SQL Prompt 4 documentation

About SQL Prompt

SQL Prompt is an add-in for SQL Server Management Studio and Visual Studio that allows you to be more productive when you work with SQL code. You can use SQL Prompt to write code faster, format your code, navigate your code, and refactor your code.

For more information, see the SQL Prompt product page.

Quick links

Release notes for SQL Prompt 4.0

Requirements

The suggested minimum requirements for the machines you install SQL Prompt on:

- Windows XP, Windows Vista, Windows 7, Windows Server 2003 or Windows Server 2008
- SQL Server Management Studio (2005, 2008, 2008 R2, including SSMS Express), Visual Studio (2005, 2008 or 2010)
- Microsoft .NET Framework 3.5 or later
- MDAC 2.8 or later
- 256 MB RAM
- 500 MB hard disk space available during installation

SQL Prompt supports connecting to the following versions of SQL Server:

- SQL Server 2008
- SQL Server 2008 R2
- SQL Server 2005
- SQL Server 2000
- SQL Server Express Edition

Installing and running SQL Prompt

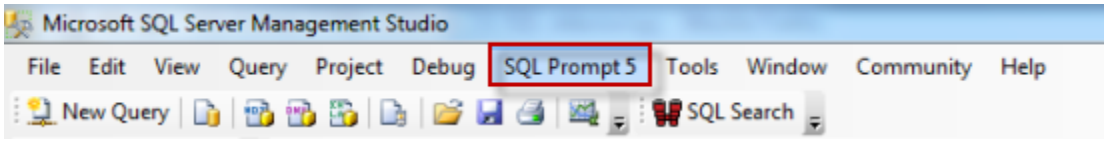
To install SQL Prompt, you must have administrator privileges. If you are upgrading from a previous version, the installer does all the preparation for you.

Running SQL Prompt

When you install SQL Prompt, add-ins to the following editors are automatically installed:

- SQL Server Management Studio
- SQL Server Management Studio Express Edition
- Query Analyzer
- Microsoft Visual Studio 2005 and 2008

Start any of these editors to begin using SQL Prompt. SQL Prompt features are available from the **SQL Prompt** menu:



Customizing SQL Prompt

You can customize how SQL Prompt suggests, inserts and formats your code, to more closely match the way you prefer to write queries. To change any of the default settings in SQL Prompt:

On the **SQL Prompt** menu, select **Options**.

See: Managing SQL Prompt behavior and Options for formatting your code.

Activating SQL Prompt

When your trial period expires, you need to enter your serial number to activate the product:

On the **SQL Prompt** menu, select **Serial Number > Enter Serial Number**.

Find out more about activation

Uninstalling SQL Prompt

To uninstall SQL Prompt, use the Windows Control Panel item, **Add or Remove Programs** or **Programs and Features**.

If the SQL Prompt menu item is not removed from SQL Server Management Studio or Visual Studio, see Removing SQL Prompt menu item after uninstalling.

Using SQL Prompt with Visual Studio

SQL Prompt can be integrated with Visual Studio 2005 and 2008. SQL Prompt only works in Database projects and SQL Server projects.

Using SQL Prompt with Query Analyzer

By default, SQL Prompt starts automatically whenever you start Query Analyzer. To switch off support for SQL Prompt in Query Analyzer, right-click the SQL Prompt 4 icon

in the desktop notification area and click **Start SQL Prompt when you start Query Analyzer** so that it is not ticked.

To remove the SQL Prompt 4 icon

from the notification area, right-click the icon and click **Exit**.

To add the SQL Prompt 4 icon

so that you can switch on or switch off support for SQL Prompt with Query Analyzer, click the Windows Start menu, and on the **Red Gate > SQL**

Prompt 4 menu, click **SQL Prompt Query Analyzer Integration**.

Licensing

When you install most Redgate products (apart from free ones), you have **14 days** to evaluate them without purchase.

For a few products, you have 28 days: DLM Automation Suite, DLM Automation Suite for Oracle, SQL Prompt, SQL Source Control, Source Control for Oracle.

If you need more time to evaluate a product, email licensing@red-gate.com.

Finding your serial number

When you buy a license for a product, we'll send you an invoice that contains your serial number to activate the product. Your invoice shows how many instances of a product the serial number can be used to activate. For information about how to activate, see Activating.

If you can't find your invoice, you can view your serial numbers at red-gate.com/myserialnumbers. You'll need to log in to your Redgate account with the email address and password you provided when you bought the product.

> If you need to reinstall products on the same computer (eg after installing a new operating system), you can reactivate them using the same serial number. This doesn't affect the number of distinct activations for the serial number. For information about moving a serial number to a different computer, see below.

Serial numbers for bundles and suites

If you've bought a bundle or suite of products, your serial number activates all the products in the bundle or suite. For bundles containing both server and client tools (such as the SQL DBA Bundle) you will have two serial numbers.

If you deactivate a bundle or suite serial number, all products using that serial number will be deactivated.

For information on which products are included in a bundle, see Bundle history.

Changing the serial number used to activate a product

To change the serial number used to activate a product, on the **Help** menu, select **Enter Serial Number**. For some products, you will need to deactivate the old serial number first.

Moving a serial number to a different computer

To move a serial number to a different computer, deactivate the serial number on the old computer, then use it to activate the product on the new computer.

To deactivate a serial number, on the **Help** menu, select **Deactivate Serial Number**. If the Deactivate Serial Number menu item isn't available, use the deactivation tool.

If you can't deactivate a serial number, use the Request Extra Activations page to request more activations for your serial number. You'll need to provide your serial number and the reason for the additional activations.

Activating

> This page applies to a number of Redgate products, so the screenshots below may not match your product.

When you activate a product with your serial number, the licensing and activation program sends an activation request to the Redgate activation server, using checksums of attributes from your computer. The checksums sent to the activation server do not contain any details that might pose a security risk. The activation server returns an activation response and an encrypted key to unlock the software. The licensing and activation program should activate your product within a few seconds.

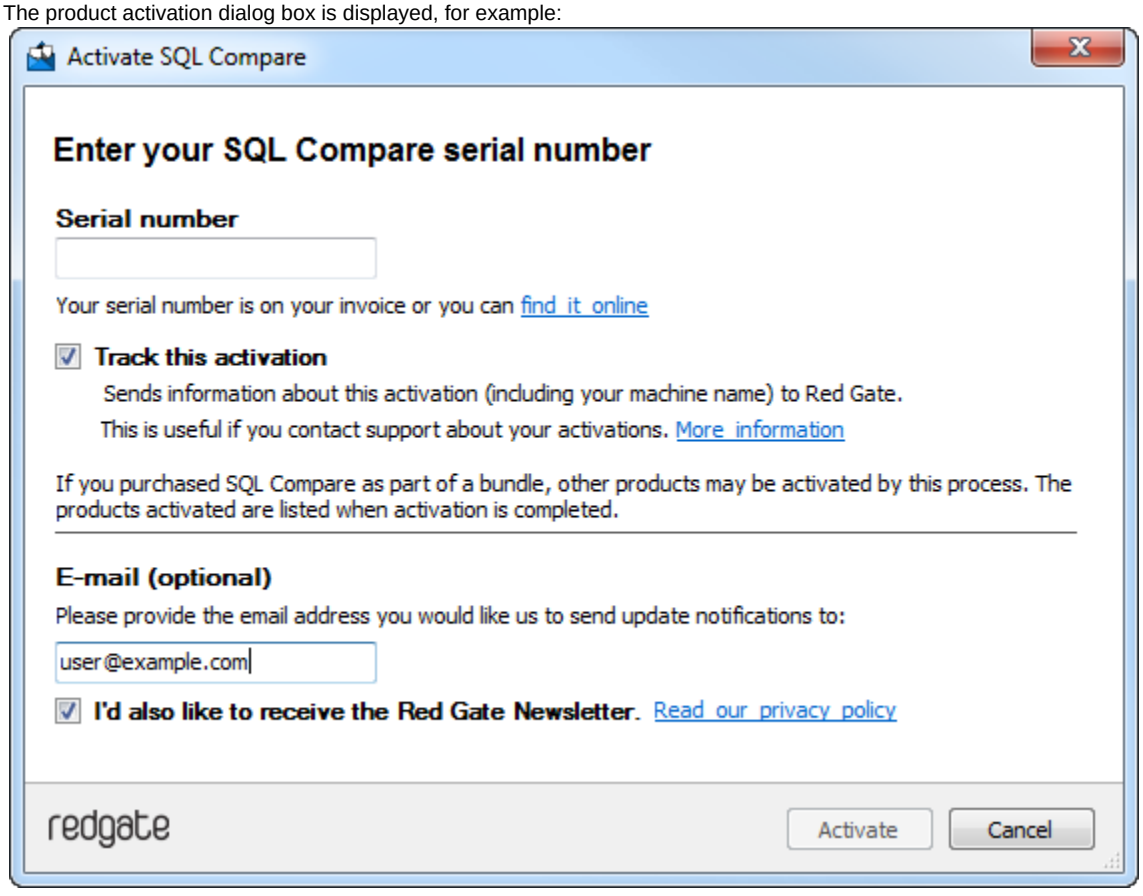
If you experience problems with activating your products, you'll be directed to activate manually.

Activating using the GUI

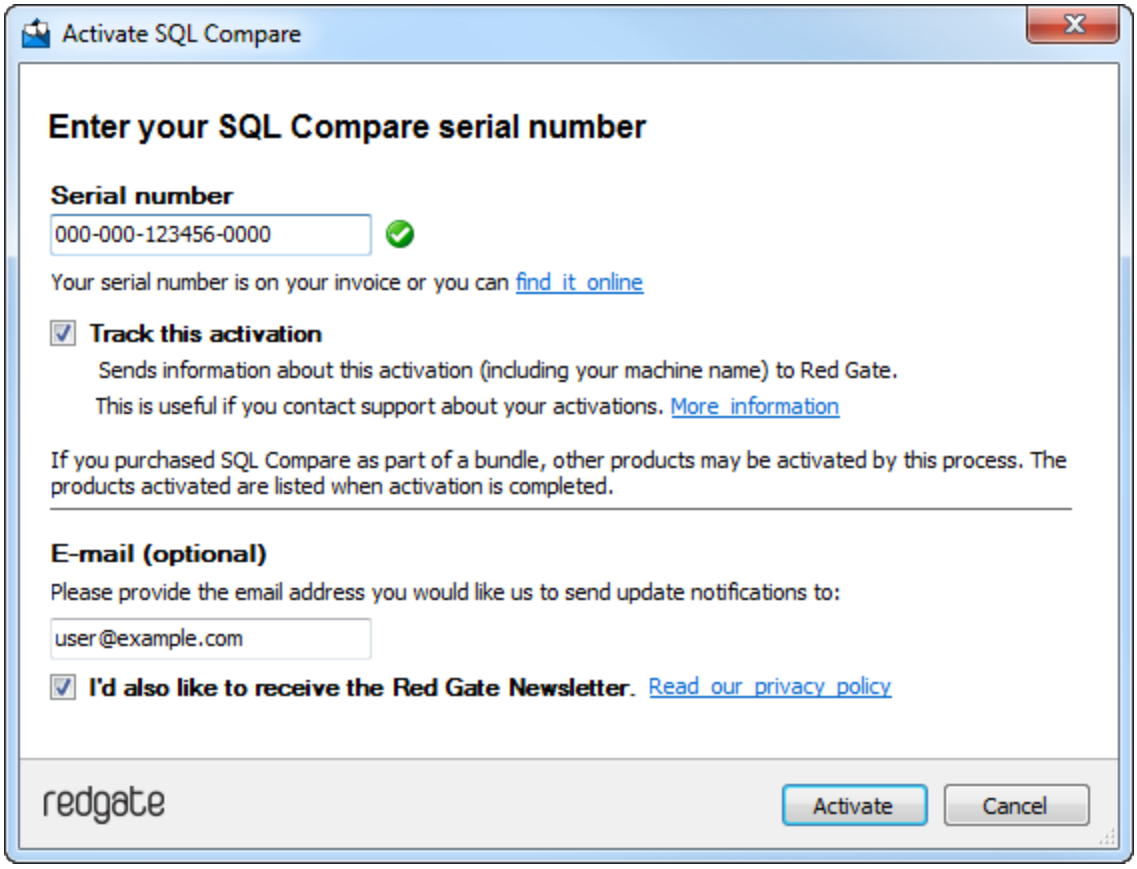
> These instructions apply to a number of Redgate products, so the screenshots below may not match your product.

