

**Toad® for SQL Server® 7.2.x**  
**Installation Guide**



# Copyright

© 2020 Quest Software Inc.  
ALL RIGHTS RESERVED.

This guide contains proprietary information protected by copyright. The software described in this guide is furnished under a software license or nondisclosure agreement. This software may be used or copied only in accordance with the terms of the applicable agreement. No part of this guide may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording for any purpose other than the purchaser's personal use without the written permission of Quest Software Inc.

The information in this document is provided in connection with Quest Software products. No license, express or implied, by estoppel or otherwise, to any intellectual property right is granted by this document or in connection with the sale of Quest Software products. EXCEPT AS SET FORTH IN THE TERMS AND CONDITIONS AS SPECIFIED IN THE LICENSE AGREEMENT FOR THIS PRODUCT, QUEST SOFTWARE ASSUMES NO LIABILITY WHATSOEVER AND DISCLAIMS ANY EXPRESS, IMPLIED OR STATUTORY WARRANTY RELATING TO ITS PRODUCTS INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. IN NO EVENT SHALL QUEST SOFTWARE BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE, SPECIAL OR INCIDENTAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, BUSINESS INTERRUPTION OR LOSS OF INFORMATION) ARISING OUT OF THE USE OR INABILITY TO USE THIS DOCUMENT, EVEN IF QUEST SOFTWARE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Quest Software makes no representations or warranties with respect to the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. Quest Software does not make any commitment to update the information contained in this document.

If you have any questions regarding your potential use of this material, contact:

Quest Software Inc.  
Attn: LEGAL Dept  
4 Polaris Way  
Aliso Viejo, CA 92656

Refer to our web site ([www.quest.com](http://www.quest.com)) for regional and international office information.

## Patents

Quest Software is proud of our advanced technology. Patents and pending patents may apply to this product. For the most current information about applicable patents for this product, please visit our website at [www.quest.com/legal](http://www.quest.com/legal).

## Trademarks

Quest, Quest Software, Benchmark Factory, Spotlight, LiteSpeed, SQL Navigator, vWorkspace, Toad, and the Quest logo are trademarks of Quest Software Inc. in the U.S.A. and other countries. For a complete list of Quest Software trademarks, please visit our website at [www.quest.com/legal](http://www.quest.com/legal). Microsoft, Windows, Windows Server, Visual Studio, SQL Server, SharePoint, Access and Excel are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. Citrix® and XenApp™ are trademarks of Citrix Systems, Inc. and/or one or more of its subsidiaries, and may be registered in the United States Patent and Trademark Office and in other countries. Subversion is a trademark of the Apache Software Foundation. All other trademarks, servicemarks, registered trademarks, and registered servicemarks are property of their respective owners.

Toad for SQL Server 7.2  
Installation Guide  
Friday, May 22, 2020

# Contents

<b>Copyright</b> .....	<b>2</b>
<b>Contents</b> .....	<b>3</b>
<b>Installation</b> .....	<b>5</b>
System Requirements .....	5
Client Requirements .....	5
Server Requirements .....	6
Virtualization Support .....	6
User Requirements .....	7
Install Toad .....	8
Specify Application Data Directory Location .....	8
Install Toad Silently .....	9
Silent Installation Using the Executable .....	9
Install Toad on Citrix® Systems .....	11
Upgrade Toad .....	12
Upgrade Automation Scripts and Scheduling Tasks .....	12
Upgrade Automation Scripts to Newer Version of Toad .....	12
Migrate Scheduling Tasks to Newer Version of Toad .....	13
Files Migrated During Upgrades .....	14
Integration between Toad and Microsoft SQL Server Management Studio .....	15
Install and Uninstall Toad Plug-In .....	16
Uninstall Toad .....	16
<b>Create Connections</b> .....	<b>18</b>
Understand Toad Connections .....	18
Toad Open Connections .....	18
Sharing a Connection Among Windows .....	18
Create SQL Server and SQL Azure Connections .....	19
<b>Troubleshoot Connections</b> .....	<b>21</b>
Troubleshoot SQL Server® Issues .....	21
Installation Issues .....	21
Toad Plug-in for Microsoft® SQL Server Management Studio Issues .....	21
Connection Issues .....	22
<b>Configure Version Control</b> .....	<b>24</b>
About Version Control .....	24
Prerequisites .....	24
Version Control for Toad Files .....	25
Configure Version Control for Objects .....	28

Manage Objects under Version Control .....	29
Troubleshoot Version Control .....	32
Troubleshoot Upgrades .....	32
Troubleshoot Other Issues .....	32
<b>Configure SQL Server Debugging .....</b>	<b>34</b>
Configure SQL Server Debugging .....	34
Debugging Prerequisites .....	34
Configure Debugging for SQL Server 2012 / SQL Server 2014 .....	36
Configure Debugging for SQL Server 2008 .....	37
Configure Debugging for SQL Server 2005 .....	37
Configure Debugging for SQL Server 2000 .....	38
Set Up Debugging .....	39
<b>About Us .....</b>	<b>40</b>
We are more than just a name .....	40
Our brand, our vision. Together. ....	40
Contact Quest .....	40
Technical Support Resources .....	40
<b>Index .....</b>	<b>41</b>

# Installation

## System Requirements

Review the following client and database server requirements for Toad® for SQL Server.

### Client Requirements

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

Requirement	Details
<b>Platform</b>	2 GHz processor (recommended minimum)
<b>Memory</b>	8 GB of RAM minimum, 16 GB recommended <b>Note:</b> The memory required may vary based on the following: <ul style="list-style-type: none"> <li>• Applications that are running on your system when using Toad</li> <li>• Size and complexity of the database</li> <li>• Amount of database activity</li> <li>• Number of concurrent users accessing the database</li> </ul>
<b>Hard Disk Space</b>	800 MB to install Toad 104 MB to run Toad <b>Note:</b> The disk space required may vary based on the edition of Toad selected for installation.
<b>Operating System</b>	Windows Server® 2012 Windows Server® 2012 R2 Windows Server® 2016 Windows Server® 2019 Windows® 8.1 (32-bit or 64-bit) Windows® 10 <b>Important:</b> Toad uses the Microsoft® Distributed Transaction Coordinator (DTC) when opening a SQL file to get Full-Text Search status, but DTC is disabled by default on Windows Server 2008 and Windows 7. If you are using either operating system, ensure that Network DTC access is enabled on the Toad client. See <a href="http://technet.microsoft.com/en-us/library/cc753510(WS.10).aspx">http://technet.microsoft.com/en-us/library/cc753510(WS.10).aspx</a> for more information about enabling DTC access.
<b>.NET Framework</b>	Microsoft® .NET Framework 4.7.1
<b>Additional Requirements</b>	<b>Web Browser</b> Microsoft® Internet Explorer® 11 or later <b>Screen</b>

Requirement	Details
	<p>Recommended maximum DPI settings for Toad are 125%. It is possible to use Toad up to 200% but some dialog windows will not be completely usable anymore.</p> <p>Maximum tested resolution for Toad is 3800 x 2160 px.</p> <p><b>Copy/Move Database Wizard</b></p> <p>The SQL Server Backward Compatibility package is required to use the Copy/Move Database wizard.</p> <p><b>Log Reader</b></p> <p>The Log Reader requires version 8.0 DLL files in the Microsoft Visual C++ 2005 SP1 Redistributable Package. If these files do not exist on the client, you will need to install them to use some functionality in the Log Reader.</p> <p><a href="http://www.microsoft.com/downloads/details.aspx?FamilyID=200B2FD9-AE1A-4A14-984D-389C36F85647&amp;displaylang=en">http://www.microsoft.com/downloads/details.aspx?FamilyID=200B2FD9-AE1A-4A14-984D-389C36F85647&amp;displaylang=en</a></p>

