

Toad[®] for DB2 **4.7**

Installation Guide



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Installation

System Requirements

Client Requirements

Before installing Toad, ensure that your client system meets the following minimum hardware and software requirements:

Platform	1 GHz minimum
Memory	 512 MB of RAM minimum, 1 GB recommended Note: The memory required may vary based on the following: Applications that are running on your system when using Toad Size and complexity of the database Amount of database activity Number of concurrent users accessing the database
Hard Disk Space	 212 MB to run Toad Allocate the following additional space as needed: If installing ToadSQL Tuning for DB2 z/OS, allocate an additional 45 MB. If installing Toad SQL Analysis for DB2 LUW, allocate an additional 47 MB. If installing the Quest SQL Optimizer for DB2 LUW, see the SQL Optimizer Release Notes for disk space requirements.
Operating System	 Windows Server 2003 (32-bit) Windows XP Professional (32-bit) Windows Vista (32-bit) Windows Server 2008 (32-bit) Windows 7 (32-bit or 64-bit) Note: The Toad SQL Analysis for DB2 LUW client is not supported on Windows Vista, Windows Server 2008, or Windows 7.

.NET Framework	 Microsoft .NET Framework 3.5 (Service Pack 1) Note: The following conditions apply: The .NET Framework Client Profile is not supported. To run Toad, the .NET security policy must be set to unrestricted. See "User Requirements and Restrictions for Running Toad " (page 10) for more information.
Database Client	 Existing DB2 Client Support Toad installs a DB2 9.7 client as part of the installation process. The DB2 9.7 client can co-exist with an existing DB2 8 client, but is incompatible with a DB2 7 client. If a DB2 7 client already exists on your computer, the Toad installation stops and cannot complete. To resolve, first upgrade to the DB2 8 client. Then restart the Toad installation to avoid losing functionality in some DB2 native tools. Requirements for Windows 7 32-Bit and 64-Bit Environments Toad provides a 32-bit and a 64-bit Toad DB2 client installer. The 32-bit client installs in any Toad-supported Windows environment. The 64-bit client installs in a Windows 7 64-bit environment only. Additionally, a 32-bit and a 64-bit IBM DB2 client cannot exist on the same computer. Based on this restriction, install the appropriate 32-bit or 64-bit Toad DB2 client if another DB2 client already resides on your 64-bit computer.
Additional Requirements	Web Browser Microsoft Internet Explorer 6.0 or later

Server Requirements

Before installing Toad, ensure that your server meets the following minimum hardware and software requirements:

Operating	DB2 for z/OS
System	z/OS (V1R6 Base Services [5694-A01] or later)
	DB2 for LUW
	IBM AIX 5.1, 5.2, 5.3, 6.1
	HP-UX 11i 1.5, 2 (32-bit or 64-bit)
	Red Hat Enterprise Linux AS release 3 and 4 (32-bit or 64-bit)
	Solaris 7, 8, 9, 10 (32-bit or 64-bit)
	SuSE 7, 8, 9
	Windows 2000, 2003 (including 64-bit), 2008, XP, Vista, Windows 7

Database Server	 IBM DB2 for LUW 8.1.5 or later, 9.1 or later IBM DB2 for z/OS 8 and 9 Notes: To run RUNSTATS and the native REORG utility on tablespaces and indexes in DB2 for LUW, Toad supports DB2 for LUW 8.2.2 or later. At this time, Toad SQL Analysis for DB2 LUW does not support DB2 for LUW 9.7. Toad supports DB2 8 for z/OS running in Full Function mode, but does not support DB2 8 for z/OS running in Compatibility mode.
Operating System Platforms for Toad for DB2 Agent	 Toad requires that the Toad for DB2 Agent reside on each DB2 for LUW server on which you intend to execute scripts server-side (using the Toad LUW Remote Script Execution feature) or to collect SQL using Toad SQL Analysis for DB2 LUW. The agent supports servers running in any of these operating systems: Microsoft Windows 2000, Windows 2003 (32-bit), Windows XP (32-bit) Sun Solaris 7 or later IBM AIX 4.3 or later SuSE Linux Enterprise Server 8 and 9 for zLinux SuSE Linux Enterprise Server 8 and 9 United Linux for Intel x86 SuSE Linux (2.6 Kernel) on AMD64 (x86_24) RedHat Enterprise Linux AS 3.0 and 4.0 zLinux (32-bit)
	 RedHat Enterprise Linux AS 2.1, 3.0, and 4.0 for Intel x86 RedHat Enterprise AS 4.0 (2.6 Kernel) on AMD64 (x86) Note: The following additional requirements apply: In 64-bit zLinux environments, the Toad for DB2 Agent supports only DB2 for LUW 9.1 or later. To collect SQL in a RedHat or SuSE Linux 2.6 environment on an x86-64 (AMD64) server, Toad SQL Analysis requires a minimum of DB2 for LUW 8.1 with FixPak 10 applied. Sun Solaris 7 servers must have Sun Solaris 7 patch 106327 applied. RedHat 3.0 servers must have compatibility library compatlibstdc++- 7.3-2.96.122.i386.rpm installed. This package is available on Red Hat Advanced Server 3.0 installation media.

	See the <i>Toad for DB2 LUW Agent Installation Guide</i> for complete agent requirements and installation details.
Hard Disk Space for Toad for DB2 Agent	For the Toad LUW Remote Script Execution component, 34.9 MB For Toad SQL Analysis services, 35 MB

Virtualization Support

Application Virtualization	Limited testing has been performed for Citrix support on Windows Server 2003 Enterprise Server (Service Pack 2) using the MetaFrame Presentation Server 5.0 and Citrix Presentation Server Clients 10.2. See "Install Toad on Citrix Systems" (page 21) for more information.

Note: Toad may work in virtualization environments other than the ones in which it was tested.

User Requirements

User Requirements to Install Toad

Only Windows Administrators and Power Users can install Toad.

Note: The following exceptions exist for Power Users:

- A Power User cannot install Toad on a computer running Windows Vista Enterprise. This is a Windows limitation because Vista does not support Power User mode.
- A Power User cannot install Toad if a DB2 for LUW version earlier than 8.1.7 already exists on the computer. Only an Administrator can install Toad under this condition. However, if the computer has an existing DB2 for LUW 8.1.7 or later installation, a Power User can install Toad as long as this user belongs to the DB2ADMNS or DBUSERS group.

If an Administrator installs Toad, the Administrator can share the Toad shortcut icon on the desktop and menu items with any user--a Power User, Restricted User, Vista standard user--on the computer.

If a Power User installs Toad, a Restricted User cannot do the following:

- Associate file extensions.
- View the Toad shortcut icon on the desktop or the Toad menu options in the Windows Start menu. As a workaround, Restricted Users can create a shortcut to Toad from the install directory and place the shortcut on their desktop.

User Requirements and Restrictions for Running Toad

The following describes the requirements and restrictions for users who launch and run Toad:

- A Windows Power User or Restricted User must belong to the DB2ADMNS or DB2USERS group. To add the user to one of these groups, select Start | Control Panel | Administrative Tools | Computer Management | System Tools | Local Users and Groups | Groups | DB2ADMNS or DB2USERS.
- A Windows Vista user must be either an administrator or a standard user that belongs to an Vista Administrators group. Additionally, to enable full functionality in Toad when Vista's User Access Control security feature is turned on, the standard user must run Toad as an administrator. (Right-click the Toad icon on the Vista desktop and select **Run as administrator**.) See the Toad for DB2 Release Notes for a description of the restrictions that are in place when the standard user does not run Toad as an administrator.
- A Windows Power User or Restricted User does not have the authority to add or remove DB2 catalog entries using the Toad Client Configuration wizard. However, these users can use the Import Profile function in the Toad Client Configuration wizard to import catalog entries to Toad.
- As a minimum requirement to manage a DB2 for z/OS subsystem in Toad, the user ID defined in the Toad connection profile for the subsystem must either have SYSADM privileges or SELECT privileges on the DB2 catalog tables.
- To run Toad, the .NET security policy must be set to *Unrestricted*. To modify the security policy:
 - 1. Select Control Panel from the Windows Start menu.
 - 2. Double-click Administrative Tools.
 - 3. Double-click Microsoft .NET Framework version Configuration.
 - 4. Select My Computer, and then select the Runtime Security Policy node.
 - 5. Select **Evaluate Assembly** from the list of tasks in the right panel, and locate and select Toad.exe in the **File** field.
 - 6. Click Next and set the permission to Unrestricted.
- To create or modify the QuestSoftware.ToadSecurity table to enable Toad Security, the user who maintains this table must have privileges to create, insert, update, and delete it. All other users need only the ability to read the QuestSoftware.ToadSecurity table to use Toad Security features.

Requirements for Full Access to Toad for DB2 z/OS Functionality

Install the following components on each DB2 for z/OS subsystem:

• Quest IBM DB2 z/OS component

Notes:

- Without the z/OS component installed, Toad for DB2 provides limited support for managing DB2 for z/OS subsystems. With the z/OS component installed, you have access to a full range of Toad functionality needed to manage DB2 subsystems. See Install Other Toad Components (page 25) for a complete list of features to which the z/OS component provides access.
- If no Quest IBM DB2 z/OS component is installed on your subsystem, see the *Quest IBM DB2 z/OS Installation Guide* for installation requirements and instructions.
- If you already have the Quest IBM DB2 z/OS component installed on your subsystem, refer to the current Toad for DB2 Release Notes to determine whether you need to perform an upgrade or a new installation of the z/OS component.
- IBM stored procedure SYSPROC.DSNUTILU, installed and operational

Notes:

- Toad requires SYSPROC.DSNUTILU to run DB2 utilities. For more information about this stored procedure, see *Appendix B* of the *IBM DB2* Universal Database for z/OS Utility Guide and Reference.
- A 32K character-size limit exists for each utility statement executing through DSNUTILU.

Compile and Debug Requirements for Stored SQL Procedures

Toad requires the following to compile and debug stored SQL procedures in DB2.

DB2 for LUW Requirements

The following is required to debug and compile stored SQL procedures on DB2 for LUW databases:

Component	Requirements
Supported DB2 Versions	DB2 for LUW 9 or later
Each DB2 Database	IBM SYSPROC.DBG_% procedures, installed and operational
Privileges	On each DB2 database, EXECUTE authority on all SYSPROC.DBG_% procedures

DB2 for z/OS Requirements

The following is required to debug and compile stored SQL procedures on DB2 for z/OS subsystems:

Component	Requirements
Supported DB2 Versions	DB2 for z/OS 8 or 9
Each DB2 Subsystem	 IBM DB2 stored procedure SYSPROC.DSNTPSMP, installed and operational (needed to compile stored procedures in Toad) IBM DB2 installation job DSNTIJSD, executed (needed to debug stored procedures) IBM SYSPROC.DBG_% procedures, installed and operational
z/OS	 IBM Unified Debugger Session Manager, installed and configured: DB2 for z/OS 8 Apply PTF UK25860. Install and configure DB2UDSMD (the Debugger Session Manager). Start task DB2UDSMD, using default port number 4553.