To activate your products:

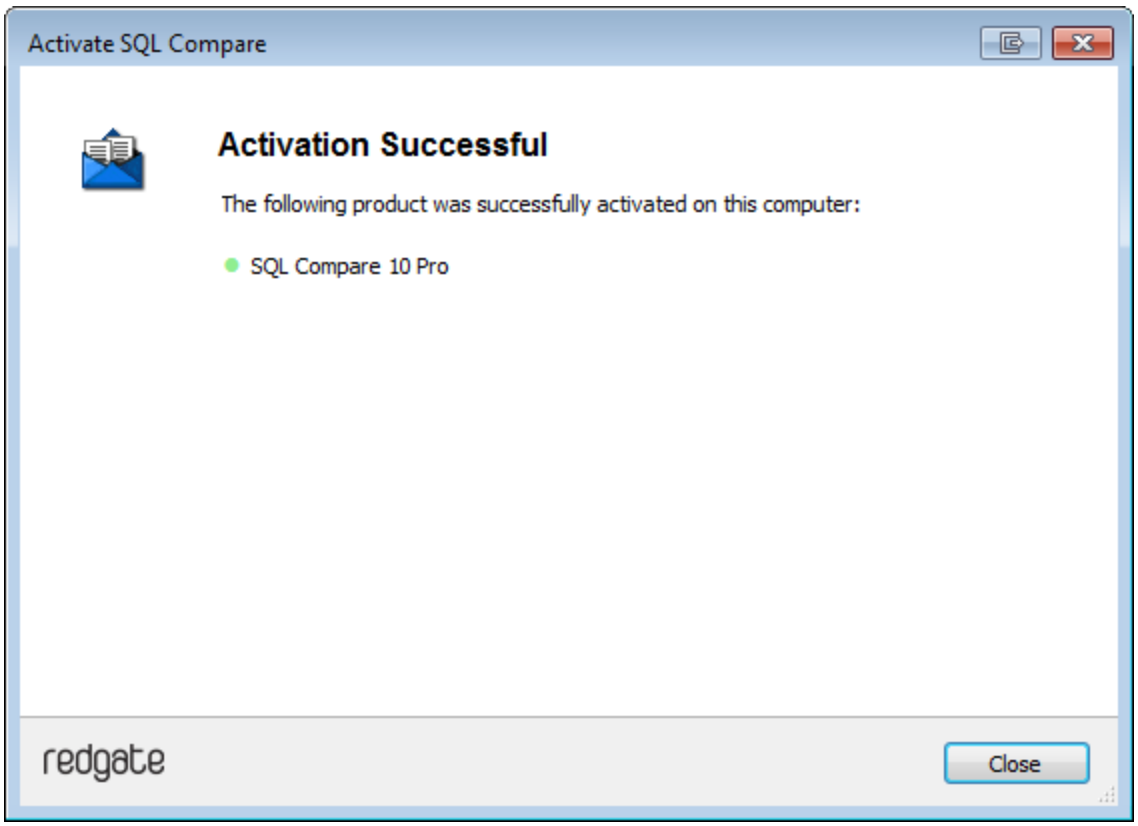
1. On the **Help** menu, click **Enter Serial Number**.
   The product activation dialog box is displayed, for example:



2. Enter your serial number.
   When you have entered a valid serial number,
   
   is displayed next to the serial number box:



3. If you want to receive email updates from Redgate, enter your email address.
   The list of identifiers and your email address may already be populated using information available to the licensing client from the Windows installation on your computer. No information is sent back to Redgate when the fields are populated.
   When you activate your product, the optional information you entered is recorded by Redgate with your serial number. Your email address is not linked to the data collected should you consent to participate in the Quality Improvement Program provided with some Red Gate products.
4. Click **Activate**.
   Your activation request is sent to the Red Gate activation server.
   When your activation has been confirmed, the **Activation successful** page is displayed, for example:



If there is a problem with your activation request, an error dialog box is displayed. For information about activation errors and what you can do to resolve them, see Troubleshooting licensing and activation errors. Depending on the error, you may want to try manual activation.

5. Click **Close**.
   You can now continue to use your product.

Activating using the command line

Open a command prompt, navigate to the folder where your product executable file is located and run a command with the following syntax:

```
<name of productEXE> /activateSerial:<serialNumber>
```

For example:

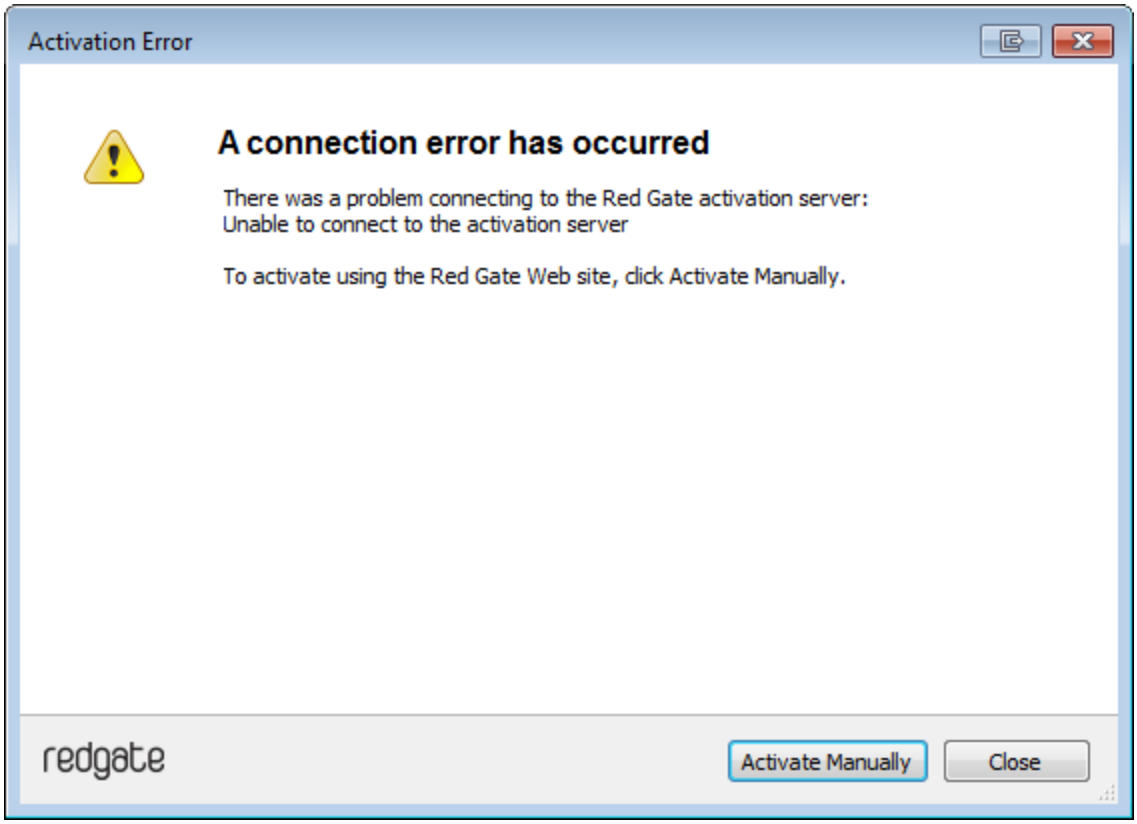
```
sqlcompare /activateSerial:123-456-789012-ABCD
```

The product activation dialog box is displayed. Follow the instructions below.

Manual activation

Manual activation enables you to activate products when your computer does not have an internet connection or your internet connection does not allow SOAP requests. You will need access to another computer that does have an internet connection.

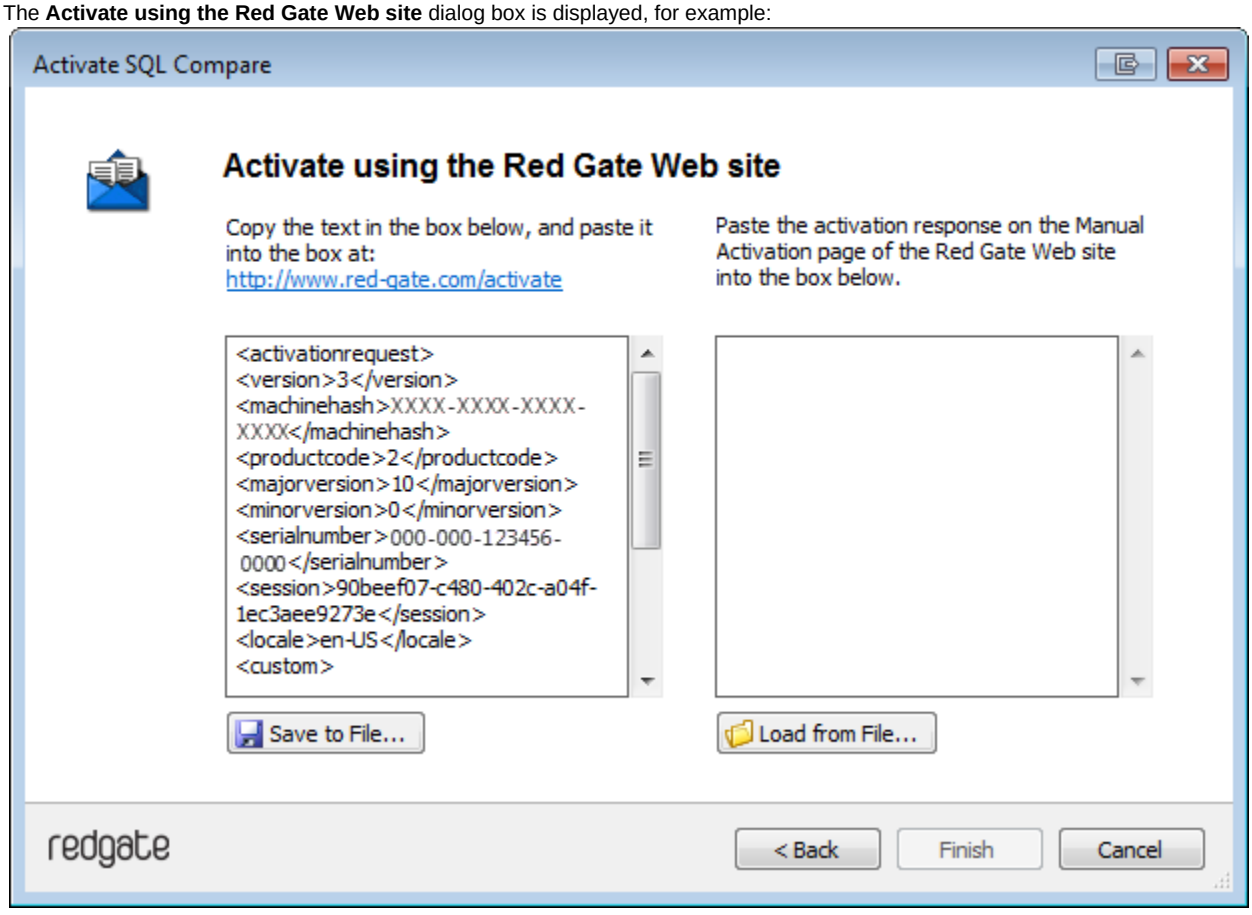
You can use manual activation whenever the **Activation Error** dialog box is displayed and the **Activate Manually** button is available, for example:



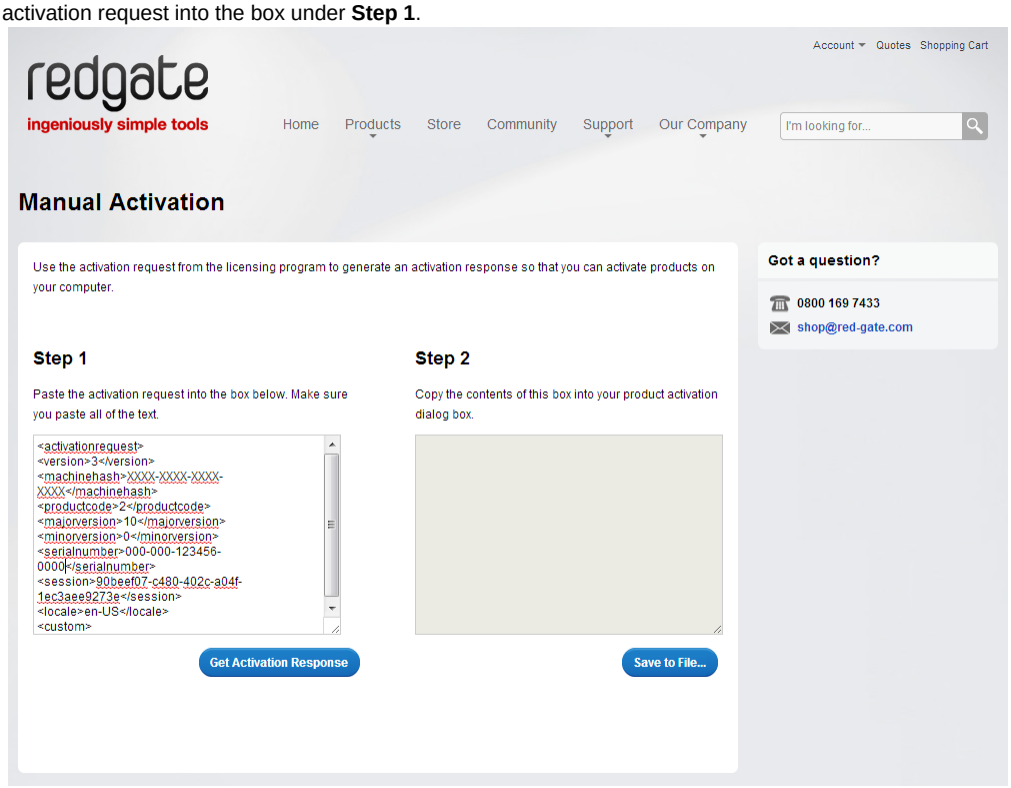
To activate manually:

1. On the error dialog box, click **Activate Manually**.

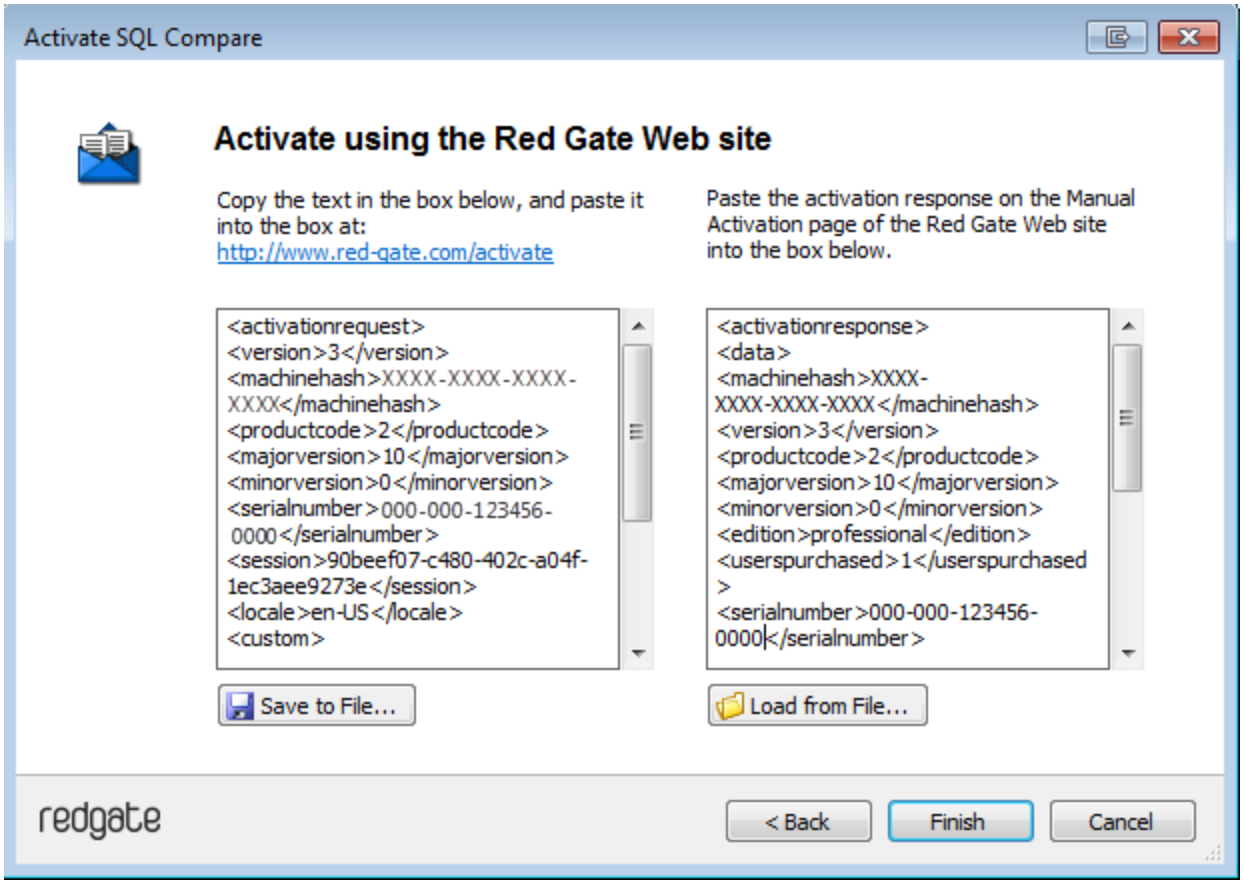
   The **Activate using the Red Gate Web site** dialog box is displayed, for example:



2. Copy all of the activation request, and **leave this dialog box open** (if you close the dialog box, you may have to start again). Alternatively you can save the activation request, for example to a location on your network or to a USB device.
3. On a computer that has an Internet connection, go to the **Manual Activation** page at http://www.red-gate.com/activate and paste the activation request into the box under **Step 1**.



4. Click **Get Activation Response**.
5. When the activation response is displayed under **Step 2**, copy all of it.
   Alternatively you can save the activation response to a .txt file.
6. On the computer where the licensing and activation program is running, paste the activation response or if you saved it, load it from the file.



7. Click **Finish**.
   The **Activation successful** page is displayed.
8. Click **Close**.
   You can now continue to use your product.

Deactivating

> This page applies to several Redgate products, so the screenshots below may not match your product.

Download deactivation tool

You can use the deactivation tool to deactivate a serial number so you can reuse it on another computer. You can also use it to deactivate serial numbers for products you've uninstalled.

> When you deactivate a serial number for a bundle of products, all the products in the bundle are deactivated. For information about what products are in your bundle, see Bundle history.

To deactivate a serial number, your computer must have an internet connection. If you can't deactivate a serial number, you can request additional activations for that serial number. You may need to do this if:

- your computer doesn't have an internet connection
- your network uses a proxy server that interrupts contact between the product and the Redgate activation server
- your serial numbers aren't displayed in the deactivation tool (eg if the product installation is corrupted)

Deactivating using the command line

Open a command prompt, navigate to the folder where your product executable file is located and run a command with the following syntax:

```
<productEXE> /deactivateSerial
```

For example:

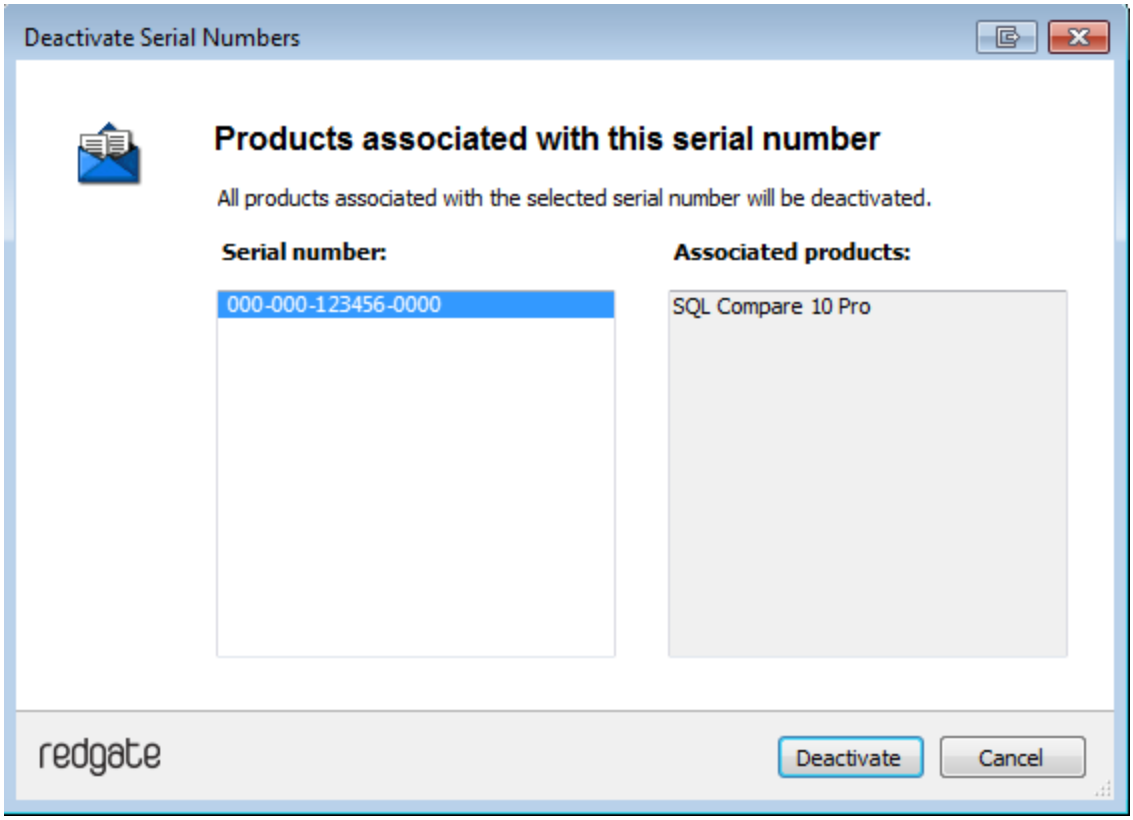
```
sqlcompare /deactivateSerial
```

The **Deactivate Serial Numbers** dialog box is displayed. Follow the instructions below.

Deactivating using the GUI

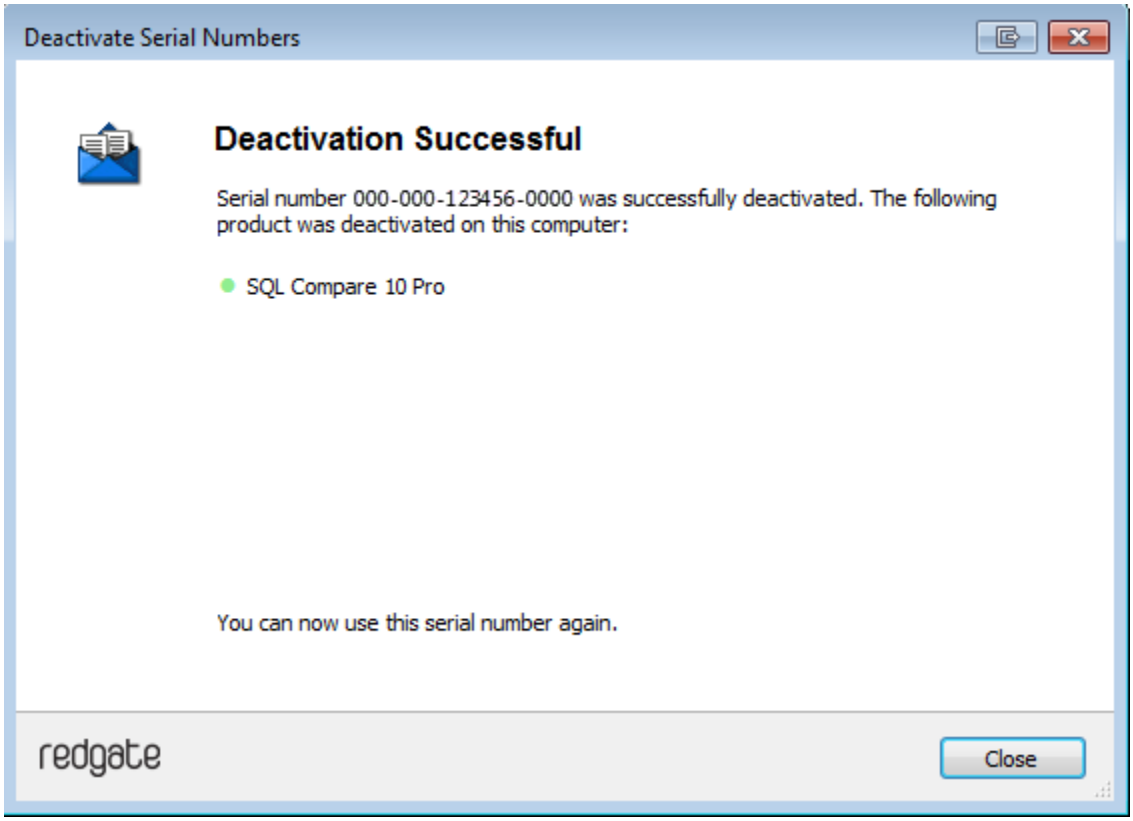
To deactivate your products:

1. Start the deactivation tool. To do this, either download the tool and run the executable file, or on the **Help** menu of the product, click **Deactivate Serial Number**.
   The **Deactivate Serial Numbers** dialog box is displayed. For example:



If you're running the executable file, the dialog box displays all the serial numbers for Red Gate products that have been activated on your computer.
If the serial number is for a bundle, all the products in the bundle are displayed under **Associated products**.

2. Select the serial number you want to deactivate and click **Deactivate**.
   Your deactivation request is sent to the Red Gate activation server.
3. When your deactivation has been confirmed, the **Deactivation successful** page is displayed. For example:



If there's a problem with your deactivation request, an error dialog box is displayed. For information about deactivation errors and how to resolve them, see Troubleshooting licensing and activation errors.

4. Click **Close**. You can now use this serial number on a different computer.

Troubleshooting licensing and activation

This page provides information about errors you may encounter when you activate Redgate products:

The number of activations for this serial number has been exceeded

This error message is displayed when a serial number is activated on more computers than the number of licenses that were purchased for that serial number.

When you purchase products from Redgate, we send you an invoice that includes your serial numbers. The serial numbers enable you to activate the software a number of times, depending on how many licenses you purchased and the terms in the license agreement. When this limit is reached, you will see this error message.

To fix the problem, you can:

- deactivate the product on another computer to free up a license
- purchase more licenses
- request additional activations for your serial number

This serial number has been disabled

This error message is displayed when you try to activate a product using a serial number that Redgate has disabled.

When you upgrade a product, your existing serial numbers will be disabled and we will issue new ones with your invoice. If you cannot find your new serial numbers, you can review them at http://www.red-gate.com/myserialnumbers

Redgate will also disable serial numbers for non-payment of invoices or breach of the terms in the license agreement. If you think we have disabled your serial numbers in error, email licensing@red-gate.com

This serial number was for a trial extension

This error message is displayed when you have requested a trial extension and you try to reuse the serial number that was provided for the trial extension; trial extensions can be used one time only.

To continue using the product, you need to purchase it.

This serial number is not registered with the activation server

This error message is displayed when the serial number you entered does not exist on the Redgate activation server.

To find out your serial numbers, check your invoice or go to http://www.red-gate.com/myserialnumbers

This serial number is not for <product name>

This error message is displayed when the serial number you entered is not for the product you are trying to activate.

To find out your serial numbers, check your invoice or go to http://www.red-gate.com/myserialnumbers

This serial number is not for this version

This error message is displayed when the serial number you entered is for a different version of the product you are trying to activate.

If the serial number is for an older version of the product, and you don't have that version installed on your computer, you can download it from the Release notes and other versions page.

If you want to upgrade to the latest version of the product, go to the Upgrade center to get a quote or purchase an upgrade, or email sales@red-gate.com.

The activation request is in the wrong format

This error message is displayed:

- if your internet connection does not allow SOAP requests.
  Try using manual activation; on the error dialog box, click **Activate Manually**, and then follow the instructions that are displayed.
- if you are activating by email and there is a problem with the format of the activation request.
  Check that you copied and pasted all of the activation request.
  Alternatively, try using manual activation. Go to http://www.red-gate.com/activate and paste your activation request under **Step 1**.
- when you are using manual activation and there is a problem with the format of the activation request. If the format is incorrect, for example part of the request is missing, the Redgate activation server cannot process the request.
  Check that you copied and pasted all of the activation request.

For more information about activating manually, see Manual activation.

The activation request contains an invalid machine hash

This error message is displayed:

- if your internet connection does not allow SOAP requests.
  Try using manual activation; on the error dialog box, click **Activate Manually**, and then follow the instructions that are displayed. For more information, see Manual activation.
- when you are using manual activation and there is a problem with the format of the *machinehash* element in the activation request. The *machinehash* is a checksum of attributes from your computer. We use the *machinehash* to identify computers on which our products have been activated. If the format of the *machinehash* element is incorrect, the Redgate activation server cannot process the request.
  Check that you copied and pasted the activation request correctly.