## Server Requirements

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

Requirement	Details
<b>Database Server</b>	<p>SQL Server 2012 and SQL Server 2012 Express</p> <p>SQL Server 2014 Enterprise and SQL Server 2014 Express</p> <p>SQL Server 2016</p> <p>SQL Server 2017</p> <p>SQL Server 2019</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• SQL Server Compact Edition is not supported.</li> <li>• Storage Management is not available on SQL Server Express.</li> </ul> <p><b>Note:</b> To use Access 2016 64-bit to connect to an Access database in Toad, the Microsoft Access Database Engine is required and might not be included in the Access installation. The engine must match the architecture (bitness) of Toad.</p>
<b>Cloud Database Service</b>	<p>SQL Azure and Azure SQL Data Warehouse</p> <p><b>Note:</b> To be able to utilize a majority of Toad functionality, please grant VIEW DEFINITION on the SQL Azure databases you want to work with.</p>

## Virtualization Support

Requirement	Details
<b>Application Virtualization</b>	<p>When deploying Toad in a virtualization environment, for best results ensure the system accurately reflects the applicable client hardware and software requirements listed in this document.</p> <p>Toad has been developed using Microsoft guidelines (see <a href="#">Remote Desktop Services programming guidelines</a>) and can be deployed and operated in virtualization environments such as Citrix XenApp, Microsoft App-V, and VirtualBox.</p> <p>See "Install Toad on Citrix® Systems" on page 11 for more information.</p>

# User Requirements

## User Requirements to Install Toad

Only Windows Administrators and Power Users can install Toad.

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—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:

- 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.

# Install Toad

**Note:** Your Toad for SQL Server license key determines the edition and will enable Toad for SQL Server functionality accordingly. In many cases, if functionality is disabled within Toad for SQL Server, you may not have an appropriate license to use it. When Toad is running, you can see which components are licensed by selecting **Help | About**.

## To install Toad

1. Run the Installer.
2. Accept the License Agreement.
3. Select the products you want to install and click **Install**.

**Note:** When installing Toad using Quest Software Installer on Windows 7 64-bit, Program Compatibility Assistant may appear with “This program might not have installed correctly” message. Select **This program installed correctly** to continue installation.

**Note:** Check **Prohibit saving passwords** during the installation to prohibit users from saving their passwords in Toad.

# Specify Application Data Directory Location

Toad for SQL Server 7.2 stores settings files in the user's Application Data directory. The default location cannot be modified from within the application. Toad provides two methods to change the default location: by using a Registry setting or by using a command switch in a Toad shortcut.

Use the Registry setting method to change the application data directory from Roaming to Local. Use the command switch method to change the location to any new path.

## To change Toad Application Data directory location from Roaming to Local

In the Registry under Toad for SQL Server (Computer\HKEY\_CURRENT\_USER\Software\Quest Software\Toad for SQL Server\7.2), add LOCALSETTINGS with a value of 1.

See the following table for default (Roaming) and resulting (Local) directory path.

**Caution:** All current Toad settings will be lost after applying this Registry setting unless you manually copy the settings files from the default location (Roaming directory) to the new location (Local directory). Copy the settings files BEFORE you add the Registry setting and BEFORE opening Toad.

Operating System	Default Location	New Location when LOCALSETTINGS = 1
Windows Server 2008	C:\Users\username\	C:\Users\username\
Windows 7	AppData\Roaming\Quest	AppData\Local\Quest Software\ Toad
Windows 8	Software\Toad for SQL Server 7.2	for SQL Server 7.2
Windows 10		

## To change Toad Application Data directory location using a command-line switch

You can override the default Application Data directory by running Toad with the command switch:

```
Toad.exe --datadir="YourNewDirPath"
```

To instruct Toad to always use the new directory path, add the command switch and the new directory path to a Toad desktop shortcut. Then use the desktop shortcut when opening Toad.

1. To add the command switch, right-click the Toad shortcut and select Properties.
2. Enter the command switch and add the directory path in quotes (replace "YourNewDirPath" with your directory path).

## 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.

Use a stand-alone installer to perform a silent install. Obtain your installer files at <https://support.quest.com/>.

Installer	Advantages	Disadvantages
Executable file (.exe)	<p>Silent installation using the .exe file has the following advantages:</p> <ul style="list-style-type: none"> <li>• Verifies whether the prerequisite software is installed, and if not, redirects you to the download location.</li> <li>• 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.</li> </ul>	<p>Silent installation using the .exe file has the following disadvantages:</p> <ul style="list-style-type: none"> <li>• Cannot deploy custom Toad settings files or license keys.</li> <li>• Installer automatically exits if the prerequisite software is not installed.</li> </ul>

## 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 Software 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 MSIEEXEC command-line options are used in this example:

Option	Description
<code>/L "C:\temp\installLog.txt"</code>	<p>(Optional) Write installation messages to the specified log file. 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.</p> <p>You can add additional parameters to the logging option to indicate what type of information to log.</p> <ul style="list-style-type: none"> <li>• <b>/Lx</b>—Adds extra debugging information to the log (used in previous example)</li> <li>• <b>/Lv</b>—Specifies verbose output</li> <li>• <b>/L*</b>—Log all information, except that specified by x and v</li> <li>• <b>/L*v</b>—Log all information, including v (verbose output)</li> <li>• <b>/L*x</b>—Log all information, including x (extra debugging info)</li> <li>• <b>/L*vx</b>—Log all information, including that specified by v and x</li> </ul> <p>See the log section at <a href="http://msdn2.microsoft.com/en-us/library/aa367988.aspx">http://msdn2.microsoft.com/en-us/library/aa367988.aspx</a> for more information about additional logging parameters.</p>
<code>License="full_path"</code>	<p>Specify the full path to a license file, e.g. License="C:\ProgramData\Quest Software\Toad for SQL Server". Toad for SQL Server to use Toad with the desired license.</p>

## 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
<code>INSTALLDIR</code>	<p>(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:</p> <p>C:\Program Files (x86)\Quest Software\Toad for SQL Server7.2.</p>
<code>ALLUSERS</code>	<p>(Optional) Specify one of the following:</p> <ul style="list-style-type: none"> <li>• For a per-machine installation, specify <code>1</code>. This value allows any user to use the Toad shortcut on the desktop after the installation completes.</li> <li>• For a per-user installation, enter the empty string value (<code>""</code>). This value allows only the user specified for <code>USERNAME</code> (and the user that installed Toad) to see the Toad shortcut on the target desktop. If <code>USERNAME</code> is omitted, only the user that installed Toad sees the shortcut.</li> </ul> <p><b>Note:</b> If you do not specify this property, the installation program defaults to a per-user installation.</p>
<code>USERNAME</code>	<p>(Optional) Specify the user that intends to use Toad on the target computer.</p> <p><b>Notes:</b></p>

Option	Description
	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>If ALLUSERS is 1, the USERNAME value is ignored during installation.</li> </ul>
COMPANYNAME	(Optional) Specify the name of the company that owns this installation.
INSTALLSSMS	(Optional) Set the property to "No" not to install Toad plug-in for Microsoft SQL Server Management Studio. <b>Note:</b> If you do not specify this property or specify any other value except "No", Toad plug-in for Microsoft SQL Server Management Studio will be installed.
ALLOWPASSWORDS=FALSE	(Optional) Set in order to prohibit users from saving their passwords in Toad.
OPTIONSTEMPLATE	(Optional) Enter a full path to the Options Template that you generated in <b>Tools   Options   General</b> .

**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.

### 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. Start the Toad installation process.
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 Toad installer from the DVD or downloaded file.
2. Select the products you want to install and click **Install**.

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.

To migrate the settings again, remove or rename the current version's Application Data folder and migrate the files from the previous version's Application Data folder.

**Note:** The Diagnostic Server is no longer used by Toad for SQL Server. If the Diagnostic Server was installed with a previous release of Toad for SQL Server then uninstall that program. Use **Control Panel | Programs and Features | Uninstall or change a program** and select to uninstall the **Toad for SQL Server Diagnostic Server**.

