TYPE_1=Full Installation
USER_INPUT_INSTALL_TYPE_2=
USER_INPUT_INSTALL_TYPE_BOOLEAN_1=1
USER_INPUT_INSTALL_TYPE_BOOLEAN_2=0
#Choose Install Folder
#-----
USER_INSTALL_DIR=C:\\Tivoli\\agents\\SqlServerAdapter
```

After you have the response file you can use it to provide parameters to the installer for silent installation as:

```
setupwin32.exe -i silent -f "Full path of response file"
```

For example,

```
setupwin32.exe -i silent -f "C:\\SQLServerInstallParameters.txt"
```

**Uninstalling the adapter using silent mode**

Run the following command from command line to uninstall IBM Tivoli SQL Server Adapter by using the -i silent option.

```
uninstaller.exe -i silent
```

Specify the full path when you are not running the command from \_uninst directory in the installation directory of the adapter.

For example,

```
"C:\\Tivoli\\agents\\SqlServerAdapter\\_uninst\\uninstaller.exe" -i silent
```

Note:

- Restart the workstation after you install or uninstall the adapter.
- Silent un-installation may not completely clean the installation directory. There may be some files or folder which is not removed. Please check the installation folder and remove files and folder which are not required after the un-installation completes.



**Updating the SQL Server Adapter or the ADK**

Note:

- This version of SQL Server adapter uses a newer version of the installer. It is recommended that you uninstall the existing adapter, if the existing adapter build number is 5.1.1009 or older.

You can either update the SQL Server adapter or the Adapter Development Kit (ADK). The ADK is the base component of the adapter. While all adapters have the same ADK, the remaining adapter functionality is specific to the managed resource.

If only a code fix has been made to the ADK, instead of upgrading the entire adapter, you can upgrade just the ADK to the newer version. See "Updating the ADK" in Installation Guide.

**Updating the SQL Server adapter**

**Note:** Update adapter is not supported if you are updating from adapter build number 5.0.1009 or older.

For adapter versions 5.0.1010 and higher, use the adapter upgrade option:

- If you want to keep the adapter configuration (registry keys and certificates) unchanged.
- If the installed adapter is FIPS enabled. The Update Installation option keeps FIPS configurations such as the CA certificates, fipsdata.txt the (key generated by running fipsenable.exe) and the registry keys encrypted with fipsdata.txt unchanged.

If update installation option is selected, the installer detects the path of the existing installed adapter. If no prior installation of the adapter is found on the system, the installer will display an error message. The installer replaces the binaries and the DLLs of the adapter and the ADK. The installer does not prompt for any configuration information during an update installation. Note: Adapter related registry keys are not modified. The update installation does not create a new service for the adapter.

During an update, in order to maintain all of your current configuration settings, as well as the certificate and private key, do not uninstall the old version of the adapter before installing the new version. For more information on how to install the adapter, see "Installing the SQL Server adapter" in Installation Guide.

In order to update an existing adapter, complete the following steps:

1. If you downloaded the installation software from Passport Advantage, perform the following steps:
  - Create a temporary directory on the computer on which you want to install the software.
  - Extract the contents of the compressed file into the temporary directory.
2. Start the installation program with the setupwin32.exe file in the temporary directory.
3. Select the language and click OK to display the Introduction window.
4. On the Introduction window, click Next to view the Software License Agreement.
  - i. Do the following at the Software License Agreement window:
    - Review the license agreement and select Accept .
    - Click Next.
  - ii. Select Update installation option and click Next

Note: The adapter must already exist if you want to perform an update installation. If it does not exist, the installer generates the following message: Update not supported when the adapter is not previously installed

## 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:

- LDAP schema management
- Working knowledge of scripting language appropriate for the installation platform
- Working knowledge of LDAP object classes and attributes
- Working knowledge of XML document structure

**Note:** This adapter supports customization only through the use of pre-Exec and post-Exec scripting.

Tivoli Identity Manager Resources:

Check the “Learn” section of the [Tivoli Identity Manager Support web site](#) for links to training, publications, and demos.

### ***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:

- Windows 2003 Enterprise Edition
- Windows 2008 Enterprise Edition 32 bit/64 bit
- Windows 2008 R2 Enterprise Edition 64-bit
- Windows 7 Enterprise Edition 32 bit/ 64 bit

Managed Resource:

- SQL Server 2005
- SQL Server 2008
- with --
- respective SQLServer Client software version 2005 and 2008

IBM Tivoli Identity Manager:

- Identity Manager v5.0

NOTE: SQL Server Client version 2005 and 2008 is supported only on the matching SQLServer resource version.

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End of Release Notes