The activation request contains an invalid session

This error message is displayed:

- if your internet connection does not allow SOAP requests.
  Try using manual activation; on the error dialog box, click **Activate Manually**, and then follow the instructions that are displayed. For more information, see Manual activation.
- when you are using manual activation and there is a problem with the format of the activation request. If the format of the *session* elemen t is incorrect, the Redgate activation server cannot process the request.
  Check that you copied and pasted the activation request correctly.

The activation request contains an invalid serial number

This error message is displayed:

- if your internet connection does not allow SOAP requests.
  Try using manual activation; on the error dialog box, click **Activate Manually**, and then follow the instructions that are displayed. For more information, see Manual activation.
- when you are using manual activation and there is a problem with the format of the activation request. If the format of the serial number is incorrect, the Redgate activation server cannot process the request.
  Check that you copied and pasted the activation request correctly.

The activation request contains an invalid product code or version number

This error message is displayed:

- if your internet connection does not allow SOAP requests.
  Try using manual activation; on the error dialog box, click **Activate Manually**, and then follow the instructions that are displayed. For more information, see Manual activation.
- when you are using manual activation and there is a problem with the format of the activation request. If the product code or version numbers are incorrect, the Redgate activation server cannot process the request.
  Check that you copied and pasted the activation request correctly.

There's a problem deactivating your serial number

This error message is displayed if your computer is not connected to the internet or your internet connection does not allow SOAP requests. You cannot deactivate a serial number if your computer does not have an internet connection.

Try deactivating again later. If the problem persists, contact your system administrator.

If you require more activations because you cannot deactivate your serial number, you can request them on the Request Extra Activations page.

This serial number is not activated on this computer

This error message is displayed when you try to deactivate a serial number that has not been activated on your computer.

If you think the product installation on your computer is corrupt, you can try re-activating the product, and then deactivating the product again.

If you require more activations because you cannot deactivate your serial number, you can request them on the Request Extra Activations page.

Products not activated on this computer

This error message is displayed when you try to deactivate a serial number for a bundle of Redgate products and those products were not activated on your computer.

If you think the product installation on your computer is corrupt, you can try re-activating the product, and then deactivating the product again.

If you require more activations because you cannot deactivate your serial number, you can request them on the Request Extra Activations page.

Upgrading

Minor releases are free for all users. For example, if you have a license for version 7.0 of a product, you can upgrade to version 7.1 at no cost. W hen you download and install a minor release, the product is licensed with your existing serial number automatically.

Major releases are free for users with a current Support and Upgrades contract. For example, if you have a license for version 7 of a product, you can upgrade to version 8 at no cost. When you download and install a major release, the product is licensed with your existing serial number automatically.

If you don't have a current Support and Upgrades contract, installing a major release will start a free 14-day trial. You'll need to buy a new license and activate the product with your new serial number.

To check whether you have a current Support and Upgrades contract or see the cost of upgrading to the latest major version of a product:

- visit the Upgrade Center
- email sales@red-gate.com
- call:
  - 1 866 733 4283 (toll free USA and Canada)
  - 0800 169 7433 (UK freephone)
  - +44 (0)870 160 0037 (rest of world)

To check the latest version of a product, see Current versions.

How to upgrade

You can download the latest version of a product using Check for Updates, the Upgrade Center, or the Redgate website.

- If you download the latest version from the Upgrade Center or our website, you need to run the installer to upgrade the product.

  > Some Redgate products are available as part of bundle. You can select which products you want to upgrade when you run the installer.

- If you use Check for Updates, the installer runs automatically.

> You can install the latest *major* version of any product (other than SQL Backup Pro) on the same machine as the previous version. For example, you can run version 9 and version 10 in parallel. However, installing a *minor* release will upgrade the existing installation.
>
> To revert to an earlier version, uninstall the later version, then download and install the version you want from the Release notes and other versions page. You can use a serial number for a later version to activate an earlier version.

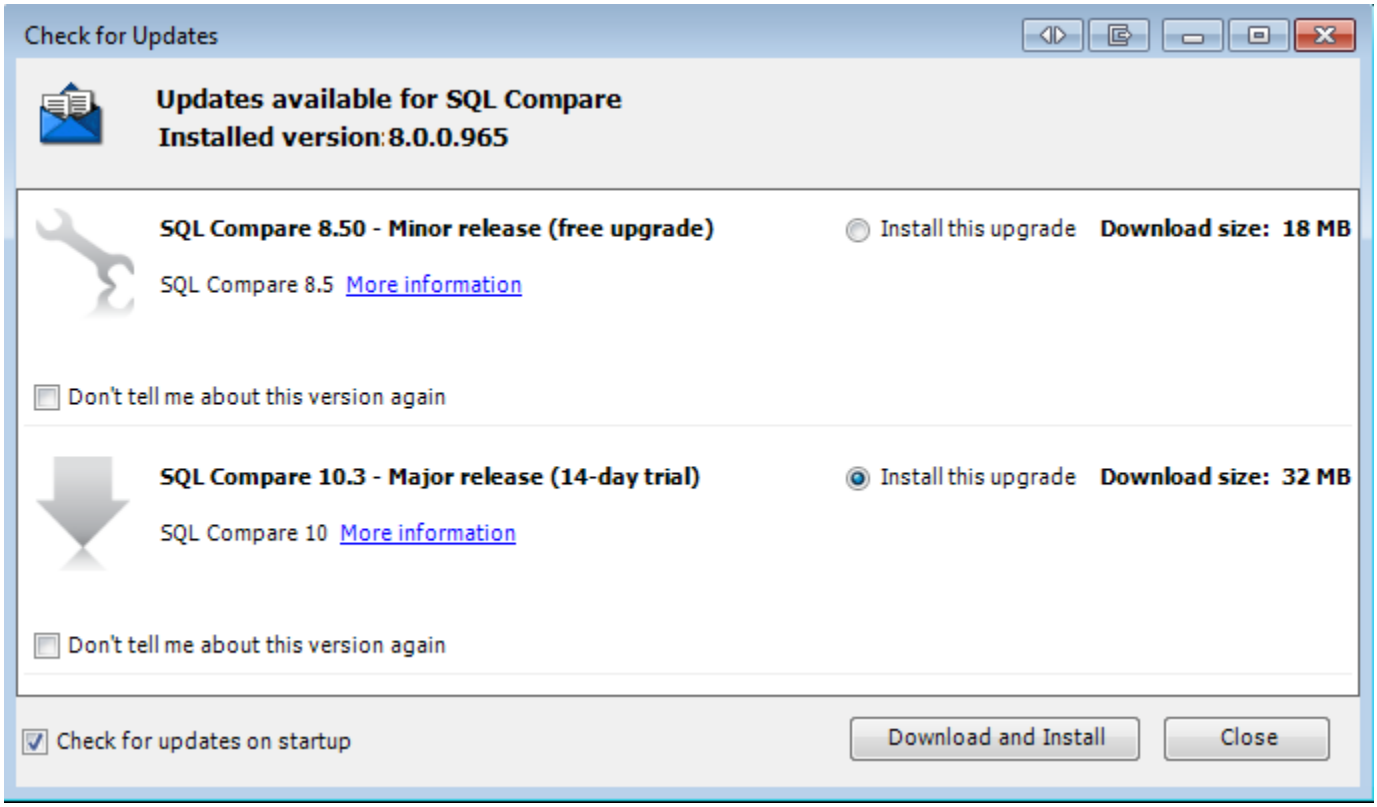
Using Check for Updates

> This page applies to several Redgate products, so the screenshots below may not match your product.

The Check for Updates service checks whether a more recent version of the product is available to download. To use the service, your computer must have a connection to the internet. If your internet connection uses a proxy server, make sure your web browser connection settings are configured correctly.

> The Check for Updates service doesn't work with automatic configuration scripts.

To check for updates for a Redgate product, on the **Help** menu, click **Check for Updates**. Any available updates are listed:



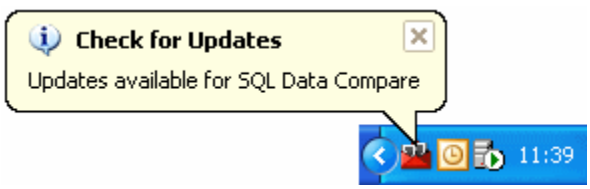
To view the full release details in your default web browser, click **More information**.

To get the update, click **Download and Install**. If you have a choice of updates, choose by selecting **Install this upgrade**, and then click **Download and Install**.

> The installer will ask you to close the program. If you're upgrading an add-in, you'll also be asked to close the host program (SQL Server Management Studio, Visual Studio or Query Analyzer).

About the Check for Updates service

When you start the application, the Check for Updates service informs you automatically when there are updates available:



If you don't want to receive these notifications for the product, clear the **Check for updates on startup** check box.

If you don't want the Check for Updates service to inform you about a particular update again, select the **Don't tell me about this version again** check box. The Check for Updates service will still inform you of new updates when they become available.

Troubleshooting Check for Updates errors

For details about how to use the Check for Updates service, see Using Check for Updates.

Error: There is a problem saving the download file to your computer

This error message is displayed if:

You don't have enough disk space

The Check for Updates service downloads the updates to the location defined by the *RGTEMP* environment variable, or the *TMP* variable if the *RGTEMP* variable doesn't exist.
If you don't have enough disk space, you can change the environment variable to a location with more space.

> Changing the *RGTEMP* or the *TMP* variables will affect other programs that use those variables. The *RGTEMP* variable affects only Redgate programs. For information about environment variables, see your Windows documentation.

There's a problem with permissions on your computer

The Check for Updates service downloads the updates to the location defined by the *RGTEMP* environment variable, or the *TMP* variable if the *RGTEMP* variable does not exist. If your user account doesn't have permissions to write to the location specified by these environment variables, contact your system administrator.

There's a problem with the download file on the Redgate web server

Contact Redgate support.

Error: There is a problem with the network connection

This error message is displayed if:

Your internet connection dropped while the Check for Updates service was downloading the updates

Try checking for updates again later.

Proxy authentication failed

Check your user name and password.

Your computer can't connect to the Check for Updates service.

Contact your system administrator. If you're using a proxy server, check it's configured correctly (see Control Panel > Internet Options > Connections).

> The Check for Updates service doesn't work with automatic configuration scripts.

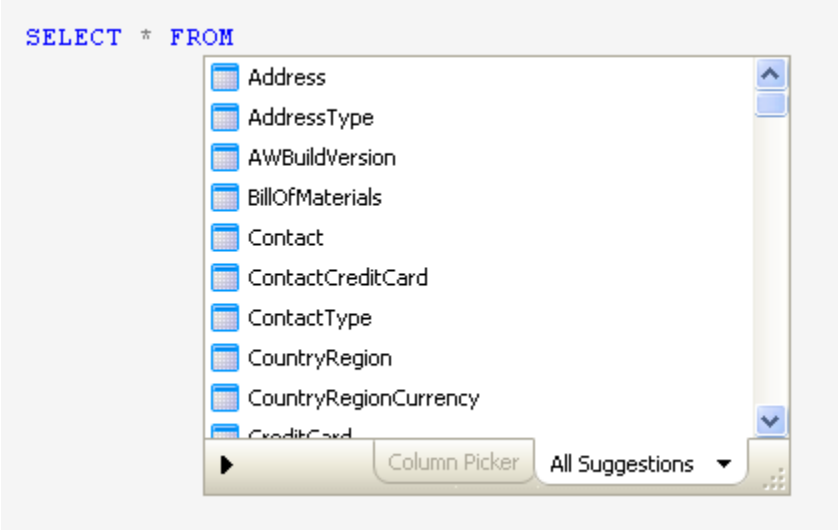
There's a problem with the download file on the Redgate web server

Contact Redgate support.

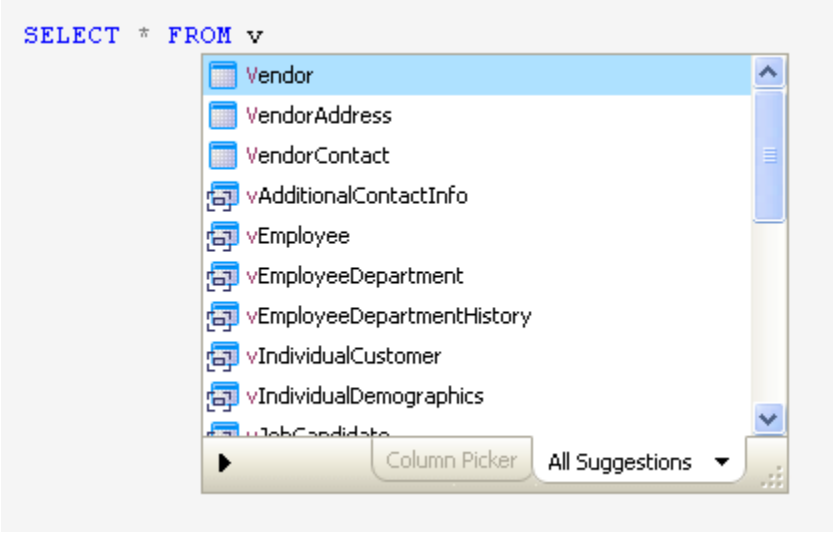
Inserting suggestions into your code

SQL Prompt provides SQL code auto-completion using the *suggestions box*. The suggestions box pops up to display items based on what you type in your query editor.

For example, when you type `SELECT * FROM`, the suggestions box displays a list of tables first, then views, and further down the list, owners, databases, functions, and so on.



The suggestions box is displayed automatically when you type the first character of a keyword or identifier. As you type, the suggestions are filtered to match the typed characters.