Component	Requirements
	DB2 for z/OS 9
	1. Install and configure DB2UDSMD (the Debugger Session Manager).
	2. Start task DB2UDSMD, using default port number 4553.
	Refer your systems administrator to the following link for instructions on installing and configuring DB2UDSMD:
	http://www.ibm.com/developerworks/data/library/techarticle/dm- 0903debugdatastudio/
Privileges	 On each DB2 subsystem, EXECUTE authority on all SYSPROC.DBG_% procedures
	• DEBUGSESSION system privilege (for continued debugging of SQL procedures)

Install Toad

- 1. Run the appropriate installer:
 - ToadForDB2_version.exe—Installs the Toad DB2 client on all Windows platforms, including a Windows 7 32-bit or 64-bit environment
 - ToadForDB2_64bitClient_version.exe—Installs the Toad DB2 client in a Windows 7 64-bit environment
- 2. Complete the wizard.

Notes:

- The Toad DB2 64-bit installer discontinues if it detects that you are installing the client in a Windows 7 32-bit environment.
- DB2 restricts you from having a DB2 32-bit client and DB2 64-bit client on the same computer. Therefore, the Toad DB2 64-bit installer discontinues if it detects a 32-bit client on the computer. Likewise, the 32-bit installer discontinues if it detects a 64-bit DB2 client on the computer.

Install Toad Silently

Silent installation provides a convenient method for deploying Toad to multiple machines. With some customization, you can also deploy the license key and settings at the same time

Determine Which Installer to Use

Before performing a silent installation, review the following to determine which installer to use:

Installer	Advantages	Disadvantages
Executable file (.exe) See "Install Toad Silently" (page 14) for more information.	 Silent installation using an exe file has the following advantages: Verifies whether the prerequisite software is installed, and if not, redirects you to the download location. Verifies whether a version of Toad already exists on the target computer. If so, the executable uninstalls the previous version and then installs the current version. Exports the previous DB2 catalog and then re-imports it into the current version. 	 Silent installation using an exe file has the following disadvantages: Cannot deploy custom Toad settings files or license keys. Installer automatically exits if the prerequisite software is not installed.
Microsoft Installer file (.msi) See "Install Toad Silently" (page 14) for more information.	Supports deployment of Toad settings files and license keys.	 Silent installation using an msi file has the following disadvantages: Requires manual verification and download of any prerequisite software. Requires a manual uninstall of the previous version of Toad using Add/Remove Programs.

Silent Installation Prerequisites

Before you perform a silent installation, you must install the following software on every computer where you are installing Toad:

- Microsoft .NET Framework 3.5 (Service Pack 1)
- Toad installs a DB2 9.7 client as part of the installation process. The DB2 9.7 client can co-exist with an existing DB2 8 client, but is incompatible with a DB2 7 client. If a DB2 7 client already exists on your computer, the Toad installation stops and cannot complete. To resolve, first upgrade to the DB2 8 client. Then restart the Toad installation to avoid losing functionality in some DB2 native tools.

Silent Installation Using the Executable

Use the executable file to perform a silent install to the default directory (or to a different directory) and to specify options such as logging installation messages.

To perform a silent install using the executable file

- 1. At a Windows command prompt, switch to the drive or directory where the executable for Toad is located. (This file can be downloaded from the Quest web site or can be found on the Toad installation CD-ROM.)
- 2. For a standard installation with all features enabled, enter the following command:

"ToadInstaller.exe" /S

You can customize MSIEXEC command-line options and overrides for your installation similar to the following command:

```
"ToadInstaller.exe" /S /Lx "C:\temp\installLog.txt"
INSTALLDIR="Drive:\your_install_path" USERNAME="some_user"
COMPANYNAME="your_company" ALLUSERS=1
```

Use the following descriptions to customize the command-line options and overrides for your installation.

Command-Line Options

The following MSIEXEC command-line options are used in this example:

Option	Description
/L "C:\temp\	 (Optional) Write installation messages to the specified log.
installLog.txt"	You can append other options, such as x for debug (used in the previous example) or v for a verbose log. See the log section at http://msdn2.microsoft.com/en-us/library/aa367988.aspx for more information about additional logging options. Also, substitute "C:\temp\installLog.txt" in the example with the fully qualified name of the log file. Enclose this value in double quotations. The installation process creates this file if it does not exist. Otherwise, the existing file is overwritten

Toad Default Installation Option Overrides

You can specify the following values to override Toad's default installation options. Enclose each value in double quotations:

Option	Description
INSTALLDIR	(Optional) Specify the absolute path for the directory in which you want to install Toad. If you do not include this path, the installation program defaults to: C:\Program Files\Quest Software\Toad for DB2 4.7.
ALLUSERS	(Optional) Specify one of the following:
	• For a per-machine installation, specify <i>1</i> . This value allows any user to the Toad shortcut on the desktop after the installation completes.
	• For a per-user installation, enter the empty string value ("") This value allows only the user specified for USERNAME and the user that installed Toad to see the Toad shortcut on the target desktop. If USERNAME is omitted, only the user that installed Toad sees the shortcut.
	Note: If you do not specify this property, the installation program defaults to a per-user installation.

Option	Description
USERNAME	(Optional) Specify the user that intends to use Toad on the target computer. Notes:
	• If ALLUSERS is omitted or defined with the empty string value (""), only the user specified here (and the user that installed Toad) can see the Toad shortcut on the desktop after the installation completes.
	• If ALLUSERS is omitted or defined with the empty string value ("") and you omit the USERNAME option, only the user that installed Toad sees the Toad shortcut on the desktop.
	• If ALLUSERS is <i>1</i> , the USERNAME value is ignored during installation.
COMPANYNAME	(Optional) Specify the name of the company that owns this installation.
Notes:	

• Enclose all values (except for the ALLUSERS value) in double quotations.

Silent Installation Using the Microsoft Installer

You can create a Microsoft transform (.mst) file that deploys the license key, custom settings, and connections for users when performing a silent install using the .msi file. You can also use the .msi file to perform a basic silent install using the default directory or can install to a different directory and specify command-line options and default installation overrides. See "Perform Silent Installation Using MSI" (page 19) for more information if you are not creating a transform file.

Note: Review the following information about the msi installer:

- The .msi file is located on the Toad installation CD or is available as a download from SupportLink at https://support.quest.com/SUPPORT/index?page=home.
- The installer does not verify that system requirements have been met before installing. If you do not want to manually verify system requirements, you should use the .exe file for the silent install.

Create Transform Files

The following procedure uses the Wise Installer to create the transform file.

To create a transform file that includes custom Toad settings

- 1. Save and install the *ToadInstaller.msi* file on a computer where the Wise for Windows Installer is installed. After customizing Toad settings, you will use the Wise Installer to create the transform file.
- 2. Open Notepad, and do the following:
 - a. Enter the license key in the first line.
 - b. Enter the site message in the second line. The file should look similar to the following:

AAABBBBCCCCCCEDXDWLMV0WJ9-123-45678-B2

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- c. Save the file with **license.key** as the file name in the Toad install directory. Make sure the file extension is *.key* not .txt.
- 3. Launch Toad. The application should open without prompting you to enter a license key.
- 4. Select **Tools** | **Configuration Wizard** from the Toad menu and complete the Configuration wizard. This wizard creates an initial settings file (Settings.xml).
- 5. Select Tools | Options from the menu in Toad to open the Options window.
- 6. Select each page in the window and set any options you want to deploy. These options create a module settings folder and files.
- 7. Select View | Connection Manager from the menu in Toad to open the Connection Manager.
- 8. Create any connections you want to deploy.
- 9. Exit Toad. Upon exiting, a Connections file is created.
- 10. Create the Microsoft Transform file, using any appropriate tool. The following steps describe how to use the Wise for Windows Installer to create the file:
 - a. Select File | New.
 - b. Select *Custom Templates* under **Categories**, and then select the *Transform* template in the New Installation File window.
 - c. Select the ToadInstaller.msi file in the Select the .MSI file to base this transform on window.
 - d. Save the project.
 - e. Select Files from the Feature Details view.

f. Locate the following files and click Add to add them to the project:

File to Add	Location
Settings.xml	This file is located in the following directory: C:\Documents and Settings\ <i>username</i> \Application Data\Quest Software\ Toad for DB2 4.7.
ModuleSettings folder and files	This folder and related files are located in the following directory: C:\Documents and Settings\ <i>username</i> \Application Data\Quest Software\Toad for DB2 4.7\ModuleSettings.
Connections.xml	This file is located in the following directory: C:\Documents and Settings\ <i>username</i> \Application Data\Quest Software\Toad for DB2 4.7.

- g. Save the project and compile it to create the transform (MST) file.
- 11. Perform a silent install. See "Perform Silent Installation Using MSI" (page 19) for more information.

Perform Silent Installation Using MSI

To perform a silent install using msi

- At a Windows command prompt, switch to the drive or directory where the msi installer for Toad is located. This file is located on the Toad installation CD or is available as a download from SupportLink at https://support.quest.com/SUPPORT/index?page=home.
- 2. For a standard installation with all features enabled, enter the following command:

msiexec /i "ToadInstaller.msi" /q

You can customize command-line options and overrides for your installation similar to the following:

msiexec /i "ToadInstaller.msi" INSTALLDIR= "Drive:\your_install_ path" /q USERNAME="someone" COMPANYNAME="your_company" ALLUSERS=1

Command-Line Options

The following MSIEXEC command-line options are used in this example:

Option	Description
/i	Run the installation.
/q	Specify the user interface (UI) that displays during installation. You can append other options, such as n to hide the UI or b to hide the Cancel button during the installation.
Note: All command-line options are case-insensitive. See <u>http://msdn2.microsoft.com/en-us/library/aa367988.aspx</u> for a complete list of command-line options.	

Toad Default Installation Option Overrides

You can specify the following values to override Toad's default installation options. Enclose each value in double quotations:

Option	Description
INSTALLDIR	(Optional) Specify the absolute path for the directory in which you want to install Toad. If you do not include this path, the installation program defaults to: C:\Program Files\Quest Software\Toad for DB2 4.7.
ALLUSERS	(Optional) Specify one of the following:
	• For a per-machine installation, specify <i>1</i> . This value allows any user to the Toad shortcut on the desktop after the installation completes.
	• For a per-user installation, enter the empty string value ("") This value allows only the user specified for USERNAME and the user that installed Toad to see the Toad shortcut on the target desktop. If USERNAME is omitted, only the user that installed Toad sees the shortcut.
	Note: If you do not specify this property, the installation program defaults to a per-user installation.

Option	Description
USERNAME	(Optional) Specify the user that intends to use Toad on the target computer. Notes:
	• If ALLUSERS is omitted or defined with the empty string value (""), only the user specified here (and the user that installed Toad) can see the Toad shortcut on the desktop after the installation completes.
	• If ALLUSERS is omitted or defined with the empty string value ("") and you omit the USERNAME option, only the user that installed Toad sees the Toad shortcut on the desktop.
	• If ALLUSERS is <i>1</i> , the USERNAME value is ignored during installation.
COMPANYNAME	(Optional) Specify the name of the company that owns this installation.
Notes:All default installation option overrides are case-sensitive.	