## Upgrade Automation Scripts and Scheduling Tasks

If you upgrade to a newer version of Toad, Automation scripts created in a previous version must be upgraded before you can open them in the newer version. Toad prompts you to automatically upgrade a script when you attempt to open it in a newer version.

In addition, *scheduled* scripts are scheduled to run using the version of Toad in which they were created. After upgrading Toad, those previously-created, scheduled scripts will not execute in the newer version until you migrate each script's scheduling task. Toad prompts you to migrate scheduling tasks when you initially launch the application after installation.

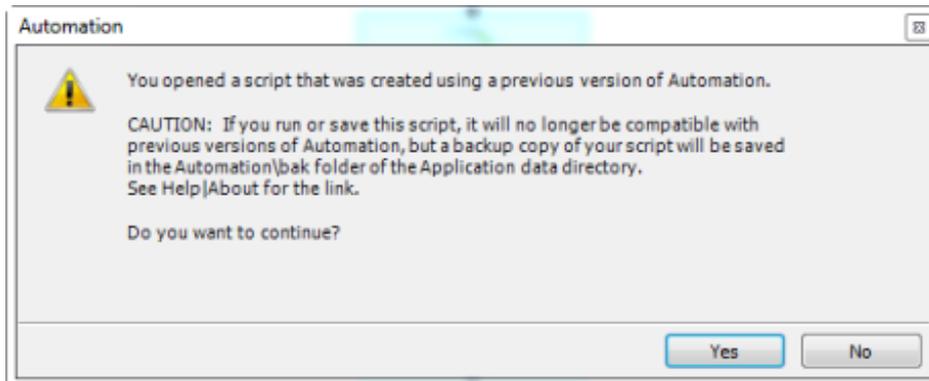
**Note:** If Toad was installed with the **Prohibit saving passwords** option selected, the Automation module is disabled and Toad does not prompt you to migrate scripts.

## Upgrade Automation Scripts to Newer Version of Toad

An automation script is compatible with the version of Toad in which the script was created. If you want to open and/or modify a script using a newer version of Toad, you must upgrade the script. Toad automatically prompts you to upgrade the script the first time you open it in the newer version.

### To upgrade an Automation script

1. Open the script in Toad. Toad prompts you to upgrade the script.



2. To upgrade the script, select **Yes**.

**Caution:** If you upgrade an automation script, it will no longer be compatible with earlier versions of Toad.

3. Select **No** (and do not elect to save the script), to keep the script compatible with the previous version.
4. If you selected Yes, Toad upgrades your script and saves a backup copy of the original script in the following location:

**<application data directory>\Automation\bak\**

5. If the script you upgraded is also scheduled, you **must** migrate the scheduling task, otherwise the upgraded script will fail to run.

## Migrate Scheduling Tasks to Newer Version of Toad

Each scheduled Automation script uses a Windows scheduling task. The scheduling task specifies which version of Toad to use by specifying the version's application path. Toad provides you with two easy ways to migrate your scheduled scripts' scheduling tasks when you upgrade Toad. First, Toad prompts you to migrate scheduling tasks upon initial launch of the application after installation. Next, you can migrate scheduling tasks at any time using the Job Manager.

### Notes:

- If you upgrade a previously-created script by opening it in a newer version of Toad, you must also migrate the scheduling task to the newer version.
- If you install the newer version of Toad side-by-side with the older version, previously-created, scheduled scripts will continue to execute using the older version, until you migrate the scheduling tasks (provided that you do not open the scripts in the newer version).

### To migrate scheduling tasks upon initial launch

1. After upgrading Toad, and upon initial launch of the application, the Migrate Scheduled Tasks dialog opens.
2. Select the scheduled tasks (scheduled Automation scripts) to migrate to the new version of Toad.
3. Click **OK** to close the dialog.
4. Toad immediately prompts you for your Windows password. Enter your password to migrate the scheduled tasks.

### To migrate scheduling tasks using the Job Manager

1. Select **Tools | Administer | Job Manager**.
2. Click  on the Job Manager toolbar.
3. Select the scheduled tasks to migrate and click **OK**.

**Note:** Only currently-scheduled tasks (enabled or disabled) are listed in the Migrate Scheduled Tasks dialog.

4. Toad immediately prompts you for your Windows password. Enter your password to migrate the scheduled tasks.

## Manually Edit Scheduling Tasks

On occasion you may need to modify the application path in a Windows scheduling task. You can do this by manually editing the scheduling task using the following procedure.

### To manually edit a scheduling task

1. In the Job Manager (**Tools | Administer | Job Manager**), right-click a task and select **Edit Task**.
2. To change the version of Toad used to run the script, in the **Actions** tab, change the folder name in the *toad.exe* path.

## Files Migrated During Upgrades

When upgrading to a new version of Toad, the following files can be migrated from the previous version's Application Data Directory (click the *Application Data Directory* link in **Help | About** to open the directory).

**Caution!** Migrating settings from a previous version of Toad may overwrite new settings files, implemented for the current release (for example, updated reports templates, layouts, etc).

File	Description
Action.log	Tracks your usage within Toad. If you agree to share this data, the file is automatically sent to Quest Software 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 <b>Tools   Execution Trace</b> 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 <b>Tools   Options   Database   Cache</b> .
Settings.xml	Contains many of the global configuration settings.
SqlServerPlanPrefs.xml	Used to generate SQL Server execution plans.
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.
Context	Contains settings that depend on the context within Toad including the following: <ul style="list-style-type: none"> <li>• Adapter—Custom data editing statements.</li> <li>• Filter—Unnamed filters defined in the Object Explorer or Database Explorer.</li> <li>• Named Filter—Named filters defined in the Object Explorer or Database Explorer.</li> <li>• TYPE—Tabs that display on the right when you select an object in the Object Explorer or Database Explorer.</li> </ul>
Document Recovery	Contains backup copies of Editor, Query Builder, and Database Diagram files saved if you have enabled Document Recovery in <b>Tools   Options   Environment   General</b> .
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: <ul style="list-style-type: none"> <li>• Code Templates—Templates used to define default values when creating new objects in the Object Explorer or Database Browser.</li> <li>• Scripts—Startup scripts to run when connecting (InitialSqlServer.Sql).</li> <li>• Snippets—Code Snippet entries.</li> <li>• Reports—Report entries.</li> </ul>

## Integration between Toad and Microsoft SQL Server Management Studio

Toad provides a plug-in that integrates Toad features with Microsoft SQL Server Management Studio. Enjoy the advantages of both products and ease of communication. The Toad Plug-in is installed as a part of the Toad for SQL Server installation process and supports the following versions of Management Studio:

- Microsoft SQL Server Management Studio 2017
- Microsoft SQL Server Management Studio 2016

- Microsoft SQL Server Management Studio 2014
- Microsoft SQL Server Management Studio 2012
- Microsoft SQL Server Management Studio 2008 R2 SP2 or later

The Toad Plug-in allows you to invoke key Toad features right from the Management Studio context menu and to send data directly into Toad. Connection information and security settings are transferred automatically and Toad functionality is already up and running.

Depending on the Toad Edition you are running, the following Toad features can be invoked from Management Studio:

- Group Execute
- Automation
- Log Reader
- Data Compare
- Schema Compare
- Importing and Exporting Data
- Session Browser
- Performance Monitor
- Index Fragmentation
- and etc.

**Note:** If you have several editions of Toad for SQL Server installed side-by-side (for example, Beta, Trial and Commercial) and you uninstall one of them, Toad Plug-in files are removed as a part of un-installation process. See "Troubleshoot SQL Server® Issues" on page 21 for more information about how to manually restore Toad Plug-in.

## Install and Uninstall Toad Plug-In

Launch SsmsInstallation.exe from the Windows command prompt as administrator.