To insert the currently highlighted suggestion, press the Tab or Enter key, or any of the defined insertion keys. You can customize which keys insert suggestions, see: Managing SQL Prompt behavior.

Closing the suggestions box

To close the suggestions box without inserting anything, press the Esc key. If nothing is selected in the suggestions box, you can also press the Enter key to close it.

You can also click anywhere in your query window to close the suggestions box.

Order of suggestions

The order in which suggestions are listed depends on the context of your query. For example:

- After typing `USE`, databases are listed at the top of the suggestions box.

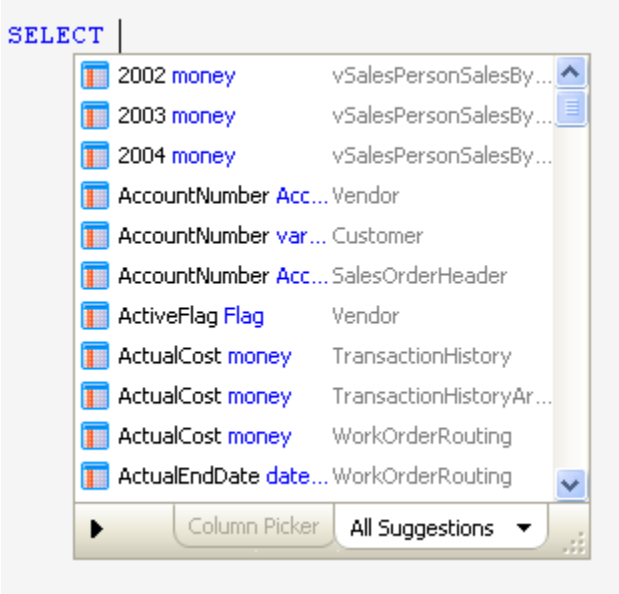
- After typing `SELECT * FROM`, tables are listed at the top of the suggestions box, followed by views, schemas and then database names.
- In a `CREATE TABLE` statement, after typing a column name, data types are listed at the top of the suggestions box.

Viewing all columns after a SELECT statement

After typing `SELECT`, SQL Prompt does not by default list all the possible columns from all tables. If you want to see all column names after typing `SELECT`:

1. From the **SQL Prompt** menu, click **Options**.
2. Go to the **Suggestions > Types of suggestion** page.
3. Select **List all database columns after a SELECT statement**.

When you type `SELECT`, all column names will now be displayed in the suggestions box, listed alphabetically:



Only displaying the suggestions box manually

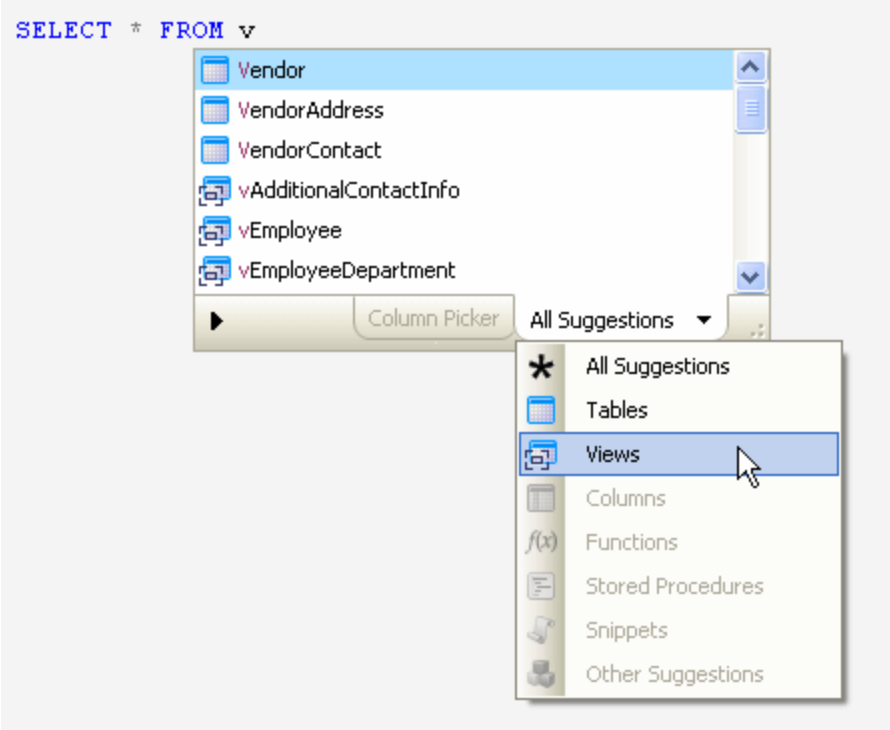
To turn off the automatic display of the suggestions box:

1. On the **SQL Prompt** menu, select **Options**.
2. On the **Main > Behavior** page (displayed by default when you first display the SQL Prompt Options dialog box), clear the **Automatically trigger suggestions** check box.

When automatic display of the suggestions box is turned off, you can press Ctrl + Spacebar at any time to display it manually. The type of suggestions displayed will depend on where in the query you display the suggestions box.

Using categories

The suggestions box displays items grouped by category. Categories are a way of organizing suggestions so you can find the item you require more easily:



Only the categories that contain suggestions are available to select.

To switch between categories, click the **All Suggestions** drop-down or press Ctrl + Up arrow or Ctrl + Down arrow.

The following categories are shown:

Tables lists tables from the current database.

Views lists views from the current database.

Columns lists column names, with their data types and associated table names (or table aliases). Primary key and foreign key columns are also shown.
You can also use the column picker to insert columns.

Functions lists user-defined functions in the current database, and built-in functions.

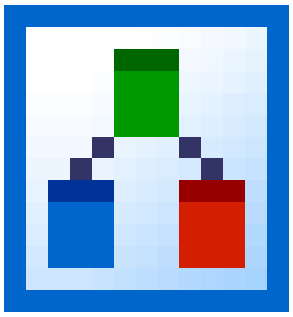
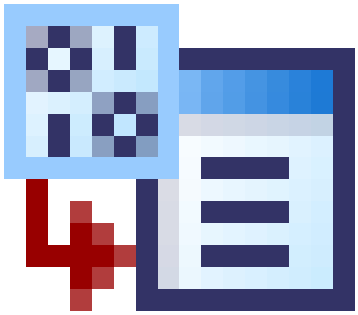
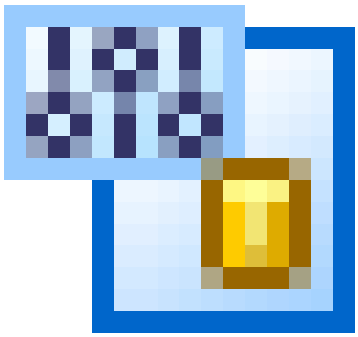
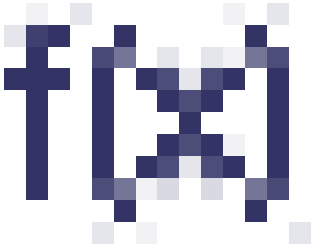
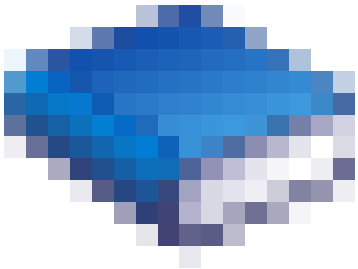
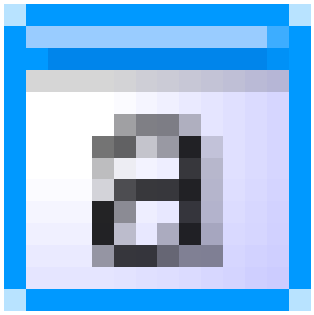
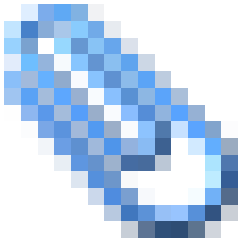
Stored Procedures lists stored procedures from the current database.

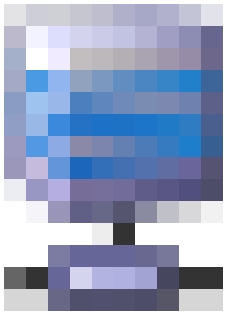
Snippets lists shortcuts for inserting pre-defined SQL fragments or statements.
For more information about snippets, see Inserting snippets.

Other Suggestions lists keywords, data types, and objects such as users and roles.

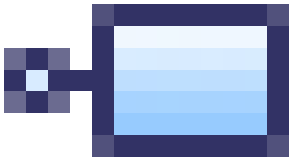
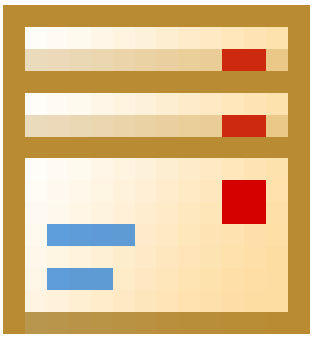
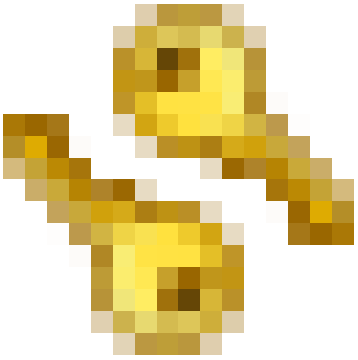
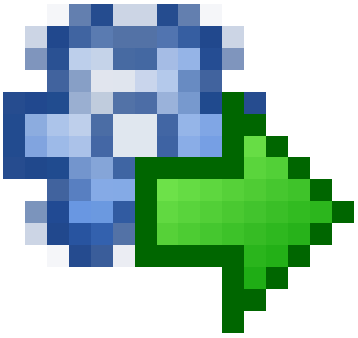
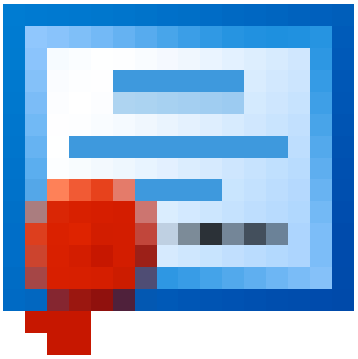
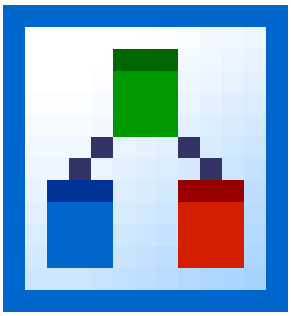
Object types

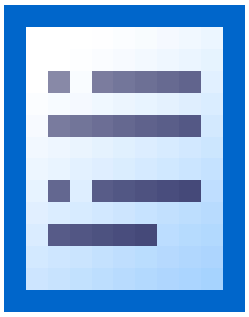
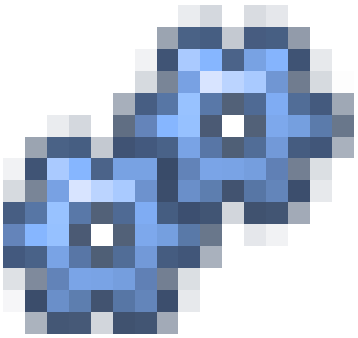
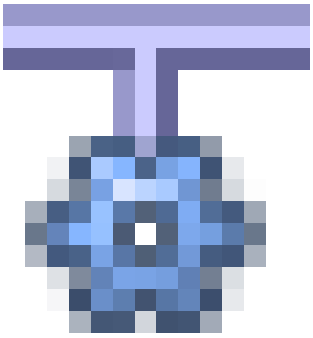
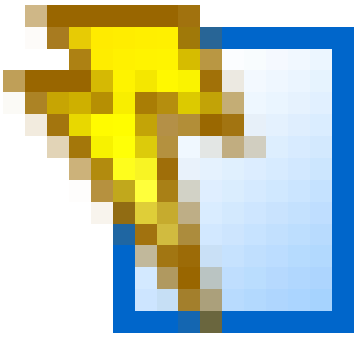
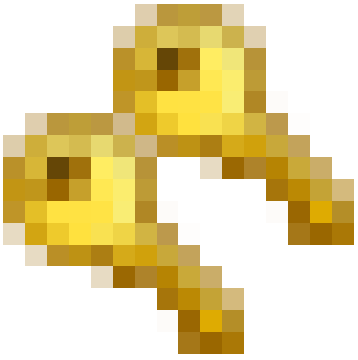
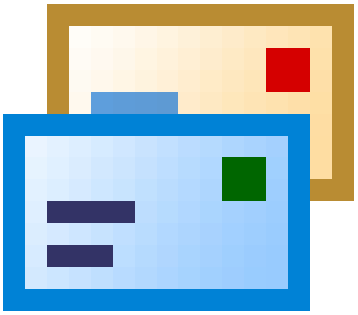
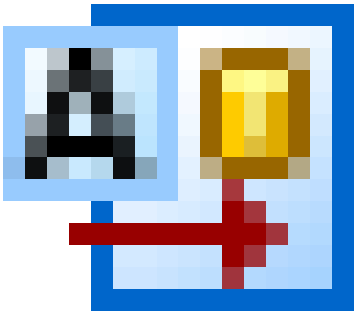
You may see the following types of object or suggestion listed in **Other Suggestions**:

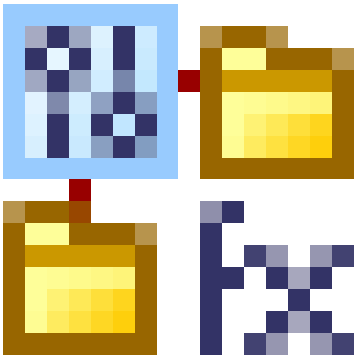
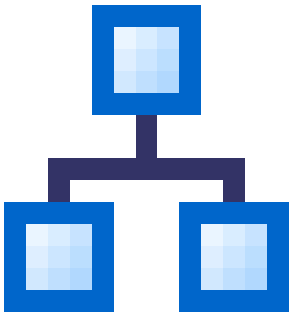
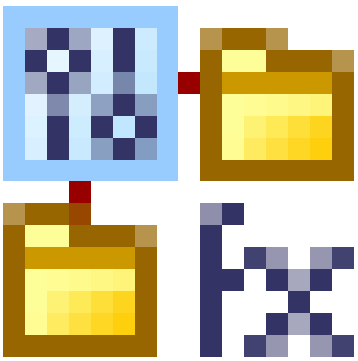
	DML triggers		Rules
	Users		Defaults
	Roles		User defined types
	Functions		Full text catalogs
	System variables		Join suggestions