• Enclose all values (except for the ALLUSERS value) in double quotations.

Install Toad on Citrix Systems

Toad must be installed on the Citrix server by the Citrix administrator. Users then connect to this instance through their Citrix login.

Note: Limited testing has been performed for Citrix XenApp 5.0 support on Windows Server 2003. See "Install Toad on Citrix Systems" (page 21) for more information.

To install Toad on a Citrix system

- 1. Connect to the Citrix Environment as an administrator.
- 2. Copy Toad to the Citrix server, if needed.
- 3. Install Toad.
- 4. During installation, select the Anyone who uses this computer checkbox when prompted.

5. Repeat steps 2 through 4 for each server in the Citrix farm.

Note: Although you must install Toad on every server in the Citrix farm, you only need to publish Toad once.

- 6. Review the following considerations regarding licensing:
 - A license supplied by an administrator always overrides a user-supplied license in a Citrix environment.
 - If you need to provide the same Toad functionality to all users, you can enter the default license key for all users.
 - If you have users with different license requirements (for example, some have Standard licenses and others have Professional licenses), individual licenses should be entered for each user. You should not enter the default license key because it enables all functionality in Toad.

Upgrade Toad

To upgrade Toad

- 1. Run the appropriate Toad installer (ToadForDB2_version.exe or ToadForDB2_ 64bitClient_version.exe) from the DVD or downloaded file.
- 2. Select Uninstall Toad and continue with install.
- 3. Complete the wizard.

If you are upgrading from a previous version of Toad, you are prompted to migrate your settings the first time you start Toad. The settings files include database connections, layout customizations, shortcut keys, and options customized in the Options pages.

Files Migrated During Upgrades

When upgrading versions of Toad, the following files can be migrated from the previous version's Application Data Directory (**Help** | **About** to select a link to navigate to the location).

File	Description
Action.log	Tracks your usage within Toad. If you agree to share this data, the file is automatically sent to Quest on a periodic basis.
Connections.xml	Contains all connections stored in the Connection Manager or the New Connection window.

ConnectionTrace.log	Contains the SQL Output connection trace log file if you select Tools SQL Trace from the menu.
ExceptionTrace.log	Contains a log of all exceptions encountered while running Toad.
FTPConnection.log	Contains a log of exceptions encountered when attempting to connect to FTP servers.
FTPConnections.xml	Contains connections to FTP servers stored in the FTP Connections window.
Quest.PersistentCache.xml	Contains the private object annotation cache options (object notes, Lookup tables, and hidden columns). You can share these options with other Toad users in Tools Options Database Cache .
Settings.xml	Contains many of the global configuration settings.
ToadSupportBundle.zip	Contains the last support bundle you generated.
Folder	Description
Automation (temporary folder)	Used by automation when executing automation scripts.
Cache	Used to spool cache database metadata to disk if enabled. The data is in binary format and can always be recreated by fetching it from the database.
CNSScripter (temporary folder)	Used by Compare plug-ins, script generation for Alter object windows, and the Script tab in the Object Explorer.
Context	Contains settings that depend on the context within Toad including the following:
	• Adapter—Custom data editing statements.
	• Filter—Unnamed filters defined in the Object Explorer or Database Explorer.
	• Named Filter—Named filters defined in the Object Explorer or Database Explorer.
	• TYPE—Tabs that display on the right when you select an object in the Object Explorer or

Document Recovery	Contains backup copies of Editor, Query Builder, and Database Diagram files saved if you have enabled Document Recovery in Tools Options Environment General .
Keyboard	Contains custom keyboard shortcut layouts.
Layouts	Contains layouts for some areas in Toad, such as tool windows that automatically display in the Editor and column layouts for the Messages tab.
ModuleSettings	Contains general settings for various components in Toad, such as whether the data grid defaults to read- only, displays not null indicators, etc.
Plugins	Used by Toad plugin components.
Session	Contains desktop configurations, including toolbar customizations and tool window locations.
SQLFormatter	Contains pre-set and user created templates for formatting SQL, and the SQL statement used to preview formatting changes in the Formatting Options page.
SQLRecall	Contains the SQL statements saved by SQL Recall.
Templates	 Contains the following templates: Code Templates—Templates used to define default values when creating new objects in the Object Explorer or Database Browser. Scripts—Startup scripts to run when connecting. Snippets—Code Snippet entries.

Register Toad

To register Toad

- 1. Select **Help** | **Licensing** from the menu (ALT+H+Z).
- 2. Review the following for additional information:

Authorization key	Enter the license key for Toad.
Site message	Enter the site message included with the license key.

Uninstall Toad

If you uninstall Toad, it may not uninstall completely. When you use Toad, you create new files such as SQL scripts, data output, or temp files. The following types of files are not removed when you uninstall:

- Any new files you create
- Any copies of files you make for backup purposes

To uninstall Toad

- 1. Run the appropriate Toad installer (ToadForDB2_version.exe or ToadForDB2_ 64bitClient version.exe) from the DVD or downloaded file.
- 2. Select Uninstall Toad only.
- 3. Complete the wizard.

Install Other Toad Components

Depending on your Toad license type, additional Toad components might be available. See the following sections for information about installing these components:

- Quest IBM DB2 z/OS Component (page 25)
- Toad for DB2 Agent (page 26)
- Quest SQL Optimizer for DB2 LUW (page 26)
- Toad SQL Tuning for DB2 z/OS (page 26)
- Toad SQL Analysis for DB2 LUW (page 27)

Quest IBM DB2 z/OS Component

The Quest IBM DB2 z/OS component enables you to take full advantage of Toad functionality on your DB2 for z/OS subsystem. If you do not have the z/OS component installed, Toad still provides some basic functionality to manage your DB2 for z/OS subsystems. However, with the z/OS component installed on your DB2 subsystem, you can perform these additional functions in Toad:

- Bind and rebind packages and plans
- Invoke DB2 for z/OS utilities and commands within scripts that Toad for DB2 generates for advanced alters, migrations, and data and object synchronization
- Run stand-alone DB2 for z/OS utilities and commands available with UIs in Toad
- Run DB2 for z/OS commands from the Editor
- Execute remote DB2 for z/OS scripts
- Create, alter, or drop dataset templates

- Use Toad UIs to run DISPLAY, START, and STOP commands on DB2 for z/OS databases, tablespaces, and indexes
- · Access accurate buffer-pool information for the DB2 subsystem
- View volumes available for defining a storage group
- View dataset information for tablespace and indexes
- Access information about the current threads connected to the DB2 subsystem
- Assign a RACF group to a Toad Security role to control the Toad features available to all users belonging to the RACF group

The z/OS component is installed on each subsystem that you wantToad to manage. For a complete description of system requirements and installation instructions for this component, refer the *Quest IBM DB2 z/OS Component Installation Guide*. This guide is available from the Windows **Start** menu under **Program Files** | **Quest Software** | **Toad for DB2** | **Documentation**.

Toad for DB2 Agent

The Toad for DB2 Agent enables you to perform the following functions on DB2 for LUW servers:

- Run remote scripts using the Toad LUW Remote Script Execution feature
- Collect and analyze SQL using Toad SQL Analysis for DB2 LUW
- Monitor SMS tablespaces using Spotlight on DB2

Note: The agent is required for DB2 for LUW 8.x servers only.

See the *Toad for DB2 Agent LUW Installation Guide* for requirements and installation instructions. This guide is available from the Windows **Start** menu under **Program Files** | **Quest Software** | **Toad for DB2** | **Documentation**.

Quest SQL Optimizer for DB2 LUW

Quest SQL Optimizer for DB2 LUW lets you tune the SQL used in the DDL for triggers, views, or materialized query tables and the SQL included in packages. You can also tune the SQL on which you are working in the Editor. See the *Quest SQL Optimizer for IBM DB2 LUW Installation Guide* for requirements and installation instructions.

Toad SQL Tuning for DB2 z/OS

Toad SQL Tuning for DB2 z/OS lets you tune the SQL used in the DDL for triggers, views, or materialized query tables and the SQL included in packages and plans. You can also tune the SQL on which you are working in the Editor.

To install SQL Tuning for DB2 z/OS, use your web browser to locate the self-extracting installation file for this product from <u>http://support.quest.com</u> (SupportLink). Download the installation file, and execute it.

Toad SQL Analysis for DB2 LUW

Toad SQL Analysis for DB2 LUW collects and analyzes SQL executing against your DB2 for LUW databases. The product requires the following:

• The SQL Analysis client installed on the same computer as your Toad DB2 client

To install the SQL Analysis client, use your web browser to locate the self-extracting installation file for this product from <u>http://support.quest.com</u> (SupportLink). Download the installation file, and execute it.

• The Toad for DB2 Agent installed on each database server on which you intend to collect SQL

For instructions about installing the Toad for DB2 Agent, see the *Toad for DB2 LUW Agent Installation Guide*. This guide is available from the Windows **Start** menu under **Program Files | Quest Software | Toad for DB2 | Documentation**.

Note: Do not run both the Toad for DB2 Agent and the Quest Central for DB2 Agent on the same computer.

Configuration

Understand Toad Connections

In Toad, a connection represents one or more actual connections to the database. Toad creates an initial database connection for general usage. It also creates a separate database connection for each Editor (the first time you execute a statement) and a separate database connection for each Data tab in the Database Explorer (the first time you select the tab and data is queried). The database connection for each Editor and Data tab remain open until you close the associated window; however, the connections remain in an inactive state if a statement is not currently executing.

Tips:

- To view the number of actual database connections that exist for a Toad connection and how many of those database connections are active, place the cursor over the connection in the Connection Manager or the Connection toolbar.
- You can view the progress of statements executing in the background in a progress bar located on the lower right side of the status bar. To cancel a script's execution, click the progress bar to display the Background Processes window.

Share Database Connections

Editors and Data tabs can share the same database connection when the connection is inactive if you clear the Use specific connection for each open editor checkbox in Tools | Options | Editor | General. Any new executions or windows attempt to use this connection first. For example; if you share a database connection, you can execute a query in the Editor, execute another query in a new Editor, and then select the Data tab from the same connection. If the connection is in use and you attempt to execute it, one of the following occurs:

- (DB2 and Oracle only) If your database supports executing multiple queries simultaneously on a shared connection, the query is placed in a queue and executes as soon as the current operation completes.
- If your database does not support executing multiple queries on a shared connection, a dialog prompts you to either permanently associate the window with a new database connection, cancel the previous operation, or add the query to a queue until the current operation completes, and the execute it. If you place multiple queries in the queue, each one executes in the order that it was added to the queue.

Note: Although you can share a database connection, any commits apply to the selected window only.

Configure DB2 Client Connections

Toad for DB2 requires two phases to set up connections to the DB2 for LUW databases and DB2 for z/OS subsystems that you want Toad to manage.

Define DB2 Client Connections

The first phase is to catalog each of these databases or subsystems on the DB2 client installed with Toad. Toad provides three methods for cataloging the systems:

• Transfer an existing catalog from another DB2 client on your computer

You can transfer the catalog of an existing DB2 client on your local computer to the new Toad DB2 client during initial setup or at any time later.