1. Open SSMS Installation directory (<Toad install directory>/ SSMS Installation) from the Windows command prompt.
2. Enter the following:

```
SsmsInstallation.exe [Type of Product/Mode] "[TSS Installation Directory]"
```

Where:

[Type of Product/Mode] can be Uninstall, Freeware, Beta, Commercial, Trial

[TSS Installation Directory] is the directory where Toad for SQL Server resides.

### Example:

```
C:\Program Files (x86)\Quest Software\Toad for SQL Server 7.2\SSMS
Installation\SsmsInstallation.exe Commercial "C:\Program Files (x86)\Quest
Software\Toad for SQL Server 7.2"
```

## 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, etc. 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
- Settings files

You can uninstall Toad for SQL Server by using the Windows install/uninstall programs feature.

### ***To uninstall Toad***

1. Open the Windows Control Panel and select **Programs and Features**.
2. Select the product that you want to uninstall.
3. Click **Uninstall**.

---

# Create Connections

## Understand Toad Connections

Review this topic to learn about open database connections in Toad.

### Toad Open Connections

In Toad, an open connection in the Connection/Navigation Manager represents one or more actual connections to the database. When you open a database connection in Toad:

- Toad creates an initial database connection for general use.
- Toad also creates a separate database connection for each Editor (the first time you execute a statement) and for each Data tab in the Database Explorer (the first time you select the tab and query data).

The connection associated with the window (or tab) remains open until you close the window. If a window has an associated connection, but a statement is not currently executing, the connection is in an inactive state.

#### *To view information for an open connection*

- To view the number of actual database connections that exist for a Toad connection, including the number of active connections, place the cursor over the connection in the Connection/Navigation Manager pane or in the connection drop-down list.

#### *To use the Background Processes pane*

- When a statement is executing, a progress bar displays in the Status bar located at the bottom of the Toad application window. Click the executing progress bar to open the Background Processes pane.
- To cancel statement execution, use the Background Processes pane.

**Note:** It is recommended that you cancel only your own processes, because terminating Toad activities could cause unexpected behavior.

## Sharing a Connection Among Windows

You can instruct Toad to share an open connection among windows. In this way, the Editor windows and Data tabs can share the same connection when the connection is inactive.

#### *To share a database connection among windows in Toad*

1. Select **Tools | Options | Editor | General**.
2. Clear the checkbox for the **Use individual connection for each open editor** option.
3. When this option is not selected, Toad attempts to use a single connection for any new windows or query

execution. 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 single connection is in use when Toad attempts to execute it, the following occurs:

- 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 then 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.

## Create SQL Server and SQL Azure Connections

You can create a new connection, or connect to an existing connection from the Create New Connection window. See "Troubleshoot SQL Server® Issues" on page 21 for more information about troubleshooting connection issues.

**Note:** For SQL Azure connections:

- To be able to utilize majority of Toad functionality please grant VIEW DEFINITION on the SQL Azure databases you want to work with.
- You can login to Windows Azure Platform by selecting **Tools | Cloud Computing | SQL Azure Portal** and providing your credentials.
- Make sure that no Azure firewall rule restricts your IP address from having access to Azure server. See "Create and Alter Azure Firewall Rules" in the online help for more information.

### To create a new connection

1. Click  on the toolbar (ALT+F+N).
2. Select *SQL Server* from the **Group** list box.
3. Review the following for additional information:

Login Tab	Description
Server name	<p>Enter the name of the server to use when connecting.</p> <p>Click  to display any servers running SQL Server that are currently active on the network.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"><li>• For SQL Azure connections, enter InstanceName.database.windows.net in this field.</li><li>• For named instances, enter the <i>MachineName\InstanceName</i> in this field.</li></ul>
Authentication	<p>Select the type of authentication to use for this connection.</p> <p>You can connect to an Azure SQL database with Active Directory authentication. Client configuration is required. See <a href="https://docs.microsoft.com/en-us/azure/sql-database/sql-database-aad-authentication-configure#configure-your-client-computers">https://docs.microsoft.com/en-us/azure/sql-database/sql-database-aad-authentication-configure#configure-your-client-computers</a></p> <p><b>Note:</b> You cannot create a SQL Azure connection using Windows Authentication.</p>

Password	Enter the password to use when connecting. <b>Tip:</b> After connecting, you can set a master password to further secure your connection in <b>Tools   Options  Environment   Security</b> .
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.).  Click <a href="#">here</a> to view a video of this feature.
Encrypt connection	Select this option to enable encryption for the current connection provided that the certificate has been already installed on the server.
<b>Advanced Tab</b>	<b>Description</b>
Network protocol	Select one of the following: <ul style="list-style-type: none"> <li>• Shared Memory</li> <li>• TCP/IP</li> <li>• Named Pipes</li> </ul> <b>Note:</b> When establishing Named Pipes connection "Poll service status in connection list" option should be cleared.
Parameter Name/Value	You can add parameters to the connection. Toad includes the <b>Application Name</b> parameter with value <i>Toad for SQL Server</i> by default.

4. Click **Connect** to save the connection and immediately connect to the database.

or

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

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

### **To import connections (including Central Management Server connections)**

1. Click .
2. Specify the location where the connections currently reside.

**Note:** Review the following for additional information on CMS connections:

- To import CMS connections, select a server from the list where the CMS is registered. The connection to this SQL Server instance should be created beforehand.
  - CMS is available beginning with Microsoft SQL Server 2008.
  - User should have an appropriate login (Windows Authentication and grant to connect to selected server are required) created on the server to which he connects via CMS.
3. Select the connections to be imported.

# Troubleshoot Connections

## Troubleshoot SQL Server<sup>®</sup> Issues

### Installation Issues

The following table describes issues related to installing Toad.

Issue	Cause/Solution
When installing Toad on Windows 7 64-bit, Program Compatibility Assistant may appear with "This program might not have installed correctly" message.	<b>Solution:</b> Select <b>This program installed correctly</b> to continue installation. For more information, see <a href="http://windows.microsoft.com/en-PH/windows7/Program-Compatibility-Assistant-frequently-asked-questions">http://windows.microsoft.com/en-PH/windows7/Program-Compatibility-Assistant-frequently-asked-questions</a>

### Toad Plug-in for Microsoft<sup>®</sup> SQL Server Management Studio Issues

Issue	Cause/Solution
Toad Plug-in cannot be invoked from Microsoft SQL Server Management Studio after you uninstalled one of several editions of Toad that resided on your machine side-by-side.	<p>If you have several editions of Toad for SQL Server installed side-by-side (for example, Beta, Trial and Commercial) and you uninstall one of them, Toad Plug-in files are removed as a part of un-installation process.</p> <p><b>Solution:</b> Select one of the following:</p> <ul style="list-style-type: none"><li>• Reinstall Toad for SQL Server. All current settings will be available after Toad reinstallation.</li><li>• Launch SsmsInstallation.exe from the Windows command prompt as administrator.<ol style="list-style-type: none"><li>1. Open SSMS Installation directory (&lt;Toad install directory&gt;/ SSMS Installation) from the Windows command prompt.</li><li>2. Enter the following: SsmsInstallation.exe [Type of Product/Mode] "[TSS Installation Directory]" Where: [Type of Product/Mode] can be Uninstall, Freeware, Beta, Commercial, Trial [TSS Installation Directory] is the directory where Toad for SQL Server resides.</li></ol></li></ul> <p><b>Example:</b></p>

Issue	Cause/Solution
	C:\Program Files (x86)\Quest Software\Toad for SQL Server 7.2\SSMS Installation\SsmsInstallation.exe Commercial "C:\Program Files (x86)\Quest Software\Toad for SQL Server 7.2"

## Connection Issues

Review the following solutions to help troubleshoot SQL Server connection issues in Toad.