	Linked server objects		

For SQL Server 2005 and 2008:

	Assemblies		Queues
	Asymmetric Keys		Routes
	Certificates		Schemas

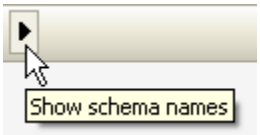
	Contracts		Services
	DDL Triggers		Service Bindings
	Event Notifications		Symmetric Keys
	Message Types		Synonyms

	Partition Functions		XML Schema Collections
	Partition Schemes		

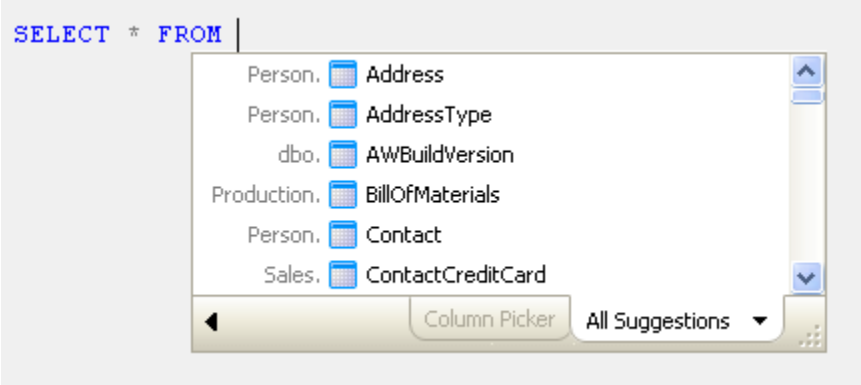
Displaying schema (owner) names

You can display schema (owner) names in the suggestions box by clicking the right arrow

in the bottom left corner of the suggestions box.



The suggestions box is autmomatically widened to allow space for the schema names, shown in grey to the left of the suggestions:



To hide the list of schema (owner) names, click the left arrow


> The arrows only affect how object names are displayed in the suggestions box. The schema (owner) name is only inserted into your code when **Qualify object names with owner name** is selected on the **Inserted Code > Qualification** options page.

Changing the size of the suggestions box

You can resize the suggestions box by dragging the resize handle

The new size is remembered the next time the suggestions box is displayed.

The size of the suggestions box is remembered between sessions in SQL Server Management Studio and Visual Studio.

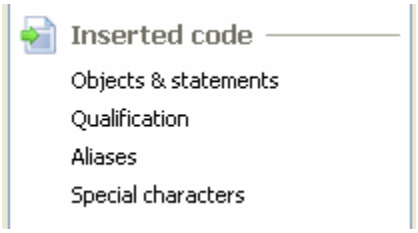
Moving through the list of suggestions

You can move through the list of items in the suggestions box by pressing:

- Up / Down arrow keys to move up or down the list one item at a time. If you are at the top of the list, pressing the Up arrow key takes you to the bottom of the list; if you are at the bottom of the list, pressing the Down arrow key takes you to the top of the list.
- Page Up or Page Down to move up or down the list one page at a time.
- Ctrl + Page Up or Ctrl + Page Down to move up or down the list one page at a time.

Changing how suggestions are inserted

When you select an item from the suggestions box, SQL Prompt inserts the suggestion according to the options you have set in the **Inserted code** pages of the **Options** dialog box:



For example, you can specify how ALTER and INSERT statements are inserted, and whether object names are qualified. For more information, see Customizing inserted code.

Encrypted objects

SQL Prompt can automatically decrypt encrypted objects to show their creation script in the object definition box. (Available in SQL Prompt Pro Edition only.)

If you do not have permission to decrypt objects, you can still view them in the suggestions box and insert them into your query.

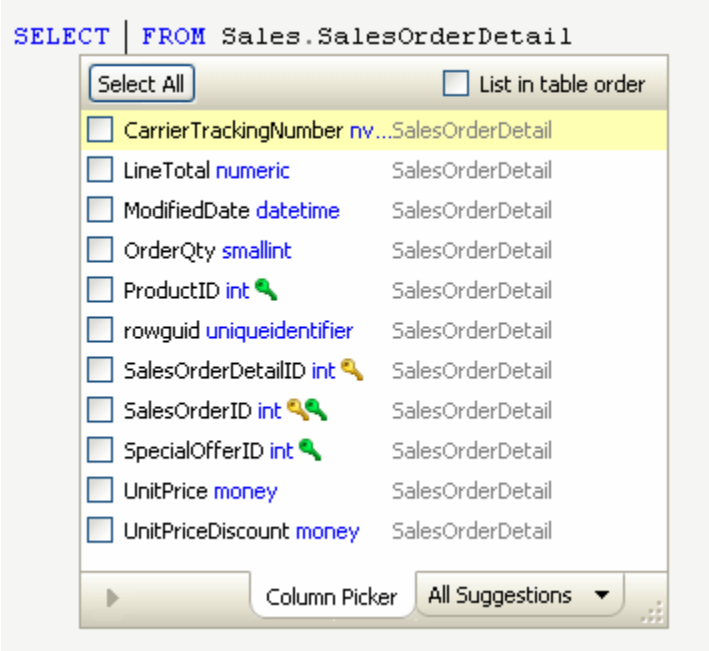
By default, SQL Prompt will decrypt encrypted objects. To turn this option off:

1. On the **SQL Prompt** menu, select **Options**.
2. Go to the **Suggestions > Types of suggestion** page.
3. Turn off **Decrypt encrypted** objects.

Inserting columns with the column picker

The Column Picker enables you to select multiple columns for tables or views specified in a `SELECT` statement or similar syntax.

When the suggestions box is displayed, press Ctrl + Left arrow or click the **Column Picker** tab to display the Column Picker:



Primary key

and foreign key

columns are indicated by key icons.

The Column Picker is never automatically selected.

- The columns are listed in the order in which they are defined in the table. Clear the **List in table order** check box to list them alphabetically.
- The first column in the list is highlighted, but it is not selected. Only columns that you specifically check will be inserted.

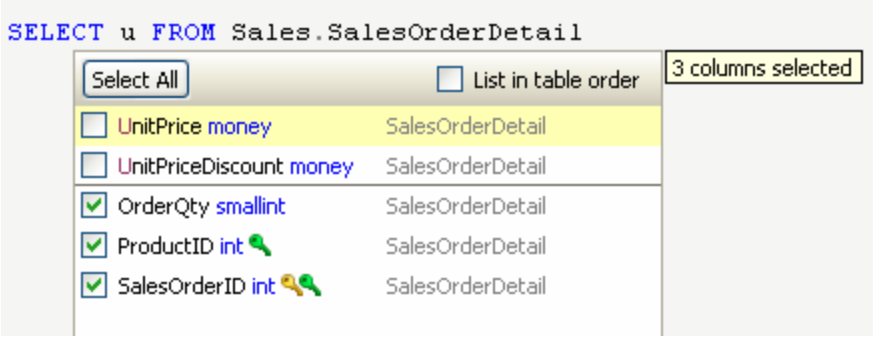
> The Column Picker is only available when it is valid syntax to insert more than one column into your code at this point in the query, and there are columns available to insert. For example, the column picker is available for `SELECT` statements and after `ORDER BY`, but not in a `WHERE` clause.

Selecting columns

As you start typing, the list of columns is filtered to show only those that match the typed characters.

- Use the Up and Down arrow keys to navigate through the list.
- Press the Spacebar to select a column to be inserted.
- You can select all the columns in the list by pressing Ctrl + A or clicking the **Select All** button.

If you have already selected some columns and then filtered the list by typing some letters, the previously selected columns are listed at the bottom:



Inserting selected columns

Press the Enter or Tab key to insert the selected columns. The columns are inserted in the order in which you selected them.

> You can also insert the selected columns using any of the other insertion keys you have specified, for example Space bar or Dot (.) or Comma (,) - see Managing SQL Prompt behavior.

The inserted columns are automatically formatted depending on the options specified in the SQL Prompt Options dialog box:

- For SQL Prompt Pro Edition, under **New lines** on the **Format > Data Statements** page.
- For SQL Prompt Standard Edition, under **Column Placement** on the **Format > Basic (Standard Edition)** page.

If the format of the inserted columns doesn't look the way you want, you can change the formatting options and then apply the new format to the selected code:

From the **SQL Prompt** menu, select **Format SQL**.

> The **Format SQL** command is only available in SQL Prompt Pro Edition.

Qualified column names

Inserted column names are qualified when:

- you have selected **Qualify column names with table name** on the **Inserted code > Qualification** options page, or
- you have specified more than one table in the FROM clause, and the column names would be ambiguous without also specifying their table

In the example below, both qualification options have been turned on:

```
SELECT  Production.ProductCategory.ProductCategoryID ,
        Production.ProductCategory.Name ,
        Production.ProductCategory.rowguid ,
        Production.ProductCategory.ModifiedDate
FROM    Production.ProductCategory
```

In the example below, SQL Prompt has automatically qualified certain column names to avoid ambiguity:

```
SELECT  ProductCategoryID ,
        Name ,
        ProductCategory.rowguid ,
        ProductCategory.ModifiedDate ,
        CustomerID ,
        TerritoryID ,
        AccountNumber ,
        CustomerType ,
        Customer.rowguid ,
        Customer.ModifiedDate
FROM    Production.ProductCategory ,
        Sales.Customer
```

> Only those columns that appear in more than one table are qualified.

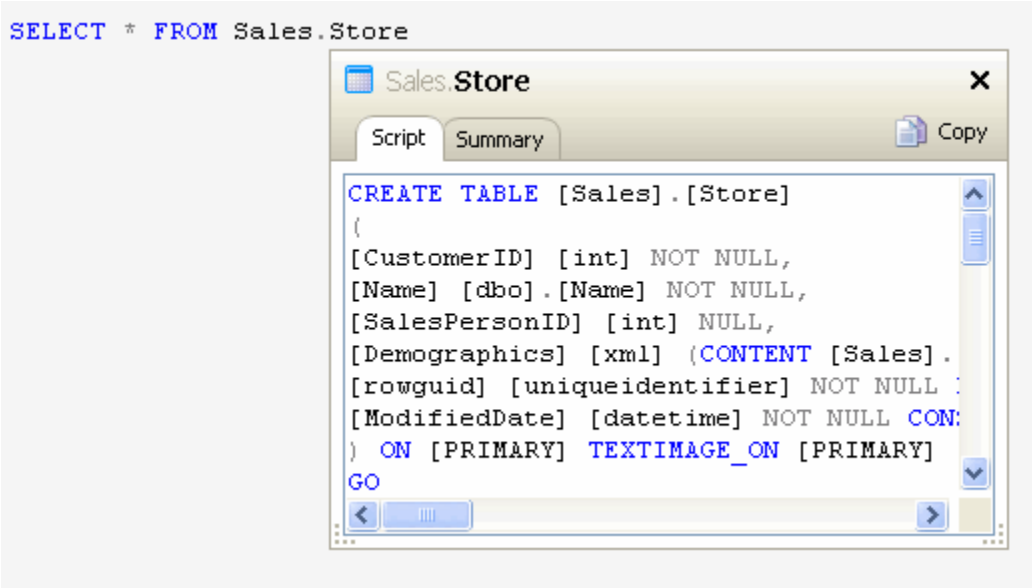
When **Assign** aliases is turned on as well as **Qualify column names with table name**, columns are qualified with the table alias. For example:

```
SELECT  a.AddressID ,
        a.AddressLine1 ,
        a.AddressLine2 ,
        a.City ,
        a.StateProvinceID ,
        a.PostalCode ,
        a.rowguid ,
        a.ModifiedDate
FROM    Person.Address AS a
```

You can customize how aliases are created and inserted. For more information, see Working with aliases.

Using the object definition box and object tooltips

SQL Prompt displays object definitions in an *object definition box*. For example, when you select a table in the suggestions box, the object definition box pops up to show the creation script for that table, and a summary of the object.



- For tables and views, the **Summary** tab shows the column names and data types.
- For stored procedures and functions, the **Summary** tab displays parameters and their data types, and for functions the data type that is returned.
- For snippets, the snippet code is shown on the **Script** tab. The **Summary** tab is not available for snippets.
- For temporary tables, CTEs and table valued variables, only the **Summary** tab is available.

To resize the object definition box, drag the resize handle

at the bottom left or right corner.

Showing or hiding the object definition box

When you first install SQL Prompt, the object definition box will always be displayed for any suitable object selected in the suggestions box. To turn it off, so that it isn't displayed automatically:

1. On the **SQL Prompt** menu, select **Options**.
2. On the **Main > Behavior** page of the SQL Prompt Options dialog box (this page is the first page displayed by default), turn off **Display object definitions**.

> If you turn off the object definition box, you can still view the object creation script for any object in your script by hovering over the object name to display a tooltip. Click the tooltip to display the object definition.

You can also increase the time lag before the object definition box is displayed. This may be useful if you don't want it to appear when you are typing code quickly, but you do want to see definitions for certain tables after a slight pause:

Enter the time in milliseconds. 500 milliseconds is the default time.