Transfer a Catalog During Initial Setup

When you first launch Toad for DB2 after installation, Toad provides an opportunity to transfer the catalog of an existing DB2 client on your local computer to your new Toad DB2 client. (In other words, Toad exports and imports the catalog for you.)

Toad			×
٩	If a DB2 Client is installed on this system, you can select a client in this dialog to automatically transfer the catalog profile to Toad.		
	If you want to import a remote or exported profile, click Cancel and use the Client Configuration Wizard in the Connections window.		
	DB2 Clark	Defail:/D82 : 8.1.8.	~
	DDE CIGIRA	an and an a crist.	
		OK Cancel	7

Toad makes this option available only when *all* of these conditions exist:

- You are launching Toad for the first time since installation.
- This installation is a first-time Toad for DB2 installation on your computer, or it is an upgrade from a previous Toad for DB2 version already on your computer.
- Toad detects other DB2 clients installed on your computer. These can include the DB2 clients laid down with other installations.

If you choose not to transfer an existing catalog at this point, you can transfer a catalog later. See "Transfer a Catalog Any Time After Initial Setup" (page 31) for more information.

To transfer an existing DB2 catalog

- 1. Open Toad for DB2 after installation is complete.
- 2. If Toad displays the Settings Migration Utility window, select whether to migrate from your previously installed Toad for DB2. (These settings include Toad connection profiles.)
 - If you migrate settings, the window showing the option to transfer a catalog displays once the migration completes.
 - If you do not migrate settings, Toad steps you through its Configuration wizard before displaying the Connections window. When you select to create a connection, the window showing the option to transfer a catalog displays.

If the Settings Migration Utility window does not display, go to step 3.

3. On the window showing the option to transfer a catalog, locate the **DB2 Client** list, and select the name of the existing DB2 client whose catalog you want to transfer to your newly installed Toad for DB2.

This list contains all current previously installed DB2 clients on your computer, including the default DB2 client instance and other Toad for DB2 client installations.

4. Click **OK** to proceed with the catalog transfer.

When the transfer completes, the Connections window displays. The **Database alias** drop-down list now includes all the DB2 databases and subsystems whose catalog entries you transferred.

Note: During the transfer process, DB2 does not automatically export catalog entries for the local DB2 instance and its databases installed on your computer unless these entries already exist in the catalog you are transferring. To include local node entries in your Toad DB2 client catalog, you must manually catalog these databases.

5. Proceed to create Toad connection profiles for the DB2 databases and subsystems whose connection profiles you did not migrate (in step 2). For those profiles you migrated, simply select the connection in the Connections window, and provide the login ID and password to start the connection. See "Create Toad Connection Profiles for DB2" (page 40) for more information.

Transfer a Catalog Any Time After Initial Setup

To transfer a catalog any time after initial setup

- 1. In the Connection Manager or on the Connections window, click 😽 in the toolbar.
- 2. From the **DB2** Client list, select the name of the existing DB2 client whose catalog you want to transfer to your newly installed Toad for DB2.

This list contains all current previously installed DB2 clients on your computer, including the default DB2 client instance and other Toad for DB2 client installations.

- 3. Click OK.
- 4. Create Toad Connection Profiles for DB2 (page 40) for any of the transferred catalog entries as needed.
- Import a DB2 catalog previously exported to a file

Toad for DB2 provides functionality to import an existing DB2 client catalog to your Toad DB2 client, saving you the effort of manually creating individual catalog entries on the Toad DB2 client. This feature executes the DB2 Connectivity Configuration Import Tool command db2cfimp, which imports an export profile containing the catalog exported the from a local or remote DB2 client or a local Toad DB2 client. Either of these functions export DB2 catalogs:

- Export Profile feature in the Toad Configuration wizard (for exporting your current Toad DB2 client catalog only). See "Export the catalog for the current DB2 client " (page 38) for more information.
- DB2 Connectivity Configuration Export Tool Command db2cfexp. For more information, see the following IBM documentation: http://publib.boulder.ibm.com/infocenter/db2luw/v8/index.jsp?topic=/com.ibm.db2.udb.doc/core/r0002442.htm.

Note: Do not attempt to manually import catalog entries from the IBM CLP window provided with Toad. If you have any DB2 ODBC entries, db2cfimp will override your existing ODBC system with DSN entries and can cause previously configured DB2 ODBC connections to stop working.

To import an exported catalog profile

- 1. In the Connections (or Create New Connection) window, click 🕎 beside the **Database alias** drop-down list to open the Client Configuration wizard.
- 2. On the Welcome page, select Import Profile.
- 3. Click Next.

- 4. Click $\overline{\buildrel \mbox{m}}$ in the **Profile name** field to browse for and select the exported profile you want to import. When you select the profile, its contents display in the text pane.
- 5. Complete the wizard.

Once you close the wizard, the **Database alias** drop-down list in the Connections window includes all the DB2 databases and subsystems whose catalog entries you imported.

Note: DB2 does not automatically export catalog entries for the local DB2 instance and its databases on the computer from which the export is run (unless these entries already exist in the catalog). Therefore, the profile you are importing might not include these node entries. To add the missing entries to your Toad DB2 client catalog, you must manually catalog the databases. If these databases are local to your computer, catalog them as remote databases. See "Manually catalog DB2 for LUW databases" (page 32) for more information.

- 6. Proceed to catalog entries as needed. See "Create Toad Connection Profiles for DB2" (page 40) for more information.
- Manually catalog DB2 for LUW databases

To manually catalog a DB2 for LUW database

- In the Connections (or Create New Connection) window, click we beside the Database alias drop-down list to open the Client Configuration wizard. The Welcome page displays, showing the Toad DB2 client's existing catalog configuration in a tree view.
- 2. If the host and node names for the database you want to configure are listed in the tree, select them. These selections pre-fill certain fields required later in the wizard process. If these names are not listed, you must provide the necessary host and node information later in the wizard.
- 3. Click Add Catalog Entry.
- 4. Review the following for additional information:

Add a Host	Description
Operating system	Select the operating system for the server on which the DB2 for LUW instance containing the DB2 database you are cataloging resides. For a list of supported server platforms, see the release notes.
Host name	Enter the TCP/IP address or the system name for the server on which the DB2 database resides.

Port number	Enter the port number for the server on which the DB2 database resides.
Enable SOCKS security	Select this checkbox to enable the SOCKS secure protocol to handle TCP traffic for this connection. SOCKS adds an authentication mechanism for additional security.
Specify an Instance	Description
Node name	Enter a user-defined name for the DB2 instance containing the database you are cataloging. If you selected the node name from the tree on the Welcome page, this information is pre-filled (but you can update it as needed).
Instance name	Enter the real name of the DB2 instance.
Comment	Enter a descriptive comment for the instance, if needed.
Add a Database	Description
Database name	Enter the real name of the DB2 database.
Database alias	Enter a unique nickname to identify the database on your system.
Authentication	Select the authentication method that is required to connect to the database.
Target principal	Enter the service account name for server's service where the database resides. Note: This option is available only when <i>Kerberos</i> is selected as the authentication method.

5. Complete the wizard.

The **Database alias** drop-down list in the Connections window shows the alias for the newly cataloged database. To complete the Toad connection setup, you must create a Toad connection profile for the database. See "Create Toad Connection Profiles for DB2" (page 40) for more information.

• Manually catalog DB2 for z/OS subsystems

Note: If you connect directly to a DB2 for z/OS subsystem, you cannot take advantage of Sysplex. If you want to use Sysplex, catalog an entry to a DB2 Connect gateway instead. See "Manually catalog DB2 Connect gateways" (page 35) for more information.

To manually catalog a DB2 for z/OS subsystem

- In the Connections (or Create New Connection) window, click beside the Database alias drop-down list to open the Client Configuration wizard. The Welcome page displays, showing the Toad DB2 client's existing catalog configuration in a tree view.
- 2. If the host name for the DB2 subsystem you want to configure is listed in the tree, select it. This selection pre-fills certain fields required later in the wizard process. If the host name is not listed, you must provide the necessary host information later in the wizard.
- 3. Click Add Catalog Entry.
- 4. Review the following for additional information:

Add a Host	Description	
Operating system	Select z/OS for the server operating system.	
Host name	Enter the TCP/IP address or the system name for the server on which the DB2 subsystem resides.	
Port number	Enter the port number of the service for the DB2 subsystem.	
Enable SOCKS security	Select this checkbox to enable the SOCKS secure protocol to handle TCP traffic for this connection. SOCKS adds an authentication mechanism for additional security.	
Add a DB2 Subsystem	Description	
Location name	Enter the location name of the DB2 subsystem as defined during the DB2 installation.	
Database alias	Enter a unique, user-defined alias to identify the DB2 subsystem on your system. You can use the same name you used in the previous Location name field, as long as it does not already exist in the list aliases in the Toad DB2 client.	

5. Complete the wizard. A message window informs you whether the entry was added successfully.

The **Database alias** drop-down list in the Connections window shows the alias for the newly cataloged subsystem. To complete the Toad connection setup, create a Toad connection profile for the database. See "Create Toad Connection Profiles for DB2" (page 40) for more information.

• Manually catalog DB2 Connect gateways

In order to connect to a DB2 for z/OS subsystem, you need to catalog two entries. First, you need to catalog the DB2 subsystem on the DB2 Connect gateway. During this process, you define an alias for the DB2 subsystem. Second, you need to catalog this DB2 subsystem alias in Toad. The procedure below describes both cataloging events.

To manually catalog an entry to a DB2 Connect gateway

- 1. Catalog the DB2 subsystem on the DB2 Connect gateway. See the IBM DB2 for z/OS documentation for more information.
- In the Connections (or Create New Connection) window in Toad, click beside the **Database alias** drop-down list to open the Client Configuration wizard.
- 3. Click Add Catalog Entry.
- 4. Review the following for additional information:

Add a Host	Description
Operating system	Select the operating system for the server on which the DB2 Connect gateway resides.
Host name	Enter the TCP/IP address or the system name for the server on which the DB2 Connect gateway resides.
Port number	Enter the port number of the service for the DB2 Connect gateway.
Enable SOCKS security	Select this checkbox to enable the SOCKS secure protocol to handle TCP traffic for this connection. SOCKS adds an authentication mechanism for additional security.
Specify an Instance	Description
Node name	Enter an alias for the user-defined node name you specify in the Instance name field.
Instance name	Enter a user-defined name for the gateway node or use the same value entered in the Node name . Note: This name does not point to an actual node on the gateway system but is needed to continue the
	cataloging process.
Add a Database	Description
Database name	Enter the database alias name for the DB2 subsystem. Note: This alias name must match the alias cataloged on the DB2 Connect gateway.
Database alias	Enter a unique, user-defined alias for the DB2 Connect gateway. You can use the same alias you used in the previous Database name field, as long as it does not exist in the list of Toad for DB2 aliases.
Authentication	Select the authentication method that matches the method specified for the DB2 subsystem on the DB2 Connect gateway.

5. Complete the wizard.

The **Database alias** drop-down list in the Connections window shows the name for the newly cataloged DB2 subsystem. To complete the Toad connection setup, you must create a Toad connection profile for the subsystem. See "Create Toad Connection Profiles for DB2" (page 40) for more information.
Note: Toad for DB2 supports LDAP connections. See "Configure DB2 LDAP Support" (page 39) for more information.