Issue	Cause/Solution
Cannot specify a port number when connecting	<p>Currently, Toad does not have a separate field for specifying a port number.</p> <p><b>Solution:</b></p> <p>You can connect if you know the port number for the instance by entering the following in the <b>Server name</b> field on the New Connection window:</p> <p>ServerName,Port</p> <p>or</p> <p>IPAddress,Port</p> <p>For example:</p> <p>10.1.29.129,1234 (where 1234 is the port number of the instance)</p>
Cannot connect to a remote instance in SQL Server 2005	<p>Remote connections may not be enabled in SQL Server 2005. Also, named instances are configured to use dynamic ports and select an available port once the SQL Server Service starts. If you are connecting to a named instance through a firewall, configure the Database Engine to listen on a specific port, so that the appropriate port is opened in the firewall.</p> <p><b>Note:</b> Remote connections are disabled by default in the Express and Developer editions of SQL Server 2005.</p> <p><b>Solution:</b></p> <p>To enable remote connections, see "How to configure SQL Server 2005 to allow remote connections" at: <a href="http://support.microsoft.com/kb/914277">http://support.microsoft.com/kb/914277</a></p>
"Path is not of a legal form" error message when connecting or "Could not find a part of the path C:\Program Files\Quest Software\Toad for SQL Server\Template\Scripts\InitialSqlServer.Sql" error message when connecting	<p>You attempted to migrate settings from a previous install of Toad to the current install, but the settings file (InitialSqlServer.Sql) for the previous install was either removed, moved, or corrupt.</p> <p>You may also receive this error if you installed Toad and migrated settings from a previous version, and later uninstalled the previous version.</p> <p><b>Solution:</b></p> <p>You must specify a valid location for the InitialSqlServer.Sql file in Toad.</p> <p><b>To specify a valid location</b></p> <ol style="list-style-type: none"> <li>1. Open the SQL Server options page under <b>Tools   Options   Database   SQL Server</b>.</li> <li>2. Specify the location for the new install's InitialSqlServer.Sql file in the <b>Run Script on new connection</b> field.</li> </ol> <p>By default, this file is located in the following directory: C:\Program Files\Quest Software\Toad for SQL Server <i>version</i>\Templates\Scripts</p> <p><b>Note:</b> Clicking  may result in a "Path not found error". If you receive this error, manually enter the location in the field.</p>
Cannot establish Named Pipes	If you are trying to connect to the server using Named Pipes, "Poll service

Issue	Cause/Solution
connection	<p>status in connection list" option should be cleared.</p> <p><b>Solution:</b></p> <ol style="list-style-type: none"> <li>1. Open the options page under <b>Tools   Options   Database   General</b>.</li> <li>2. Clear <b>Poll service status in connection list</b> checkbox.</li> </ol>
Cannot establish Azure connection	<p>Failing to establish Azure connection may indicate that your IP address is restricted from having access to the Azure server.</p> <p><b>Solutions:</b></p> <ol style="list-style-type: none"> <li>1. Select <b>Tools   Cloud Computing   SQL Azure Portal</b> to login to Azure Portal.</li> <li>2. Create a firewall rule on the master database, enabling access to current IP address or range. See "Create and Alter Azure Firewall Rules" in the online help for more information.</li> </ol>
Cannot access some functionality when working with Azure connection.	<p>To utilize majority of Toad functionality VIEW DEFINITION grant is required for those databases you want to work with.</p>

# Configure Version Control

## About Version Control

Toad integrates with your existing version control system so you can maintain multiple revisions of objects and SQL scripts. See ["Configure Version Control for Objects"](#) on page 28 for more information on configuring version control in Toad.

For Version Control of your files handled by Toad see [Version Control for Toad Files](#).

**Important:** See ["Troubleshoot Version Control"](#) on page 32 for more information about issues when upgrading version control from a previous version.

### Notes:

- Version Control can be configured for MS SQL Server 2005 and above.
- If you want to place database objects under version control, you must configure version control for objects using the Object Explorer. Once configured, you can manage SQL scripts there. The main advantage of managing scripts in the Object Explorer is that you can easily share them with team members who have version control configured. See ["Manage Objects under Version Control"](#) on page 29 for more information.
- If you rename a version controlled object, Toad drops the original object and its history from version control and prompts you to add the renamed object to version control. This newly renamed object does not have any history associated with it.
- Currently, CLR objects are not supported by version control.

## 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
Apache Subversion™	Subversion 1.7.5 on Windows	CollabNet Subversion Command-Line Client 1.7.5 <b>Note:</b> Any Subversion client must have <code>svn.exe</code> in its installation directory to use version control in Toad.
Git	Toad works only with the local repository. For commands such as clone, pull and push use an external tool.	
Team Foundation Server (TFS)	TFS 2008, 2010, 2012, 2013, 2015	Visual Studio® (2008, 2010, 2012, 2013) Team Explorer Client
File system based	Toad allows to utilize practically any version control system using the external client tool. In this case Toad Version Control tool works with the directories at local HDD while you commit changes to the repository with version control client tool.	

Supported Provider	Server Version Tested	Client Version Tested
--------------------	-----------------------	-----------------------

**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.

The following objects can be added to Version Control:

- TABLE
- VIEW
- STORED PROCEDURE
- FUNCTION
- SEQUENCE
- UDDT
- RULE
- DEFAULT
- SQL SCRIPT

Details of Team Foundation Server support:

Visual Studio/Team Explorer version	TFS 2013 support notes	TFS 2012 support notes	TFS 2010 support notes
<b>Visual Studio 2015</b>	Supported (RTM or latest update)	Supported (RTM or latest update)	Supported (RTM or latest update)
<b>Visual Studio/Team Explorer 2013</b>	Supported (RTM or latest update)	Supported (RTM or latest update)	Supported (RTM or latest update)
<b>Visual Studio/Team Explorer 2012</b>	Requires latest Visual Studio 2012 update. Supports Git with Visual Studio Tools for Git extension	Supported (RTM or latest update). Supports Git with Visual Studio Tools for Git extension	Supported (RTM or latest update). Supports Git with Visual Studio Tools for Git extension

**Note:** Additional functionality and compatibility with older clients is possible but out of scope of what we are able to test.

## Version Control for Toad Files

Toad can integrate with your existing version control system allowing you to maintain multiple versions of Toad files. After you integrate Toad with your version control system, you can perform version control tasks directly from within Toad, such as commit file changes and retrieve revisions.

Toad supports the following version control systems for managing Toad files:

- Apache Subversion™—Toad has been tested with Subversion 1.7.5 and 1.8.

The following types of files can be managed using version control from within Toad: Editor (.tef, .sql, .txt), Query Builder (.tqm), ER Diagram (.ter), and Automation (.tas).

Toad supports version control for database objects, as well as files. Version control for objects is configured separately from version control for files. For more information about version control for objects, see [Configure Version Control for Objects](#).

### To configure version control for Toad files

1. Ensure that an Apache Subversion client is installed on the same computer as Toad.
2. In Toad, open one of the supported file types. Then right-click the document window tab and select **File Version Control | Version Control Wizard**. This action opens the Version Control Wizard which allows you to configure Toad for your version control system.

**Note:** Even if you previously configured version control for objects, you must run the Version Control Wizard again to configure version control for files.

3. Use the wizard to provide information about your version control system to Toad. Review the following for additional information:

Field/Button	
<b>Version Control System Page</b>	
Type	Select <i>Subversion</i> .
Properties	Click the <b>Properties</b> button and enter the path to the Subversion executable ( <b>svn.exe</b> ) on the client computer. For example, if using TortoiseSVN, the path might be: C:\Program Files\TortoiseSVN\bin <b>Note: Do not include svn.exe in the path.</b>
Server	Enter the URL for the Subversion repository on the Subversion server.
Login and Password	Enter the user name and password for your Subversion account.
<b>Default Version Control Settings Page</b>	
Version Control Folder	Select the folder on the Subversion server where you want to check in files. If you currently have files under version control, select the folder on the server where these files are located.
Working Folder	Select a folder on the client computer to use as the root working folder. This is the location into which you will check out files. If you currently have files under version control, select your existing working folder.