Copying object definitions

You can copy the information in the object definition box to the clipboard:

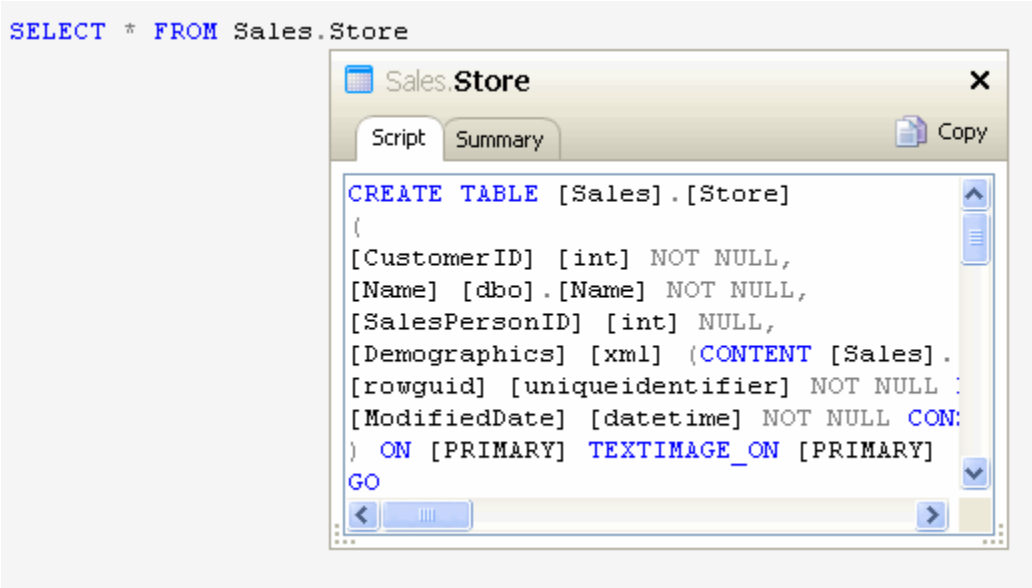
- To copy all the information, ensure that there is no text selected, and click **Copy**.
- To copy part of the information, select the required text, and click **Copy**.

Using object definition tooltips

When you move the mouse pointer over an object in your query, SQL Prompt displays a tooltip containing the fully qualified object name:

The tooltip also displays the MS_Description extended property for the object, in this case a brief explanation of the table's contents.

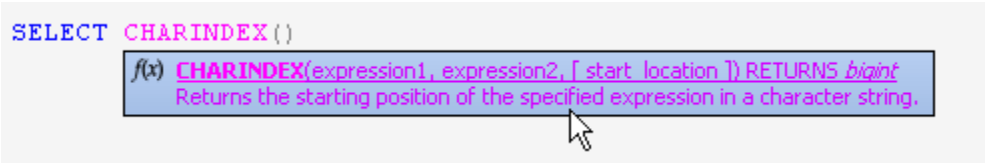
If the object name is underlined, you can click it to display the object definition box for the object:



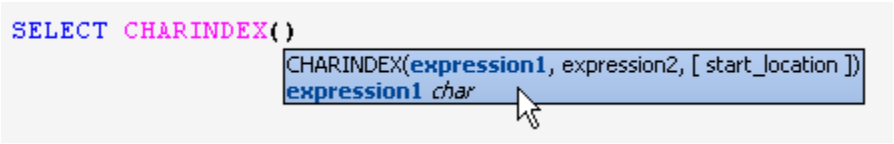
For functions, the tooltip displays the possible parameters for that function.

Using tooltips for more help on system functions and parameters

Move the mouse pointer over a system (built-in) function to display an interactive tooltip. You can click on the tooltip to access the SQL Server online help for that function:

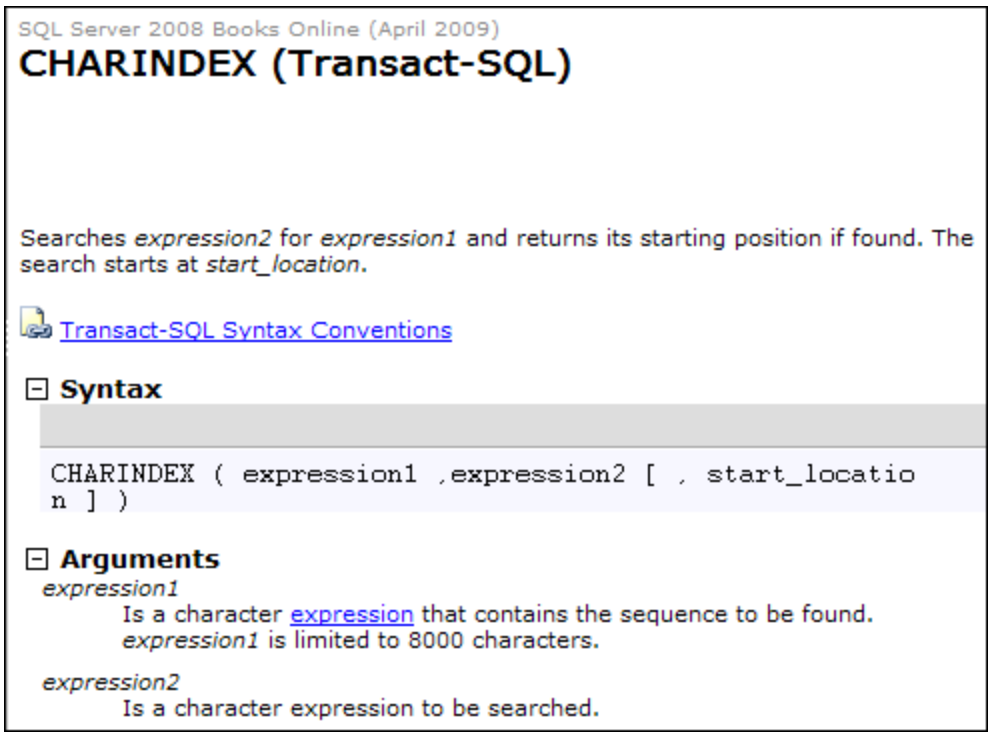


You can move the mouse over the function parameters to display a tooltip specifically listing the valid parameters for this function:



As you enter the parameters, the next expected parameter is highlighted in blue.

Click either type of tooltip to read more about the current function in Books Online:



Showing or hiding tooltips

When you first install SQL Prompt, tooltips are enabled by default. To turn them off:

1. On the **SQL Prompt** menu, select **Options**.
2. On the **Main > Behavior** page of the SQL Prompt Options dialog box (this page is the first page displayed by default), turn off **Objects** or **Parameters** under **Tooltips**.

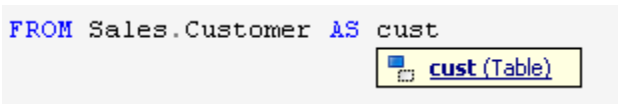
Tooltips are displayed for these objects:

- tables
- views
- stored procedures
- databases
- data types
- snippets
- triggers
- local variables (type)
- local parameters (type)
- columns (table name and type)
- built-in functions (function signature)
- user-defined functions (function signature)

Viewing tooltips for aliases

SQL Prompt displays a tooltip when you have created an alias for a table or view. Aliases are identified by the

icon in the tooltip:



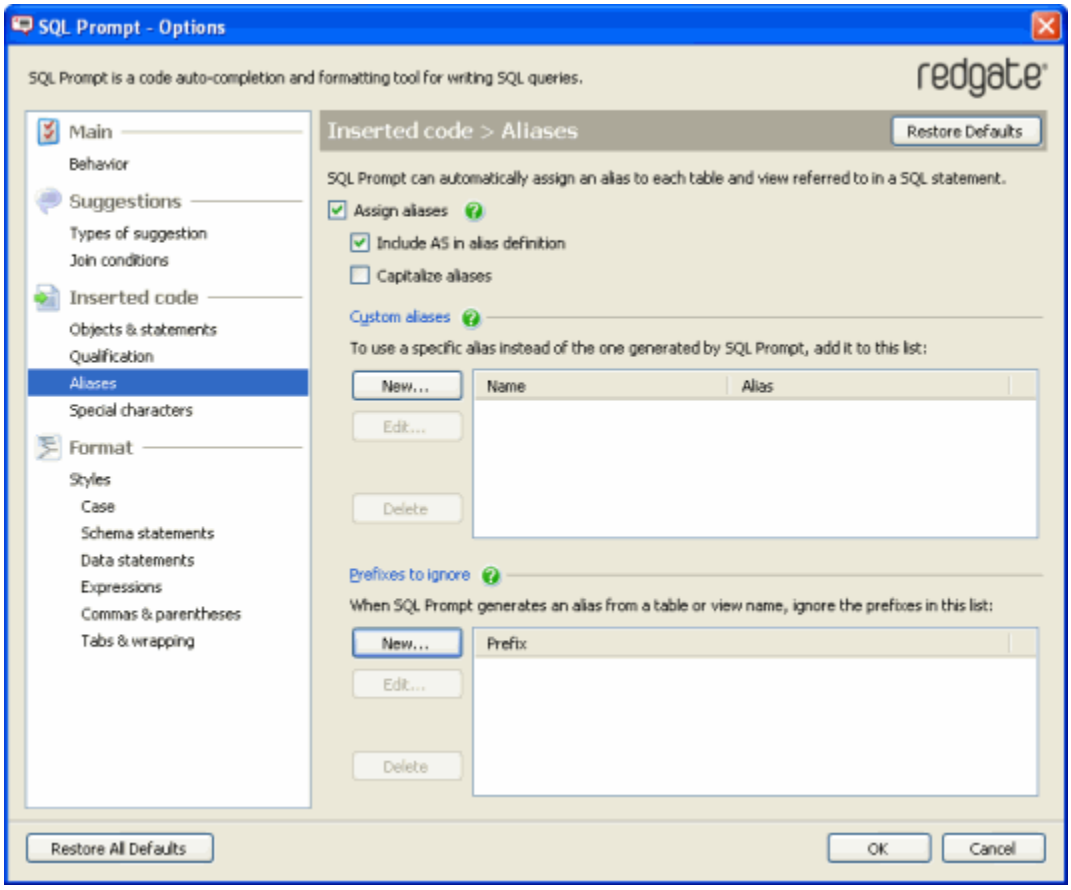
You can click the tooltip to view the summary of columns in that table or view. Aliases for views are also identified as "Table" in the object tooltip.

Working with aliases

You can set SQL Prompt to automatically assign an alias to each table and view that is referenced in a SQL statement. You can also define custom aliases for tables and views.

To manage aliases:

1. On the **SQL Prompt** menu, click **Options**.
2. On the SQL Prompt Options dialog box, select the **Inserted code > Aliases** page.



Alias assignment

When the **Assign aliases** check box is selected, SQL Prompt assigns an alias to tables and views that are referenced in a SQL statement, provided that you have specified a list of columns or used * to select all columns.

For example, if you select all columns from the table *Contact*, SQL Prompt creates the alias *c* to represent the table name *Contact*.

```
SELECT * FROM Person.Contact AS c
```

If you do not want SQL Prompt to include the AS keyword when it assigns aliases, clear the **Include AS in alias definition** check box.

Where possible, SQL Prompt generates aliases using the first letter of the table or view name. SQL Prompt also takes into account:

- underscores
  `TBL_Contact` is assigned the alias `tc`
- hyphens
  `hyphenated-tablename` is assigned the alias `ht`
- case
  `MixedCase` is assigned the alias `mc`

The suggestion box displays the learned aliases at appropriate points in your query, for example when you are typing a WHERE clause or adding additional columns to your query.

SQL Prompt creates additional aliases whenever there is ambiguity, for example in self-joins:

```
SELECT DISTINCT
        pv.VendorID ,
        pv2.ProductID ,
        pv.ProductID
FROM    Purchasing.ProductVendor AS pv
        INNER JOIN Purchasing.ProductVendor AS pv2
ON pv.ProductID = pv2.ProductID
WHERE   pv.VendorID <> pv2.VendorID
```

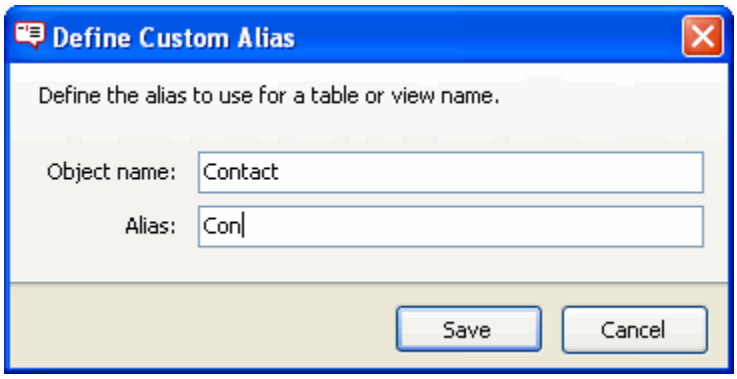
Custom aliases

If the aliases that SQL Prompt automatically generates do not satisfy your naming conventions, you can specify user-defined aliases for table or view names.

To add a user-defined alias:

1. Under **Custom aliases**, click **New**.
2. In the **Alias Define Custom Alias** dialog box, type the name of the table or view in the **Object name** box and the alias in the **Alias** box.
3. Click **Save**.

For example, to specify the user-defined alias *Con* for the Contact table, type the following in the **Define Custom Alias** dialog box:



SQL Prompt will then assign the alias as follows:

```
SELECT * FROM Person.Contact AS Con
```

To delete a custom alias, select the alias that you want to delete, and click **Delete**.

Prefixes to ignore

You can specify that SQL Prompt should ignore a prefix when assigning an alias for a column, table, or view name.

To add a prefix to ignore when generating an alias:

1. Under **Prefixes to ignore**, click **New**.
2. In the **Prefix to Ignore** dialog box, type the name of the prefix.
3. Click **Save**.