Maintain DB2 Client Connections

Additionally, Toad provides functionality to perform the following maintenance on the catalog you set up for the current Toad DB2 client:

• Edit DB2 catalog entries

To edit a DB2 catalog entry

- 1. In the Connections (or Create New Connection) window, click 🕎 beside the **Database alias** drop-down list to open the Client Configuration wizard.
- 2. In the catalog configuration tree for the Toad DB2 client, select the catalog entry for the DB2 database or subsystem that you want to edit.
- 3. Click Edit Catalog Entry.
- 4. On the Edit Catalog Entry page, update the catalog properties as needed. For a description of the catalog properties, see the following links:
 - Manually catalog DB2 for LUW databases (page 32)
 - Manually catalog DB2 for z/OS subsystems (page 34)
 - Manually catalog DB2 Connect gateways (page 35)
- 5. Click Next to open the Catalog Script Review window.
- 6. Review and modify the script in the preview pane as needed.
- 7. Click **Finish**. A message window displays, informing you whether the updates to the catalog entry completed successfully.
- Remove DB2 catalog entries

To remove a DB2 catalog entry

- 1. In the Connections (or Create New Connection) window, click 🕎 beside the **Database alias** drop-down list to open the Client Configuration wizard.
- 2. In the catalog configuration tree for the Toad DB2 client, expand one or more nodes, and select the catalog entries that you want to remove. (Press CTRL+click to select multiple entries.)

Note: You can remove a node by selecting all database entries for that node.

3. Click Remove Catalog Entry.

- 4. On the Catalog Script Review page, modify the script in the preview pane as needed.
- 5. Click **Finish**. A message window displays, informing you whether the removals completed successfully.
- Export the catalog for the current DB2 client

Toad for DB2 provides functionality to export your current Toad DB2 client catalog to a file, called an *export profile*. You can then import this profile to set up the catalog for another Toad DB2 client.

To create the export profile containing the current Toad DB2 client catalog, Toad executes the DB2 Connectivity Configuration Export Tool command db2cfexp. If you want to export the catalog of a remote or local DB2 client (other than your current Toad DB2 client), you must manually execute this command. For more information, see the following IBM documentation: http://publib.boulder.ibm.com/infocenter/db2luw/v8/index.jsp?topic=/com.ibm.db2.udb.doc/core/r0002442.htm.

To export the Toad DB2 client catalog

- 1. In the Connections (or Create New Connection) window, click 🖳 beside the **Database alias** drop-down list.
- 2. Click **Export Profile** in the Welcome window of the Client Configuration wizard. (You might need to click this button.)
- 3. Click Next.
- 4. Click \square in the **Profile name** field to browse for and select the path for the profile in which to export the current Toad DB2 client catalog.
- 5. Select the type of profile you want to create:
 - *Template* to create a profile used as a template for other DB2 clients (default for exporting a Toad DB2 catalog)
 - Backup to create a profile used to back up a DB2 database instance
 - *Maintain* to create a profile that contains only database or node information required for updating other instances

For more information about these profile types, see the IBM documentation (as cited previously) describing the db2cfexp command.

6. Complete the wizard. A message window displays, informing you whether the export completed successfully.

Note: DB2 does not automatically export catalog entries for the local DB2 instance and its databases installed on your computer unless these entries already exist in the catalog you are exporting. If you later import the export catalog to a Toad DB2 client, you must manually catalog the missing local-node databases as remote databases. See "Manually catalog DB2 for LUW databases" (page 32) for more information.

After you have set up the catalog on the current Toad DB2 client, you can proceed to the second phase of the Toad connection setup. This phase involves creating Toad connection profiles for the cataloged DB2 databases or subsystems. See "Create Toad Connection Profiles for DB2" (page 40) for more information.

Configure DB2 LDAP Support

You can create DB2 Lightweight Directory Access Protocol (LDAP) connections when the DB2 client installed with Toad is configured for LDAP. Configuring the client consists of enabling LDAP support and specifying the host name and port number of the LDAP server. Once the client is configured, Toad retrieves names from your LDAP server and displays them in the **Database Alias** list in the Connections window.

Notes:

- You must configure LDAP support for the DB2 client installed with Toad regardless of whether an existing DB2 client on the computer is already configured to support LDAP.
- Currently, Toad for DB2 supports only the access of DB2 LDAP catalog entries. Toad does not support the management of these entries.

To configure the DB2 client for LDAP

- Open the Command Window for the DB2 client installed with Toad by selecting Start | All Programs | IBM DB2 | <ToadCom, ToadEval, or ToadFree> | Command Line Tools | Command Window.
- 2. Enter the following command to enable LDAP support:

db2set DB2_ENABLE_LDAP=YES

3. Enter the following command to specify the TCP/IP host name and port number of the LDAP server:

db2set DB2LDAPHOST=<hostname[:port]>

The port number defaults to 389 (default LDAP port) if you leave the port number blank.

- 4. Exit the Command window.
- 5. Launch Toad and open the Connections window.

Databases on the LDAP server should be available from the **Database alias** dropdown list in the Connections window. To complete the Toad connection setup, you must create a Toad connection profile for each database. See "Create Toad Connection Profiles for DB2" (page 40) for more information.

Create Toad Connection Profiles for DB2

Toad for DB2 requires two phases to set up connections to the DB2 for LUW databases and DB2 for z/OS subsystems that you want Toad to manage.

Tip: Connections are stored in the connections.xml file and can be found by clicking the *Application Data Directory* link in **Help** | **About**.

The first phase is to catalog each of these databases or subsystems on the DB2 client installed with Toad. See "Configure DB2 Client Connections" (page 29) for more information.

The second phase involves creating Toad connection profiles for the cataloged DB2 databases or subsystems. Each profile contains the information that Toad needs to connect to the system, such as the user ID and password, DB2 registry settings, and the default schema.

Create Connection Profiles

Use of these methods to create Toad connection profiles:

• Migrate existing connection profiles from another Toad for DB2 installation on your computer (available during initial Toad setup only)

When you first launch Toad for DB2 after installation, Toad provides an opportunity to migrate the settings of an existing Toad for DB2 installation on your local computer to your new Toad for DB2 installation. These settings include, among other configuration parameters, the Toad connection profiles defined on the earlier installation. (Toad exports and imports these connection profiles for you.)

Toad makes this option available only when *both* of these conditions exist:

- You are launching Toad for the first time since installation.
- Toad detects earlier versions of Toad for DB2 on your computer.

If you choose not to migrate the connection profiles at this point, you can perform the migration later using the Connection Managers' Import Connections feature.

To migrate Toad connection profiles

- 1. Open Toad for DB2 after installation is complete. Toad displays the Settings Migration Utility window if the conditions described previously exist.
- 2. Select the Toad for DB2 installation whose connection profiles you want to migrate to your new Toad installation, and click **Migrate**.

After the migration completes, Toad provides the option to transfer a local DB2 catalog to your new Toad DB2 client.

3. Select to transfer a DB2 catalog or to manually catalog entries later. See "Configure DB2 Client Connections" (page 29) for more information.

Note: The connection profiles you migrated are not usable unless you also transfer the DB2 catalog containing the corresponding entries for these profiles (or until you manually create these catalog entries later).

After the catalog transfer is complete, your Toad connection setup is complete for all those connections that have both a catalog entry on the Toad DB2 client and a Toad connection profile. For any connection that does not have a corresponding DB2 catalog entry, create an entry. See "Configure DB2 Client Connections" (page 29) for more information.

• Import Toad connection profiles previously exported to an XML file

(See "Export connection profiles to an XML file" (page 43) for more informationabout exporting a profile that you can later import.)

Note: The connection profiles are not usable unless you have also created entries in the DB2 catalog for the DB2 databases and subsystems to which these profiles correspond. See "Configure DB2 Client Connections" (page 29) for more information.

To import connection profiles

- In the Connections (or Create New Connection) window, click \$\$\vee\$ on the toolbar, and select Connection file.
- 2. From the Import Connections window, browse for and select the XML file containing the connection profiles you want to import.
- 3. Click Open.
- 4. Select DB2 and click OK to complete the import.

The connections whose profiles you imported are listed on the Connections window.

• Manually define Toad connection profiles.

To create a Toad connection profile for a DB2 database or subsystem

- 1. In the Connections (or Create New Connection) window, click ¹/₂ on the toolbar (ALT+F+N).
- 2. Select *DB2* from the **Group** list box.
- 3. Review the following for additional information:

Database alias	Select the alias for the DB2 database or subsystem. This alias was defined when you cataloged this DB2 database or subsystem on the Toad DB2 client. See "Configure DB2 Client Connections" (page 29) for more information if the alias does not display in the list. Tip: Click Storefresh the alias list. Normally, Toad caches the Toad DB2 catalog the first time you open this window in your Toad session and continues to read from cache each time you subsequently open this window. This button forces Toad to reread the DB2 catalog to list any new systems that might have been cataloged externally during the caching period.
Default schema/auth ID	Enter the SET SCHEMA value (DB2 for LUW) or the SET SCHEMA or SET CURRENT SQLID value (DB2 for z/OS) for this connection.
Category	Select or create a category if you want to color code Editor tabs for a specific connection. This can help differentiate between development and production databases. You can also set an option to color code the Object Explorer pane and object editor windows (Create, Alter, Drop, etc.).

- 4. Select the Advanced tab to define special register values that are then in effect each time Toad connects to the DB2 database or subsystem.
- 5. Click **Connect** to save the connection and immediately connect to the database.

or

Click Save to save the connection without connecting to the database.

Manage Connections

After you have completed both phases for configuring Toad connections to DB2 databases or subsystems, the Connections window lists all the configured connections, allowing you to perform the following:

- Connect to and manage a DB2 database or subsystem through Toad
- Export connection profiles to an XML file

Toad for DB2 provides functionality to export one or more of your current Toad connection profiles to an XML file. You can then import these exported connection profiles into another Toad for DB2 installation. See "Import Toad connection profiles previously exported to an XML file " (page 41) for more information.

To export connection profiles

- 1. In the Connections (or Create New Connection) window, select the connections whose profiles you want to export.
- 2. Click \gtrsim on the toolbar, and select **Connection file**.
- 3. On the Export Connections window, review the selected connections, and click **OK**.
- 4. Browse for and select the path for the file in which to export the selected profiles.
- Import missing connections defined on the Toad client

You can import all connection entries currently defined in the Toad DB2 client catalog but missing from your current list of Toad connectionsSee "Create Toad Connection Profiles for DB2" (page 40) for more information.

Note: The imported connection entries might be associated with incorrect or missing DB2 catalog or Toad connection profile information, making them currently invalid. To re-instate any of these connections, you might need to provide accurate DB2 catalog and Toad profile information.

To import missing connections

- » In the Connections or Connections Manager window, click 👺.
- Troubleshoot connection issues

Troubleshoot DB2 LUW Issues

Review the following solutions to help troubleshoot DB2 LUW issues pertaining to Toad installation and database connections.

Installation Issues

The following table describes issues related to installing Toad for DB2.