### To add a file to version control

1. After configuring version control for files, you can start adding files to version control from within Toad. Right-click a document window tab and select **File Version Control | Add file to working folder**.
2. Select a location in your working folder in which to save the file. Click **Save**.
3. In the Commit dialog, enter a comment and click **OK** to add the file to version control.

### To browse the repository

1. Right-click the document window tab (of one of the supported file types) and select **File Version Control | Repository Browser**.
2. In the Repository Browser you can right-click a file to perform one of the following actions. Available actions depend on the file's status.

Action	Description
Open	Open the file in Toad.
Commit	Commit your changes. Available for <i>Modified</i> or <i>Untracked</i> files.
Undo Changes	Discards your changes and reverts to the previous revision of the file (previous commit). Available when the file status is <i>Modified</i> .
Get Latest Version	Check out the latest revision from the remote repository. Available when the file status is <i>OutOfDate</i> .

### To commit your changes

- After modifying a file, right-click the document window tab and select **File Version Control | Commit**.

### To compare revisions (Editor files only)

- After modifying and saving an Editor file, you might want to compare your changes to the remote copy (last commit) before committing your changes. Right-click the document tab and select **File Version Control | Diff with latest revision**.
- You can compare two revisions of an Editor file (.tef, .sql, or .txt) by using the History dialog.
  1. To open a file's History dialog, right-click the document tab and select **File Version Control | Show history**.
  2. Select two revisions to compare. Then right-click the revisions and select **Compare revisions**.
  3. For an *OutOfDate* file, right-click the latest revision in the History dialog and select **Compare with working copy** to compare the remote file to your working copy.

### To check file status

- The status of a currently open file displays in the status bar of the document window. You can also place the cursor over the document tab to display status.
- You can check the status of one or more files by using the Repository Browser. To update file status in the Repository Browser, right-click a folder and select **Update folder**.
- Review the following file status definitions.

File Status	Definition
Untracked	The file has not been added to version control. Right-click the file in the Repository Browser and select <b>Commit</b> to add it to version control.
UpToDate	The file in your working folder is synchronized with the file in the remote repository. No changes are detected. No action is required.
Modified	The working copy of this file was modified. The changes are stored in the working folder only. Commit this file to add the changes to the remote repository.
OutOfDate	A more recent revision of this file exists in the remote repository. To update your working copy, check out the latest revision from the remote repository (right-click the file and select <b>Get Latest Version</b> ).

File Status	Definition
Unknown	The file is under version control, but its status cannot be determined.
Deleted	The file was under version control, but it was dropped or renamed in the working folder and exists only in the remote repository.

### Additional Actions

- To open the folder where a file is located, open the file and then right-click the document tab and select **File Version Control | Open in Windows Explorer**.

## Configure Version Control for Objects

To configure version control for files, see [Version Control for Toad Files](#).

### To configure version control for Objects

- Ensure that a supported version control client is installed on the computer where Toad is installed. See "[About Version Control](#)" on page 24 for more information about tested version control clients and supported versions.
- Right-click one or more objects in the Object Explorer and select **Version Control | Version Control Wizard**.

**Note:** Version control is configured for individual databases separately. You cannot configure version control on server level.

- Review the following for additional information:

Version Control System Page	Description
Type	<p>Select the version control system name:</p> <ul style="list-style-type: none"> <li>Apache Subversion™ <ul style="list-style-type: none"> <li><b>Note:</b> 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.</li> </ul> </li> <li>Git</li> <li>Team Foundation Server <ul style="list-style-type: none"> <li><b>Note:</b> If you select TFS, you must specify the workspace name for the provider in the Team Foundation Server Properties window that displays.</li> </ul> </li> <li>File system based</li> </ul>
Properties	<p>(Subversion only) Click this button (beside the <b>Type</b> field) and complete the binary path. Enter the path where the Subversion client that contains <b>svn.exe</b> is installed. For example, if you installed the CollabNet Subversion Client, you would enter:</p> <p>C:\Program Files\CollabNet Subversion Client</p> <p><b>Note:</b> <i>Do not</i> include <b>svn.exe</b> in the path.</p>
Server	<p>Select one of the following:</p> <ul style="list-style-type: none"> <li>Subversion—Specify the existing working folder for the version</li> </ul>

	<p>control repository or specify the server string (for example: <code>svn://MyServer</code>).</p> <ul style="list-style-type: none"> <li>• TFS—Specify the server where your version control provider is installed and the port number (default is 8080) to use in the following format: <ul style="list-style-type: none"> <li>◦ <code>http://MyServer:Port</code> for TFS 2008</li> <li>◦ <code>http://MyServer:Port/TFS</code> for TFS 2010, 2012</li> </ul> </li> <li>• File System Based—Specify a directory at your local machine.</li> </ul>
Repository Settings	Set your local Working Folder and your Version Control Folder will be automatically filled.
User name/ Password	Enter your Subversion command-line user name and password and click <b>Login</b> . <b>Note:</b> For TFS only, if you leave the user name and password fields blank, Toad uses your default Windows credentials.
<b>Version Control General Options Page</b>	<b>Description</b>
Prompt to Commit on Close	You will be asked to commit your changes before each version controlled file is closed
<b>Version Control Configurations Options Page</b>	<b>Description</b>
Version control folder	Select the folder on the version control server where you want to check objects and scripts in. If you already have objects or scripts under version control, select the folder on the server where these objects or scripts are located. <b>Note:</b> Version control automatically checks out objects or scripts in this folder and any subfolders to the location you specify in the <b>Working folder</b> field.
Working folder	Select the root repository folder on the client computer to use as the default working folder for checking objects and SQL scripts out. If you already have objects or SQL scripts under version control, select the existing working folder for these.

4. Manage object and scripts using Version Control. See "[Manage Objects under Version Control](#)" on page 29 for more information.

## Manage Objects under Version Control

**Note:** Version Control should be configured in Toad before you start managing objects. See "[Configure Version Control for Objects](#)" on page 28 for more information.

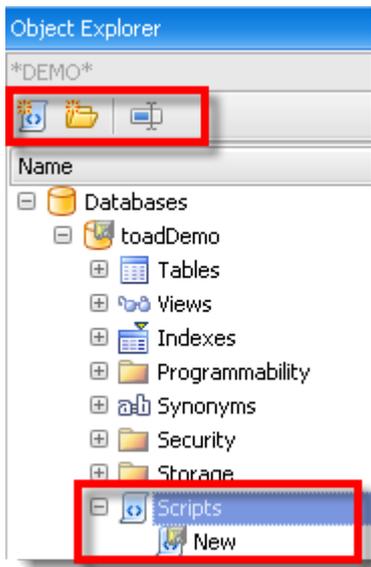
### **To add objects and scripts under version control**

- » Right-click an object or script and select **Commit**.

#### **Tips:**

- The objects under version control are marked with  sign at the top right corner of the object's icon.
- If you rename a version controlled object, Toad drops the original object and its history from version control and prompts you to add the renamed object to version control. This newly renamed object does not have any history associated with it.

- You can create and version control SQL scripts for current database using the Scripts node in the Object Explorer. Click  to create the new script.



### To manage objects and scripts under version control

- Determine object's version control status. Hover a mouse over the object in the Object Explorer to see its status. Review the following for additional information:

Version Control status	Description
Uninitialized	The object status is undetermined yet. This is a temporary status that is issued for all objects during version control status processing.
Untracked	The object is not added to version control.
Ignored	The object is added to ignore list and excluded from version control.
UpToDate	The object is under version control and is synchronized with version control repository. No changes are detected.
Modified	The object is under version control and has been modified by user. The changes are stored in local database only and need to be synchronized with version control repository.
Merge	The object is under version control and has been modified in both local database and version control repository. <b>Note::</b> Toad's Version Control feature does not allow to merge object scripts.
OutOfDate	The object is under version control and has been modified in version control repository.
Unknown	The object is under version control but for some reason its status cannot be determined (for example, you created a script in your local database while the script with the same name already exists in version control repository, or you upgraded to a higher version of Toad and configured version control for the same repository while you have some uncommitted changes in the database). <b>Tip:</b> If you are sure that the object is up to date but is listed as unknown, commit the object in version control system to resolve unknown status.