Issue	Cause/Solution		
System.IO.FileNotFoundException - File or assembly name DB2AdminWrapper, or one of its dependencies was not found	You are not a member of the DB2ADMIN or DB2USERS group. To install Toad, you must be a member of either group. Solution: Ensure that you have been added to one of these groups.		
Cannot access IBM DB2 native tools after installing Toad for DB2 2.0 with previous install of DB2 client v7. Error: "SQL10007N Message "-1390" could not be retrieved. Reason code: "2"."	Toad is bundled with the IBM DB2 v9 client. IBM does not support direct client migration from v7 to v9, so installing Toad on a system that has an existing v7 client may cause errors. Solution: Upgrade the IBM DB2 v7 client to the v8 client. If you upgrade the client after installing Toad, you do not have to uninstall or reinstall Toad.		
Error: "Could not load file or assembly 'IBM.Data.DB2.9.1.0, Version=9.1.0.2, Culture=neutral, PublicKeyToken=7c307b91aa13d208' or one of its dependencies. The system cannot find the file specified."	 You installed a commercial version of Toad for DB2 after uninstalling the freeware version. Solution: You must remove run time information for the freeware version of Toad from the .NET system.config file. <i>To remove run time information</i> Exit Toad. Navigate to the following .NET 		
	 Nuvigate to the following http:// framework directory: C:\WINDOWS\Microsoft.NET\ Framework\v2.0.50727\ CONFIG Create a backup copy of the system.config file. Open the system.config file in Notepad. Locate the <runtime> tag delete everything between the runtime tags (including <runtime> and </runtime>).</runtime> Save the file. 		
	7. Restart Toad.		

Connection Issues

Issue	Cause/Solution
ERROR [08001] [IBM] SQL1336N The remote host was not found. SQLSTATE=08001	You are attempting to connect to a database version that is not supported in Toad. Solution: Review the list of supported databases in the Release Notes or Installation Guide.
ERROR [58031] [IBM] SQL1031N The database directory cannot be found on the indicated file system. SQLSTATE=58031	Catalog entries have not been imported or defined for the connection. Solution: See <u>Configure DB2 Client Connections</u> to determine the best method for cataloging a database.
"The type initializer for 'IBM.Data.DB2.DB2Connection' threw an exception." or "SUCCESS - unable to allocate an environment handle."	 A settings file might be corrupt. Solution: Rename your local settings directory so a new one can be recreated. <i>To rename your local setting directory</i> Exit Toad. Navigate to the following settings directory: C:\Documents and Settings\ <i>UserName</i>\Local Settings\ApplicationData\Quest Software Rename the Toad for DB2 version# folder to "Toad for DB2 OLD". Restart Toad and try to connect. Note: Make sure you can view hidden folders in Windows Explorer.

Troubleshoot DB2 z/OS Issues

Review the following solutions to help troubleshoot DB2 z/OS issues in Toad.

Installation Issues

Issue	Cause/Solution		
Error: "Could not load file or assembly 'IBM.Data.DB2.9.1.0, Version=9.1.0.2, Culture=neutral, PublicKeyToken=7c307b91aa13d208' or one of its dependencies. The system cannot find the file specified."	You installed a commercial version of Toad for DB2 after uninstalling the freeware version. Solution: You must remove run time information for the freeware version of Toad from the .NET system.config file.		
	To remove run time information		
	1. Exit Toad.		
	 Navigate to the following .NET framework directory: C:\WINDOWS\Microsoft.NET\ Framework\v2.0.50727\ CONFIG 		
	3. Create a backup copy of the system.config file.		
	4. Open the system.config file in Notepad.		
	 Locate the <runtime> tag delete everything between the runtime tags (including <runtime> and </runtime>).</runtime> 		
	6. Save the file.		
	7. Restart Toad.		

Connection Issues

Issue	Cause/Solution
ERROR [08001] [IBM] SQL1336N The remote host was not found. SQLSTATE=08001	You are attempting to connect to a database version that is not supported in Toad. Solution: Review the list of supported databases in the Release Notes or Installation Guide.
ERROR [58031] [IBM] SQL1031N The database directory cannot be found on the indicated file system. SQLSTATE=58031	You do not have any catalog entries defined for the connection.Solution:See <u>Configure DB2 Client Connections</u> to determine the best method for cataloging a database.
ERROR [42501] [IBM][DB2] SQL0551N "UserName" does not have the privilege to perform operation "SELECT" on object "SYSIBM.SYSSTMT". SQLSTATE=42501	You do not have SYSADM privileges for the DB2 for z/OS subsystem. Solution: Ensure that you are granted SELECT permissions on the DB2 catalog tables.
ERROR [] [IBM] SQL1460N The environment variable "SOCKS_NS" required for SOCKS server name resolution is not defined or not valid.	 When using the Time-Sharing Option (TSO) to connect, the user ID, port number, or IP address entered may be incorrect. Solution: Ensure that you use the following for TSO connections: DB2 user ID for the DB2 subsystem Port number that DB2 listens on, for remote connections, via the DB2 DDF address space IP address for the z/OS subsystem

Issue	Cause/Solution
ERROR [56038] [IBM][DB2] SQL0969N There is no message text corresponding to SQL error "-4700" in the message file on this workstation.' when connecting to compatibility mode database. -or- After connecting, some objects do not display properly or some functionality does not work as designed.	In general, Toad does not support a z/OS subsystem running in Compatibility mode. Solution: If possible, switch the subsystem's operating mode to Full Function mode. If this is not possible, Toad now provides a message when you connect to subsystem, informing you of that the subsystem is running in compatibility mode and that some features might not be available.

Other Issues

Issue	Cause/Solution	
[IBM][CLI Driver][DB2] SQL0104N An unexpected token "/*" was found following	The SQL script that you attempted to execute contains commented text delimited by characters that DB2 for z/OS 8 or earlier does not support.	
". Expected tokens may include:	Solution:	
SQLSTATE=42601	Set an option in Toad that removes comments automatically from a script before you execute it.	
	To have Toad remove comments automatically from SQL before execution	
	1. Select Tools Options Database DB2 General.	
	2. Select Remove comments from SQL statements prior to execution.	

Configure Version Control

About Version Control

Toad integrates with your existing version control system so you can maintain multiple revisions of objects, SQL scripts, and files.

Important: See "Troubleshoot Version Control" (page 65) for more information about issues when upgrading version control from a previous version.

Prerequisites

You must install a supported version control client on the computer where Toad is installed. The following table lists the supported version control providers and the versions tested with Toad.

Supported Provider	Server Version Tested	Client Version Tested	
Visual SourceSafe (VSS)	VSS 6.0d	VSS 6.0d See "Configure TFS or VSS" (page 50) for more information.	
Concurrent Versions System (CVS)	CVS 1.11.22 on Solaris CVSNT 2.5.03 on Windows	CVSNT 2.5.03 See "Configure CVS " (page 54) for more information.	
Subversion	Subversion 1.5.6 on Windows Note: Toad only supports Subversion 1.5.6 or later.	 CollabNet Subversion Command-Line Client 1.5.6 Notes: Toad only supports Subversion 1.5.6 or later. Any Subversion client must have svn.exe in its installation directory to use version control in Toad. Tortoise SVN is no longer supported in Toad because it no longer includes svn.exe in its installation directory. See "Configure Subversion" (page 59) for more information. 	
Team Foundation Server (TFS)	TFS 2005, 2008	Visual Studio (2005 and 2008) Team Explorer Client See "Configure TFS or VSS" (page 50) for more information.	
Note: Toad connects to your version control system based on login information included			

Note: Toad connects to your version control system based on login information included in the configuration. Your version control client does not need to run for Toad to connect.

Configure TFS or VSS

You can configure version control to work with SQL scripts in the Editor, or you can configure it to work with database objects in the Object Explorer. See "Troubleshoot Version Control" (page 65) for more information.

Notes:

- If you want to place database objects under version control, you must configure version control for objects using the Object Explorer.
- To manage version-controlled scripts, you must create a separate version control configuration from the Editor.

To configure TFS or VSS to work with SQL scripts in the Editor

- 1. Ensure that a supported version control client is installed on the computer where Toad is installed. See "About Version Control" (page 48) for more information about tested version control clients and supported versions.
- 2. Open an Editor window.
- 3. Right-click anywhere in the toolbar area and select **Version Control** to display the Version Control toolbar.

Tip: You can also access version control functionality from the **File** | **Version Control** menu when the Editor window has focus.

- 4. Click 🔄 to open the Version Control wizard.
- 5. Review the following for additional information:

Version Control System Page	Description
Туре	Select either <i>Team Foundation Server</i> or <i>Visual SourceSafe</i> . Note: If you select TFS, you must specify the workspace name for the provider in the Team Foundation Server Properties window that displays.
Properties	(TFS only) Click this button (beside the Type field) and specify the workspace name for the provider in the Team Foundation Server Properties window.

Server	Select one of the following:			
	• For TFS, specify the server where your version control provider is installed and the port number (default is 8080) to use in the following format:			
	http://MyServer:Port			
	 For VSS, select the folder where the Source Safe client is installed and the srcsafe.ini file (for example: C:\SourceSafe\VSS\srcsafe.ini). 			
User name/	Enter login information for the version control provider and click Login .			
Password	Note: For TFS only, if you leave the user name and password fields blank, Toad uses your default Windows credentials.			
Version Control Settings Page	Description			
Version control	Select the folder on the version control server where you want to check the scripts in.			
folder	If you already have the Editor-managed scripts under version control, select the folder on the server where these scripts are located. Notes:			
	• Version control automatically checks out the scripts in this folder and any subfolders to the location you specify in the Working folder field.			
	• Make sure the version control folder used for scripts is different from the one used for database objects.			
Working folder	Select the root repository folder on the client computer to use as the default working folder for checking SQL scripts out. If you already have Editor-managed SQL scripts under version control, select the existing working folder for these.			

6. See "Add Scripts Using the Editor" in the Toad help for more information.

Tips:

• You can view revision history and revision comments for a script from the History tab; and can also right-click a revision to send it to the Diff Viewer to compare differences.

Result Sets Mes	ssages Expla	in Plan	Pivot & Chart	History		
Date Time		Updat	ed By	Revision	Comment	
7/15/2009 1:52:2	26 AM	quest2	2	1.3	Added Wh	ere Clause for city to query
7/15/2009 1:45:0	02 AM	quest2	:	1.2	<u>⊂</u> ompare	on the Free edition of March Hare Software CVSNT
7/15/2009 1:43:4	14 AM	quest2	2	1.1	Lindaka Likekama	CVS Suite for more features and support:
					Update History	n-hare.com/cvsnt/

- You can enable, disable, or delete a version control configuration under **Tools** | **Options** | **Version Control** | **General.**
- You can modify current settings, including whether to require comments when checking objects and scripts in or out, avoid checking scripts in automatically when executing a script in the Editor, disable or delete a version control configuration, etc., from Tools | Options | Version Control | <options page>.