Version Control status	Description
Deleted	The object was under version control, but it was dropped or renamed in local database and exists only in version control repository. <b>Tip:</b> You can see deleted objects in the Controlled objects pane only. To access it right-click any object and select <b>Show perspective</b> . Once you commit changes in Controlled objects pane, the object with all history will be deleted from version control repository.
NotInView	The object is under version control and exists in version control repository only.

2. Right-click an object or script and select one of the following actions:

Use	To...
Show perspective	Select to review all controlled objects for current configuration.
Diff	Select to review differences between the object script in your local database and the object's revision that was applied to it. <b>Note:</b> Diff is unavailable for File System Based configuration.
Diff with latest revision	Select to review differences between the object script in your local database and the latest revision in the version control repository.

**Example:** You got the latest object revision from the repository 2 days ago. By the time you did it, the latest revision was 5. Yesterday your colleague worked with the same object and committed changes in the repository, which are now marked as revision 6.

Today you altered the object's script and want to see the differences. You can select one of the following:

- Diff—To compare the object in your local database with revision 5.
- Diff with latest revision—To compare the object in your local database with revision 6.

Show history	Select to review all commits for selected object. <b>Tip:</b> Select <b>Show history</b> on database to review all commits. <b>Note:</b> Show History is unavailable for File System Based configuration.
Get latest revision	Select to apply object's changes from the version control repository to your local database. The synchronization script is generated to update selected object to the latest revision.
Commit	Select to apply object's changes from your local database to the version control repository. <b>Note:</b> You should write a comment when committing changes.
Undo changes	Select to rollback changes in your local database. The synchronization script is generated to revert object to the revision which was applied last time.
Update status	Select to compare a script in your local database with the script in the repository. New status will be issued according to the comparison results.
Add to ignore list	Select to exclude object from the version control. Ignored objects are not listed in Controlled Objects pane, <b>Commit</b> and <b>Get latest revision</b> are disabled.
Remove from ignore list	Select to set object status as <i>Untracked</i> and add it to version control.
Open in Windows Explorer	Select to navigate to the file in the Windows Explorer.

**Tip:** You can enable, disable, or delete a version control configuration under **Tools | Options | Version Control | Configurations**.

# 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:

- Version control settings are not migrated from the previous version of Toad, so you have to reconfigure version control in Toad.
- In previous releases, the method Toad used to generate the script was different than the current method. After upgrading Toad and reconfiguring version control, the local revision of the objects differs from version control repository (The objects have Unknown status). If the object in your database is current, you should commit it into version control.

## Troubleshoot Other Issues

Review the following to help troubleshoot issues with version control:

Apache 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 <b>BinaryPath</b> field of the Command Based Version Control Properties window. Verify that <b>svn.exe</b> 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. <b>Workaround:</b> Generate identity keys that automatically authenticate between the client and the server when connecting with SSH.
OutOfMemory exception when adding a large number of objects	When adding a large number of objects, Subversion may encounter OutOfMemory exception. <b>Workaround:</b> Commit objects in several steps.
SVN is missing in the list of available providers	If Subversion is missing in the list of available version control providers, it means that <b>Subversion.xml</b> was removed or corrupted. <b>Workaround:</b> Contact Support to get a new <b>Subversion.xml</b> and place it under <code>&lt;Toad install path&gt;/Templates/Version Control/</code> .
Object Issues	Description
Adding multiple objects failed	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	<p>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 using the right-click menu in the Scripts node/folder/tab of the Object Explorer.</p> <p><b>Note:</b> If you alter the object again, you receive a prompt to use the “locally changed” script. Click <b>Yes</b> to use the locally changed copy; click <b>No</b> to refresh the local copy from the source repository; click <b>Cancel</b> to cancel the prompt.</p>

# Configure SQL Server Debugging

## Configure SQL Server Debugging

### Debugging Prerequisites

Before configuring the Debugger, verify that the following prerequisites have been met:

- Disable all firewalls or open corresponding ports. Specifically, the TCP 135 port must be opened and the Toad.exe must be added to the Exceptions list. The same is true for the remote (SQL Server) machine - TCP 135 port must be opened and sqlservr.exe must be added to the Exceptions list.
- Stop any antivirus software that can lock the corresponding components, settings, etc.
- Check your security policy because it may include an access lock to the remote server.

**Notes:**

- The security policy can be applied to the domain or local computer.
- Currently, you cannot debug CLR stored procedures.

### Platforms Tested for Debugging Support

The following platforms have been tested for debugging support.

**Note:** The Service Pack on the client must match the Service Pack on the server unless specified otherwise.

SQL Server 2012 and SQL Server 2014 Platforms Tested for Debugging						
Client	Server					
	2003 EE (SP2)	2000 (SP4)	2000 Pro (SP4)	Vista	Server 2008	7
2003 EE (SP1)	✗	✗	✗	✗	✗	✗
Vista	✗	✗	✗	✗	✗	✗
Server 2008	✗	✗	✗	✗	✗	✗
7	✗	✗	✗	✗	✓	✗

SQL Server 2008 Platforms Tested for Debugging						
Client	Server					
	2003 EE (SP2)	2000 (SP4)	2000 Pro (SP4)	Vista	Server 2008	7
2003 EE (SP1)	✘	✘	✘	✘	✘	✘
Vista	✘	✘	✘	✘	✘	✘
Server 2008	✘	✘	✘	✘	✘	✘
7	✘	✘	✘	✘	✔	✘

SQL Server 2005 Platforms Tested for Debugging						
Client	Server					
	2003 EE (SP1)	2000 (SP4)	2000 Pro (SP4)	Vista	Server 2008	7
2003 EE (SP1)	✓	✓	✓	✗	✗	✗
Vista	✗	✗	✗	✓	✗	✗
Server 2008	✗	✗	✗	✗	✗	✗
7	✓	✗	✗	✗	✗	✗

SQL Server 2000 (SP4) Platforms Tested for Debugging						
Client	Server					
	2003 EE (SP1)	2000 (SP4)	2000 Pro (SP4)	Vista	Server 2008	7
2003 EE (SP1)	✓	✗	✗	✗	✗	✗
Vista	✗	✗	✗	✗	✗	✗
Server 2008	✗	✗	✗	✗	✗	✗
7	✗	✗	✗	✗	✗	✗

## Configure Debugging for SQL Server 2012 / SQL Server 2014

### *To debug locally, perform the following on the Toad client*

1. Install the appropriate SQL Server Client Tools (2012 /2014) on the Toad client.
2. If autocommit is disabled, commit or rollback the connection in Toad before starting the debugging session.

### *To debug remotely, perform the following*

1. Install the appropriate SQL Server Client Tools (2012 /2014) on the Toad client.
2. Set the following permission. Your server login must also be a member of the sysadmin role. This login can be your Windows user account (Windows authentication), or a SQL Server login (SQL Server authentication).

To create a server login from your Windows account and add it to the sysadmin role, a user who already has sysadmin privileges must execute the following:

```
sp_addsrvrolemember 'Domain\Name', 'sysadmin'
```

where *Domain\Name* is your Windows login.

3. If autocommit is disabled, commit or rollback the connection in Toad before starting the debugging session.

## Configure Debugging for SQL Server 2008

### ***To debug locally, perform the following on the Toad client***

1. Install the SQL Server 2008 Client Tools on the Toad client.
2. If autocommit is disabled, commit or rollback the connection in Toad before starting the debugging session.