To configure TFS or VSS to work with objects in the Object Explorer

- 1. Ensure that a supported version control client is installed on the computer where Toad is installed. See "About Version Control" (page 48) for more information about tested version control clients and supported versions.
- 2. Right-click one or more objects in the Object Explorer and select Version Control | Version Control Wizard.
- 3. Review the following for additional information:

Version Control System Page	Description		
Туре	Select either <i>Team Foundation Server</i> or <i>Visual SourceSafe</i> . Note: If you select TFS, you must specify the workspace name for the provider in the Team Foundation Server Properties window that displays.		
Server	 Select one of the following: For TFS, specify the server where your version control provider is installed and the port number (default is 8080) to use in the following format: http://MyServer:Port For VSS, select the folder where the Source Safe client is installed and the srcsafe.ini file (for example: C:\SourceSafe\VSS\srcsafe.ini). 		
User name/ Password	Enter login information for the version control provider and click Login . Note: For TFS only, if you leave the user name and password fields blank,Toad uses your default Windows credentials.		

Version Control Settings Page	Description
Version control folder	Select the folder on the version control server where you want to check objects in.
	If you already have objects under version control, select the folder on the server where these objects are located.
	Notes:
	• Version control automatically checks out objects in this folder and any subfolders to the location you specify in the Working folder field.
	• Make sure the version control folder used for database objects is different from the one used for scripts.
Working	Select the folder to use as the default working folder.
folder	If you already have objects under version control, select the working folder for these objects.
Create/Change file name formats	Specify the default format to use for objects. Objects are archived as script files in the version control provider. To change the default order, delete the default format and click + to select the order.
Use default mode	Clear this checkbox to override default folders for actions, such as create or alter scripts for each object (recommended for objects that are already under version control).

4. Complete the wizard and add objects to version control. Depending on the number of objects selected, this process may take time.

The following indicators display in the top-right corner of any object under version control:

	Object is under version control
۵	Object is checked out by another user
*	Object is checked out by current user
If version control is configured but an indicator does not display, open the Object Options page in the Toad help and select the checkbox for that object.	

5. Use the right-click menu to check files in/out, get the latest version, update the status, and other actions.

Tips:

• You can use the Script tab in the Object Details pane to view revision information about each script and historical create/alter scripts (initially collapsed). You can also right-click a revision date to compare differences or update version control history. See Compare Revisions in the Toad help for more information.

	Script
F	
<pre>/****** Object: Table [Employee: USE [Northwind_copy]; GO SET ANSI_NULLS ON; GO SET QUOTED_IDENTIFIER ON; GO CREATE TABLE [Employees] ([EmployeeID] int IDENTITY(1, 1) [LastName] nvarchar(20 NOT NUL] [FirstName] nvarchar(20 NOT NUL] [Title] nvarchar(30) NULL, [TitleOfCourtesy] nvarchar(25) I</pre>	Create Alter USE [Northwind_copy]; GO SET ANSI_NULLS ON; GO SET QUOTED_IDENTIFIER ON; GO CREATE TABLE [dbo].[Employees] ([EmployeeID] int IDENTITY(1, 1) NOT [LastName] nvarchar(20) NOT NULL, [FirstName] nvarchar(10) NOT NULL, [Title] nvarchar(30) NULL, [TitleOfCourtesy] nvarchar(25) NULL, [BirthDate] datetime NULL.
Date Time Updated By Revision 7/9/2009 3:45:18 0M cuert2 1.2 7/9/2009 12:5 Compare 1.1 Update History	Comment Added Supervisor column Committed on the Free edition of March Hare Software CVSNT Server. Upgrade to CVS Suite for more features and support: http://march-hare.com/cvsnt/

- You can view history for the last 100 check in operations by selecting History in the Object Explorer. The History folder/node is read-only, and you cannot perform any actions on the objects using it. Also, the Object Details pane remains empty when the History folder/node is selected.
- You can modify current settings, including whether to require comments when checking objects and scripts in or out, adding or removing objects from version control, disable or delete a version control configuration, etc., from Tools | Options | Version Control | <options page>.

Configure CVS

You can configure version control to work with SQL scripts in the Editor, or you can configure it to work with database objects in the Object Explorer. See "Troubleshoot Version Control" (page 65) for more information.

Notes:

- If you want to place database objects under version control, you must configure version control for objects using the Object Explorer.
- To manage version-controlled scripts, you must create a separate version control configuration from the Editor.

To configure CVS to work with SQL scripts in the Editor

- 1. Ensure that a supported version control client is installed on the computer where Toad is installed. See "About Version Control" (page 48) for more information about tested version control clients and supported versions.
- 2. Open an Editor window.
- 3. Right-click anywhere in the toolbar area and select **Version Control** to display the Version Control toolbar.

Tip: You can also access version control functionality from the **File** | **Version Control** menu when the Editor window has focus.

- 4. Click 🔄 to open the Version Control wizard.
- 5. Review the following for additional information:

Version Control System Page	Description	
Туре	Select CVS.	
Properties	Click this button (beside the Type field) and complete the following in the Command Based Version Control Properties window:	
	• BinaryPath—Enter the path where the CVS client is installed. For example, if you installed CVSNT, you would enter:	
	C:\Program Files\CVSNT	
	• BranchRevision—Leave this field blank if you are working from the trunk in version control. If you are working from a branch, enter the branch number or name in this field.	
	Caution: Specifying HEAD for the BranchRevision parameter can cause errors. Leave the parameter blank when working with the HEAD revision.	
Server	Select the existing working folder for the version control repository or specify the server string. For example, if you are connecting using pserver, you should specify the server string as follows: :pserver:MyServer:Port:/MyWorkingRepository	
User name/ password	Enter your CVS command-line user name and password and click Login. Note: The User name field is optional.	

Default Version Control Settings Page	Description
Version control	Select the folder on the version control server where you want to check the scripts in.
folder	If you already have the Editor-managed scripts under version control, select the folder on the server where these scripts are located.
	Notes:
	• Version control automatically checks out the scripts in this folder and any subfolders to the location you specify in the Working folder field.
	• Make sure the version control folder used for scripts is different from the one used for database objects.
Working folder	Select the root repository folder on the client computer to use as the default working folder for checking SQL scripts out. If you already have Editor-managed SQL scripts under version control, select the existing working folder for these.

6. See "Add Scripts Using the Editor" in the Toad help for more information.

Tips:

• You can view revision history and revision comments for a script from the History tab; and can also right-click a revision to send it to the Diff Viewer to compare differences.

Result Sets	Messages	Explain Plan Pivot & Cha	art History				
Date Time		Updated By	Revision		~	Comment	
7/15/2009 1	:52:26 AM	quest2	1.3			Added Whe	re Clause for city to query
7/15/2009 1	:45:02 AM	quest2	1.2	<u>C</u> omp	bare	;	on the Free edition of March Hare Software CVSNT
7/15/2009 1	:43:44 AM	quest2	1.1				CVS Suite for more features and support:
				Upda	ite f	History	n-hare.com/cvsnt/

- You can enable, disable, or delete a version control configuration under **Tools** | **Options** | **Version Control** | **General.**
- You can modify current settings, including whether to require comments when checking objects and scripts in or out, avoid checking scripts in automatically when executing a script in the Editor, disable or delete a version control configuration, etc., from **Tools | Options | Version Control | <options page>**.

To configure CVS to work with objects in the Object Explorer

- 1. Ensure that a supported version control client is installed on the computer where Toad is installed. See "About Version Control" (page 48) for more information about tested version control clients and supported versions.
- 2. Right-click one or more objects in the Object Explorer and select Version Control | Version Control Wizard.
- 3. Review the following for additional information:

Version Control System Page	Description		
Туре	Select CVS.		
Properties	Click this button (beside the Type field) and complete the following in the Command Based Version Control Properties window:		
	• BinaryPath—Enter the path where the CVS client is installed. For example, if you installed CVSNT, you would enter:		
	C:\Program Files\CVSNT		
	• BranchRevision—Leave this field blank if you are working from the trunk in version control. If you are working from a branch, enter the branch number or name in this field.		
Server	Select the existing working folder for the version control repository or specify the server string. For example, if you are connecting using pserver, you should specify the server string as follows: :pserver:MyServer:Port:/MyWorkingRepository		
User name/ Password	Enter your CVS command-line user name and password and click Login .		
	Note: The User name field is optional.		
Default Version Control Settings Page	Description		
Version control folder	Select the folder on the version control server where you want to check objects in. If you already have objects under version control, select the folder on the server where these objects are located. Notes:		

	 Version control automatically checks out objects in this folder and any subfolders to the location you specify in the Working folder field. Make sure the version control folder used for database objects is different from the one used for scripts.
Working folder	Select the root repository folder on the client computer to use as the default working folder for checking objects out. If you already have objects under version control, select the existing working folder for these.
Create/Change file name formats	Specify the default format to use for objects. Objects are archived as script files in the version control provider. To change the default order, delete the default format and click + to select the order.
Use default mode	Clear this checkbox to override default folders for actions, such as create or alter scripts for each object (recommended for objects that are already under version control).

4. Complete the wizard and add objects to version control. Depending on the number of objects selected, this process may take time.

The following indicators display in the top-right corner of any object under version control:

	Object is under version control
۵	Object is checked out by another user
*	Object is checked out by current user
If version control is configured but an indicator does not display, open the Object Options page in the Toad help and select the checkbox for that object.	

5. Right-click one or more objects in the Object Explorer to check them in/out, get the latest version, update the status, and other actions.

Tips:

• You can use the Script tab in the Object Details pane to view revision information about each script and historical create/alter scripts (initially collapsed). You can also right-click a revision date to compare differences or update version control history.

	Script
5	
<pre> /****** Object: Table [Employee: USE [Northwind_copy]; Go SET ANSI_NULLS ON; GO SET QUOTED_IDENTIFIER ON; Go CREATE TABLE [Employees] ([EmployeeID] int IDENTITY(1, 1) [LastName] nvarchar(20 NOT NUL) [FirstName] nvarchar(10) NOT NUU [Title] nvarchar(30) NULL, [TitleOfCourtesy] nvarchar(25) I C CENTER STATE STATE STATE STATE STATE Set State State State Set State</pre>	Create Alter USE [Northwind_copy]; GO SET ANSI_NULLS ON; GO SET QUOTED_IDENTIFIER ON; GO CREATE TABLE [dbo].[Employees] ([EmployeeID] int IDENTITY(1, 1) NOT [LastName] nvarchar(20) NOT NULL, [FirstName] nvarchar(20) NOT NULL, [Title] nvarchar(30) NULL, [TitleOfCourtesy] nvarchar(25) NULL, [BirthDatel datetime NULL.
Date Time Updated By Revision 7/9/2009 3:45:18.0M ouest? 1.2 7/9/2009 12:5 ⊆ompare 1.1 Update Historγ	Comment Added Supervisor column Committed on the Free edition of March Hare Software CVSNT Server. Upgrade to CVS Suite for more features and support: http://march-hare.com/cvsnt/

See Compare Revisions in the Toad help for more information.

- You can view history for the last 100 check in operations by selecting History in the Object Explorer. The History folder/node is read-only, and you cannot perform any actions on the objects using it. Also, the Object Details pane remains empty when the History folder/node is selected.
- You can modify current settings, including whether to require comments when checking objects and scripts in or out, adding or removing objects from version control, disable or delete a version control configuration, etc., from Tools | Options | Version Control | <options page>.

Configure Subversion

You can configure version control to work with SQL scripts in the Editor, or you can configure it to work with database objects in the Object Explorer. See "Troubleshoot Version Control" (page 65) for more information.

Notes:

- If you want to place database objects under version control, you must configure version control for objects using the Object Explorer.
- To manage version-controlled scripts, you must create a separate version control configuration from the Editor.

To configure Subversion to work with SQL scripts in the Editor

- 1. Ensure that a supported version control client is installed on the computer where Toad is installed. See "About Version Control" (page 48) for more information about tested version control clients and supported versions.
- 2. Open an Editor window.
- 3. Right-click anywhere in the toolbar area and select **Version Control** to display the Version Control toolbar.

Tip: You can also access version control functionality from the **File** | **Version Control** menu when the Editor window has focus.

- 4. Click 🔄 to open the Version Control wizard.
- 5. Review the following for additional information:

Version Control System Page	Description	
Туре	Select Subversion.	
Properties	Click this button (beside the Type field) and complete the following in the Command Based Version Control Properties window:	
	• BinaryPath—Enter the path where the Subversion client that contains svn.exe is installed. For example, if you installed the CollabNet Subversion Client, you would enter:	
	C:\Program Files\CollabNet Subversion Client	
	Note: <i>Do not</i> include svn.exe in the path.	
	• BranchRevision—Leave this field blank if you are working from the trunk in version control. If you are working from a branch, enter the branch number or name in this field.	
	Important: Specifying HEAD for the BranchRevision parameter can cause errors. Leave the parameter blank when working with the HEAD revision.	
Server	Select the existing working folder for the version control repository or specify the server string (for example: svn:// <i>MyServer</i>).	
User name/ Password	Enter your Subversion command-line user name and password and click Login .	

Default Version Control Settings Page	Description
Version control	Select the folder on the version control server where you want to check the scripts in.
folder	If you already have the Editor-managed scripts under version control, select the folder on the server where these scripts are located.
	Notes:
	• Version control automatically checks out the scripts in this folder and any subfolders to the location you specify in the Working folder field.
	• Make sure the version control folder used for scripts is different from the one used for database objects.
Working folder	Select the root repository folder on the client computer to use as the default working folder for checking SQL scripts out. If you already have Editor-managed SQL scripts under version control, select the existing working folder for these.

6. See "Add Scripts Using the Editor" in the Toad help for more information.

Tips:

• You can view revision history and revision comments for a script from the History tab; and can also right-click a revision to send it to the Diff Viewer to compare differences.

Result Sets M	lessages Expla	in Plan 🛛 Pivot & Chart	History				
Date Time		Updated By	Revision		^	Comment	
7/15/2009 1:52	2:26 AM	quest2	1.3		_	Added Whe	re Clause for city to query
7/15/2009 1:45	5:02 AM	quest2	1.2	Comp	bar	e	on the Free edition of March Hare Software CVSNT
7/15/2009 1:43	3:44 AM	quest2	1.1				CVS Suite for more features and support:
			Upda	ice	History	n-hare.com/cvsnt/	

- You can enable, disable, or delete a version control configuration under **Tools** | **Options** | **Version Control** | **General.**
- You can modify current settings, including whether to require comments when checking objects and scripts in or out, avoid checking scripts in automatically when executing a script in the Editor, disable or delete a version control configuration, etc., from **Tools | Options | Version Control | <options page>**.

To configure Subversion to work with objects in the Object Explorer

- 1. Ensure that a supported version control client is installed on the computer where Toad is installed. See "About Version Control" (page 48) for more information about tested version control clients and supported versions.
- 2. Right-click one or more objects in the Object Explorer and select Version Control | Version Control Wizard.
- 3. Review the following for additional information:

Version Control System Page	Description	
Туре	Select Subversion.	
	Note: The version number beside Subversion is an internal file definition used by Toad to check if an update for this file is available. It is not the actual version number for the version control provider.	
Properties	Click this button (beside the Type field) and complete the following in the Command Based Version Control Properties window:	
	 BinaryPath—Enter the path where the Subversion client that contains svn.exe is installed. For example, if you installed the CollabNet Subversion Client, you would enter: 	
	Note: Do not include syn.exe in the path	
	• BranchRevision—Leave this field blank if you are working from the trunk in version control. If you are working from a branch, enter the branch number or name in this field.	
Server	Select the existing working folder for the version control repository or specify the server string (for example: svn:// <i>MyServer</i>).	
User name/ Password	Enter your Subversion command-line user name and password and click Login .	
Default Version Control Settings Page	Description	
Version control folder	Select the folder on the version control server where you want to check objects in.	
	If you already have objects under version control, select the folder on the server where these objects are located.	
	• Version control automatically checks out objects in this folder and any subfolders to the location you specify in the Working folder field.	
	• Make sure the version control folder used for database objects is different from the one used for scripts.	

Create/Change file name	Specify the default format to use for objects. Objects are archived as script files in the version control provider.		
formats	To change the default order, delete the default format and click $+$ to select the order.		
Working folder	Select the root repository folder on the client computer to use as the default working folder for checking objects out. If you already have objects under version control, select the existing working folder for these.		
Use default mode	Clear this checkbox to override default folders for actions, such as create or alter scripts for each object (recommended for objects that are already under version control).		

4. Complete the wizard and add objects to version control. Depending on the number of objects selected, this process may take time.

The following indicators display in the top-right corner of any object under version control:

	Object is under version control	
۵	Object is checked out by another user	
×	Object is checked out by current user	
If version control is configured but an indicator does not display, open the Object		

5. Right-click one or more objects in the Object Explorer to check them in/out, get the latest version, update the status, and other actions.

Options page in the Toad help and select the checkbox for that object.

Tips:

• You can use the Script tab in the Object Details pane to view revision information about each script and historical create/alter scripts (initially collapsed). You can also right-click a revision date to compare differences or update version control history.

	Script
<pre> /****** Object: Table [Employee: USE [Northwind_copy]; Go SET ANSI_NULLS ON: Go SET QUOTED_IDENTIFIER ON; Go CREATE TABLE [Employees] ([EmployeeID] int IDENTITY(1, 1) [LastName] nvarchar(20 NOT NUL] [FirstName] nvarchar(20 NOT NUL] [TitleOfCourtesy] nvarchar(25) I </pre>	Create Alter USE [Northwind_copy]; GO SET ANSI_NULLS ON; GO CREATE TABLE [dbo].[Employees] ([EmployeeID] int IDENTIFY(1, 1) NOT [LastName] nvarchar(20) NOT NULL, [FirstName] nvarchar(10) NOT NULL, [Title] nvarchar(30) NULL, [TitleOfCourtesy] nvarchar(25) NULL,
	KITChDatel datetime NULL.
Date Time Updated By Revision 7/9/2009 3:45:18.0M duast2 1.2 7/9/2009 12:5 Compare 1.1 Update History 1.1	Comment Added Supervisor column Committed on the Free edition of March Hare Software CVSINT Server. Upgrade to CVS Suite for more features and support: http://march-hare.com/cvsnt/

See Compare Revisions in the Toad help for more information.

- You can view history for the last 100 check in operations by selecting History in the Object Explorer. The History folder/node is read-only, and you cannot perform any actions on the objects using it. Also, the Object Details pane remains empty when the History folder/node is selected.
- You can modify current settings, including whether to require comments when checking objects and scripts in or out, adding or removing objects from version control, disable or delete a version control configuration, etc., from Tools | Options | Version Control | <options page>.

Troubleshoot Version Control

Troubleshoot Upgrades

For this release, the back-end of version control has been rewritten. If you previously used version control in Toad, the following may occur:

- If you migrate settings when upgrading Toad, you may have to reconfigure the repository setting in version control if a "Failed to open the settings for module VersionControl reverting to defaults" error displays. To reconfigure the repository, select **Tools | Options | Version Control | Defaults** and select the previous repository in the **Version control folder** field. Your previous project settings are applied.
- In previous releases, the method Toad used to generate the script was different than the current method. After upgrading Toad, a message may display stating that objects or files in version control are different than the local version. If your local version is current, you should check the objects and files into version control.

Troubleshoot Other Issues

Review the following to help troubleshoot issues with version control:

VSS Issues	Description
Language support	VSS 6.0 uses ANSI strings. Consequently, the English-encoded VSS server and client do not handle certain characters in other languages. This issue may also exist on previous or later VSS language installations.
Case insensitive	VSS is not case-sensitive. Using version control on objects whose names differ by case only can cause history and version-tracking issues.
CVS Issues	Description
System cannot find file	If a message stating that, "The system cannot find the file specified" displays, this usually means that the CVS executable cannot be found in the path you specified in the BinaryPath field of the Command Based Version Control Properties window. Verify that cvs.exe exists in the directory you specified in this field
Command execution	When executing CVS commands, user input is not allowed. This presents an issue when the user is using CVS with the SSH method and must enter a password to establish the Secure Shell.Workaround:Generate identity keys that automatically authenticate between the client and the server when connecting with SSH.
Subversion Issues	Description
System cannot find file	If a message stating that, "The system cannot find the file specified" displays, this usually means that the Subversion executable cannot be found in the path you specified in the BinaryPath field of the Command Based Version Control Properties window. Verify that svn.exe exists in the directory you specified in this field
Command execution	When executing Subversion commands, user input is not allowed. This presents an issue when the user is using Subversion with the SSH method and must enter a password to establish the Secure Shell.Workaround:Generate identity keys that automatically authenticate between the client and the server when connecting with SSH.
Object Issues	Description

Adding multiple objects	When you add multiple objects to version control, the objects are grouped and added in batches (for example, all the tables for a particular schema are added at once). If an error (for example, failure to support Korean characters) causes this command to fail, none of the objects are added.
Script Issues	Description
Canceled check-in	SQL scripts remain checked out if a change was made to the text, but check-in was canceled during the prompt for a check-in comment. This behavior is by design—that is; the user can either undo the checkout or check in the script.
	Note: If you alter the object again, you receive a prompt to use the "locally changed" script. Click Yes to use the locally changed copy; click No to refresh the local copy from the source repository; click Cancel to cancel the prompt.

Appendix: Contact Quest

Contact Quest Support

Quest Support is available to customers who have a trial version of a Quest product or who have purchased a Quest product and have a valid maintenance contract. Quest Support provides unlimited 24x7 access to SupportLink, our self-service portal. Visit SupportLink at http://support.quest.com.

From SupportLink, you can do the following:

- Retrieve thousands of solutions from our online Knowledgebase
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View the Global Support Guide for a detailed explanation of support programs, online services, contact information, policies and procedures. The guide is available at: <u>http://support.quest.com</u>.

Toad Community

Get the latest product information, find helpful resources, and join a discussion with the Toad for DB2 team and other community members. Join the Toad for DB2 community at <u>http://toadfordb2.com/index.jspa</u>.

Contact Quest Software

Email <u>info@quest.com</u> Quest Software, Inc. World Headquarters Mail 5 Polaris Way

> Aliso Viejo, CA 92656 USA

Web site <u>www.quest.com</u>

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