### ***To debug remotely, perform the following***

1. Install the SQL Server 2008 Client Tools on the Toad client.
2. Make sure the following permissions are set:
  - Your Windows account that Toad is running under must be a member of sysadmin server role in the SQL Server being debugged.
  - Your server login must also be a member of the sysadmin role. This login can be your Windows user account (Windows authentication), or a SQL Server login (SQL Server authentication).

To create a server login from your Windows account and add it to the sysadmin role, a user who already has sysadmin privileges must execute the following:

```
sp_addsrvrolemember 'Domain\Name', 'sysadmin'
```

where *Domain\Name* is your Windows login.

3. If autocommit is disabled, commit or rollback the connection in Toad before starting the debugging session.

## Configure Debugging for SQL Server 2005

### ***To debug locally, perform the following on the Toad client***

1. Install the SQL Server 2005 Workstation Component option of the SQL Server 2005 installation.
2. If autocommit is disabled, commit or rollback the connection in Toad before starting the debugging session.

### ***To debug remotely, perform the following***

1. Complete the following:
  - a. Install the SQL Server 2005 Workstation Components option of the SQL Server 2005 installation on the Toad client.
  - b. Copy and register the **ssdebugps.dll** (debugging host component) on both the client and server. This file is located by default in the following directory on the server where SQL Server 2005 is installed:

C:\Program Files\Common Files\Microsoft Shared\SQL Debugging

To register this file, open a command prompt and enter the following command:

```
regsvr32 ssdebugps.dll
```

**Note:** If you are unable to locate this file, you can run the remote debugging setup component (rdbgsetup.exe). This file is located by default in the following directory on the server where SQL Server 2005 is installed:

C:\Program Files\Microsoft SQL Server\90\Shared\1033

2. Make sure the following permissions are set:

- Your Windows account that Toad is running under must be a member of sysadmin server role in the SQL Server being debugged.
- Your server login must also be a member of the sysadmin role. This login can be your Windows user account (Windows authentication), or a SQL Server login (SQL Server authentication).

To create a server login from your Windows account and add it to the sysadmin role, a user who already has sysadmin privileges must execute the following:

```
sp_addsrvrolemember 'Domain\Name', 'sysadmin'
```

where *Domain\Name* is your Windows login.

3. If autocommit is disabled, commit or rollback the connection in Toad before starting the debugging session.

## Configure Debugging for SQL Server 2000

### ***To debug locally, perform the following on the Toad client***

1. Make sure that SQL Server 2000 with Service Pack 3 or Service Pack 4 is installed on the server.
2. Install the SQL Server Client Tools on the Toad client.
3. If autocommit is disabled, commit or rollback the connection in Toad before starting the debugging session.

### ***To debug remotely, perform the following***

1. Complete the following:

- a. Make sure that SQL Server 2000 with Service Pack 3 or Service Pack 4 is installed on the server.
- b. Install the SQL Server Client Tools on the Toad client.
- c. Copy and register the **sqldbg.dll** and **sqldbreg2.exe** (debugging host components) on both the Toad client and server. These files are located by default in the following directory on the server where SQL Server 2000 is installed:

C:\Program Files\Common Files\Microsoft Shared\SQL Debugging

To register these files, open a command prompt and enter the following commands:

```
regsvr32 sqldbg.dlls  
qldbreg2.exe /RegServer
```

**Note:** The Remote Procedure Call (RPC) service should be started on both the Toad client and server.

2. Make sure the following permissions are set:

- Your Windows account that Toad is running under must be a member of the sysadmin server role for the instance you are debugging.
- Your server login must also be a member of the sysadmin role. This login can be your Windows

user account (Windows authentication), or a SQL Server login (SQL Server authentication).

To create a server login from your Windows account and add it to the sysadmin role, a user who already has sysadmin privileges must execute the following:

```
sp_addsrvrolemember 'Domain\Name', 'sysadmin'
```

where *Domain\Name* is your Windows login.

- DCOM Access permissions must be granted for the system account and the group or user who needs access. To verify permissions:
  - a. Open a command prompt and run **dcomcnfg.exe**.
  - b. Expand Component Services, Computers.
  - c. Right-click My Computer and select **Properties**.
  - d. Select the COM Security tab.
  - e. Under Access Permissions, click **Edit Default**, and verify permissions.

**Note:** By default, Windows administrators on a computer running SQL Server are SQL Server sysadmins on that computer.

3. If autocommit is disabled, commit or rollback the connection in Toad before starting the debugging session.

## Set Up Debugging

The Debugger Setup wizard checks your database library and settings files on both the server and client system to identify conflicts with the Debugger.

The wizard verifies the following on the server:

- Existence of the corresponding DLL files
- DLL version (determines whether Toad has permission for their verification)
- COM registration
- DCOM support

The wizard verifies the following on the client:

- Existence of the corresponding DLL files
- DLL version
- COM registration
- Availability of DLLs for this user
- Ability to connect to the server
- Whether this user has administrator privileges for the server
- DCOM support

### **To run the Debugger Setup wizard**

- » Select **Debug | Debugger Setup Wizard** from the menu in an open Editor window.

## We are more than just a name

We are on a quest to make your information technology work harder for you. That is why we build community-driven software solutions that help you spend less time on IT administration and more time on business innovation. We help you modernize your data center, get you to the cloud quicker and provide the expertise, security and accessibility you need to grow your data-driven business. Combined with Quest's invitation to the global community to be a part of its innovation, and our firm commitment to ensuring customer satisfaction, we continue to deliver solutions that have a real impact on our customers today and leave a legacy we are proud of. We are challenging the status quo by transforming into a new software company. And as your partner, we work tirelessly to make sure your information technology is designed for you and by you. This is our mission, and we are in this together. Welcome to a new Quest. You are invited to Join the Innovation.

## Our brand, our vision. Together.

Our logo reflects our story: innovation, community and support. An important part of this story begins with the letter Q. It is a perfect circle, representing our commitment to technological precision and strength. The space in the Q itself symbolizes our need to add the missing piece—you—to the community, to the new Quest.

## Contact Quest

For sales or other inquiries, visit [www.quest.com/contact](http://www.quest.com/contact).

## Technical Support Resources

Technical support is available to Quest customers with a valid maintenance contract and customers who have trial versions. You can access the Quest Support Portal at <https://support.quest.com>.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

- Submit and manage a Service Request
- View Knowledge Base articles
- Sign up for product notifications
- Download software and technical documentation
- View how-to-videos
- Engage in community discussions
- Chat with support engineers online
- View services to assist you with your product

## A

- application virtualization 6
- automation
  - migrate scheduled tasks 13
  - upgrade scripts 12

## C

- Citrix
  - install 11
  - requirements 6
- client requirements 5
- connections
  - create SQL Azure 19
  - create SQL Server 19
  - share for all session windows 18
  - troubleshoot SQL Server 21
  - understand 18
- corporate deployment 9

## D

- debugger
  - configure SQL Server 34
  - verify installed components 39
- desktop virtualization 6

## I

- install 8
  - Citrix 11
  - Citrix support 6
  - client requirements 5
  - silent 9
- intergration with Management Studio 15

## M

- manage objects under Version Control 29

## R

- requirements
  - Citrix 6
  - client 5
  - virtualization 6

## S

- server virtualization 6
- silent install 9
- SQL Azure
  - create connections 19
- SQL Server
  - configure debugging 34
  - create connections 19
  - troubleshoot 21
- Subversion, configure 28
- system requirements 5

## T

- Team Foundation Server, configure 28
- TFS, configure 28
- Toad Plug-in 15
- troubleshoot
  - SQL Server connections 21
  - version control 32

## U

- uninstall 16

## V

### Version Control

- about 24

- configure Subversion 28

- configure TFS 28

- File system based 28

- manage objects 29

- troubleshoot 32

- virtualization support 6