For example, if you specify `TBL` as a prefix to ignore and there is a table called `TBL_Orders`, SQL Prompt considers only `Orders` when assigning an alias for the table name:

```
SELECT * FROM dbo.tbl_orders AS o
```

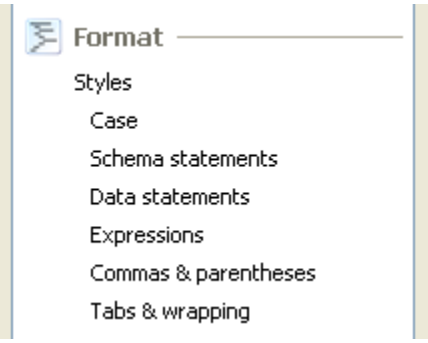
- Prefixes are not case-sensitive. Specifying `tbl`, `TBL`, or `Tbl` as the prefix will result in the SQL Prompt behavior shown above.
- You do not need to include the underscore in the prefix name.

Formatting your code

> Formatting your code using SQL Prompt is only available in **SQL Prompt Pro Edition**.

Setting the format options

To set formatting options, on the **SQL Prompt** menu, select **Options**. On the SQL Prompt Options dialog box, formatting options are all available in the **Format** group:



Click the page containing the type of format options you want to set.

> These settings will affect the appearance of your code only after you close the Options dialog box and then insert suggestions or select **Format SQL**.

For more information about formatting options, see Options for formatting your code.

Previewing the format options

There are two ways to preview the effect of applying the current format options to your code:

- The **Sample SQL** view shows how an example query would be formatted using the current options.
- The **Current Query** view shows how the first few lines of the query that is currently active in the editor window of your SQL editing application (eg SSMS) would be laid out using the current options.

  > **Current Query** is available only when you are currently editing a query.

Formatting your SQL

To format the SQL code in the current query editor or a highlighted SQL code fragment, do one of the following:

- on the **SQL Prompt** menu, click **Format SQL**
- right-click in your query editor window and click **Format SQL**
- press Ctrl + K, Y (In Query Analyzer, press Ctrl + Shift + Y)

> Not all SQL commands can be refactored by SQL Prompt. For unsupported commands only the wrapping option is applied.

Saving your format options as a style

When you have set up all your format options, you can save them as a style. Styles allow you to reapply all your format options without having to change each one again.

Using styles to format your code

A style contains all your preferred settings for formatting SQL code. Saving your formatting options as a style allows you to reapply them to a query at a later date, or share them with other SQL Prompt users so they can use the same conventions for formatting their queries.

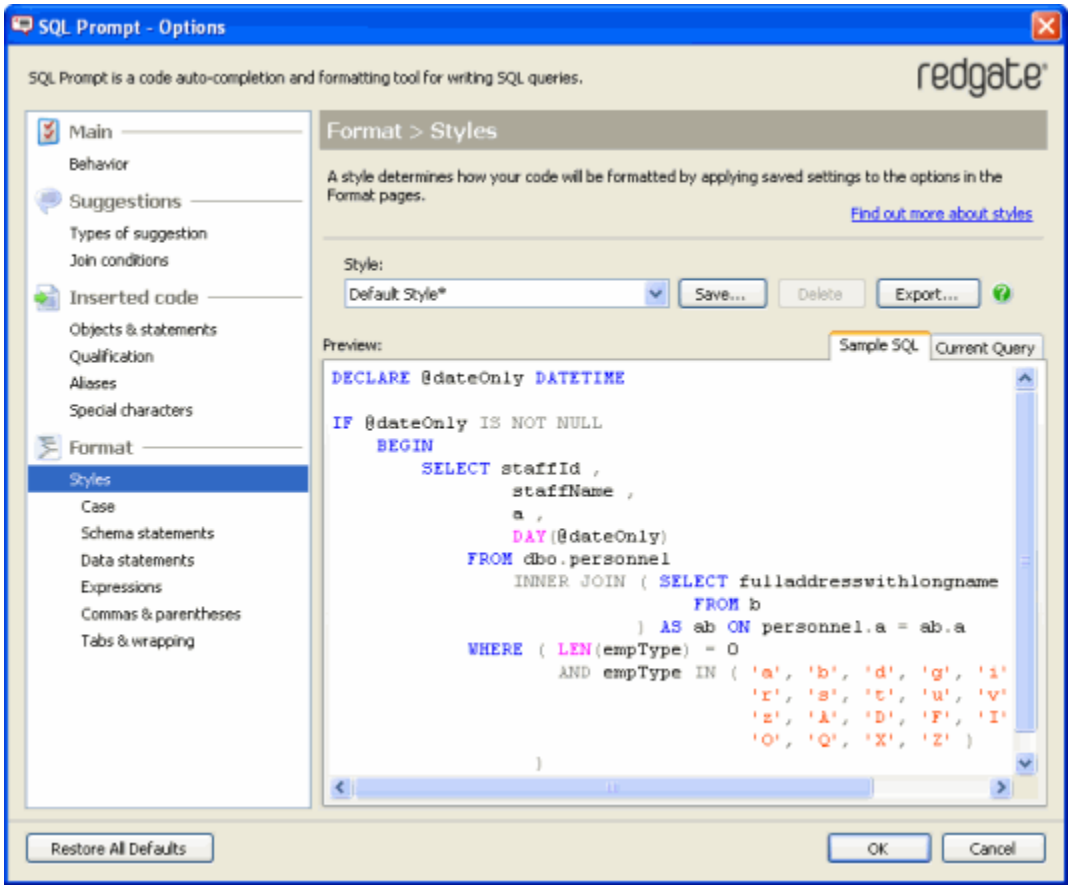
Overview: applying a style to your code

1. On the **Format > Styles** page of the SQL Prompt Options dialog box, select the style you want to use from the **Styles** drop-down list. Before you apply the style, you can preview how it will lay out the first few lines of your current query - select the **Current Query** preview tab. The style is not applied to your code until you specifically choose to apply it in your code editor.
2. Click **OK** to close the SQL Prompt Options dialog box.
3. Select the code you want to format in your SQL editor, right-click and click **Format SQL**.
   If you don't select any code, the entire query will be formatted.

> SQL Prompt cannot format your query if it contains syntax errors. A message will be displayed to indicate when there are syntax errors.

Choosing a style

From the SQL Prompt Options dialog box, select **Format** > **Styles**.



Select a style you have previously created from the **Style** drop-down list.

An asterisk * next to a style name indicates that some format options currently selected in SQL Prompt do not match those previously saved as this style.

If you close the SQL Prompt Options dialog box and then format the code, it will use the current settings rather than the settings saved in the style.

If the style you want to use has been emailed to you, or is available on your network, you will first need to import it into SQL Prompt. See Importing and exporting styles.

Previewing the effect of the style

There are two ways to preview the effect of applying the current format options to your code:

- The **Sample SQL** view shows how an example query would be formatted using the current options.
- The **Current Query** view shows how the first few lines of the query that is currently active in the editor window of your SQL editing application (eg SQL Server Management Studio) would be laid out using the current options.

Editing the format settings

See Options for formatting your code.

Applying a style to your code

1. Select the style you want to use, then click **OK** to close the SQL Prompt options dialog box.
2. In your query editor, highlight the lines of code you want to format, and do one of the following:
    - press Ctrl + K, Y (hold down Ctrl and press K then Y)
    - right-click and click **Format SQL**
    - on the **SQL Prompt** menu, select **Format SQL**

If you don't select any code, the formatting will be applied to the entire query.

Importing and exporting styles

You can share formatting styles with other people. SQL Prompt can export all the format settings as a single file, which can then be imported by another SQL Prompt user. This allows you to ensure consistent conventions within your organisation. See Importing and exporting styles.

Importing and exporting styles

If you have saved your code formatting options as a style, you can share that style with other people in your organization by exporting it.

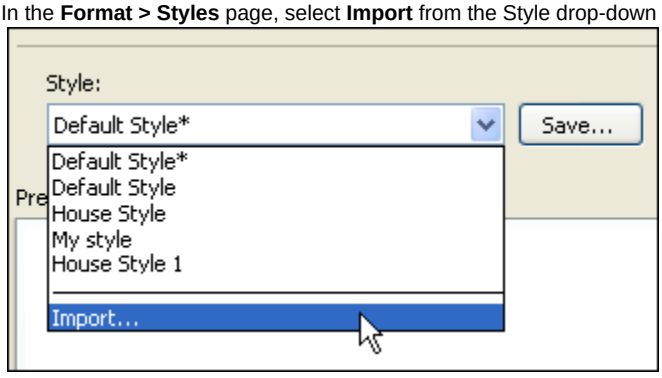
To export a style

SQL Prompt exports the style as a single file with a *.sqlpromptstyle* extension.

1. Set all the formatting options that you want:
   On the SQL Prompt Options dialog box, use the options on the various Format pages to lay out the code the way you want it. Select the **Current Query** tab to preview how the code currently in your SQL editor would be laid out using these settings.
2. On the **Format > Styles** page, click **Export**.
3. Browse to where you want to store the file and click **Save**.

To import a style

1. In the **Format > Styles** page, select **Import** from the Style drop-down list:



2. Browse to the folder where the *.sqlpromptstyle* file is located, then click **Open**.
3. All the format options will be updated. Your code will not be formatted until you click **OK** to close the SQL Prompt Options dialog box and then apply the style.

Speeding up your queries

There are several features in SQL Prompt to help you write faster, more accurate queries:

- Inserting snippets
- Managing snippets
- Using keyboard shortcuts

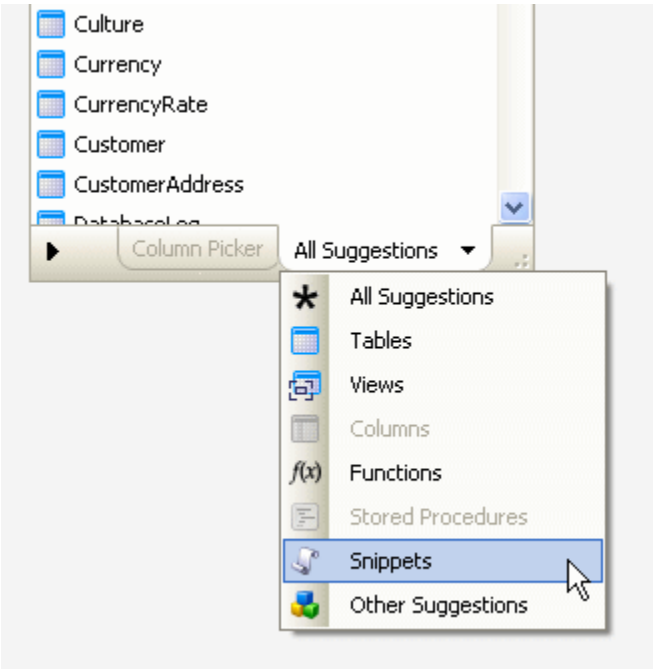
If you want to start using SQL Prompt, try out the worked example.

Inserting snippets

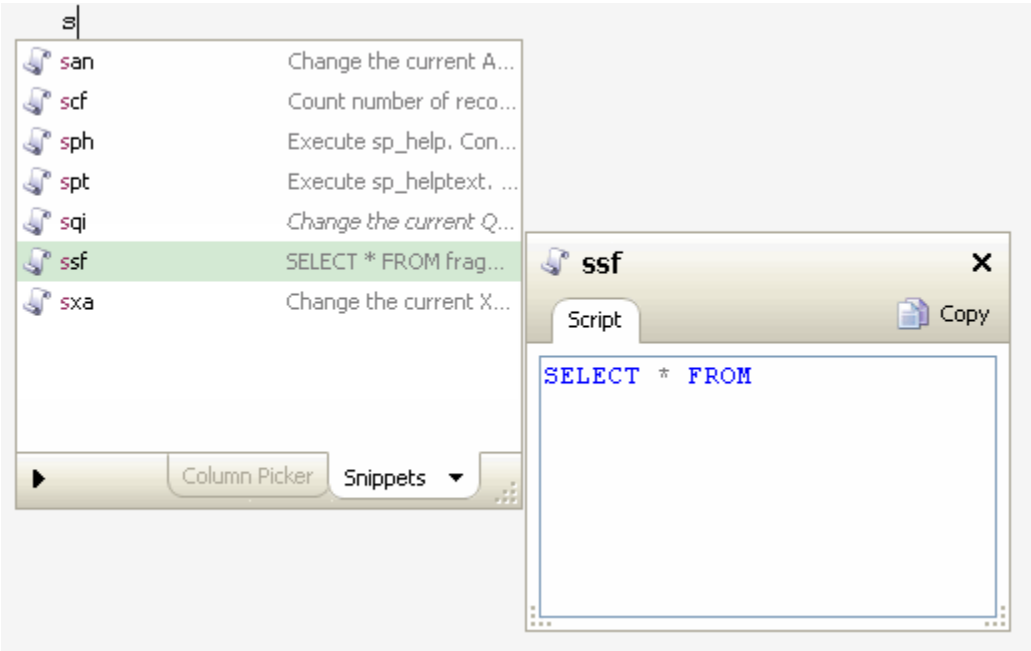
Snippets enable you to insert pre-defined code into your query editor.

To insert snippet code, type the snippet name and press Tab or any other specified insertion key. In some cases, only Tab is available to insert the snippet (for example when the snippet name could also be the name of an alias you are typing).

To see a list of available snippets, press Ctrl + Spacebar to display the suggestions box, and select the 
Snippets category. You can also press Ctrl + Down arrow to move down the types of suggestion to Snippets.



A preview of the snippet code is displayed in the object definition box. (You can turn off the display of the object definition box - see Managing SQL Prompt behavior.)



The snippet code is inserted at the same indentation level as your SQL code at the point of insertion.

Using default snippets

SQL Prompt is pre-configured with a number of snippets. For example:

- **ssf** inserts a SELECT * FROM fragment
- **cdb** inserts a CREATE DATABASE statement and places the insertion point after the CREATE DATABASE fragment.
- **cuci** creates a unique clustered index

You can edit or delete the default snippets in the **Snippet Manager** dialog box.

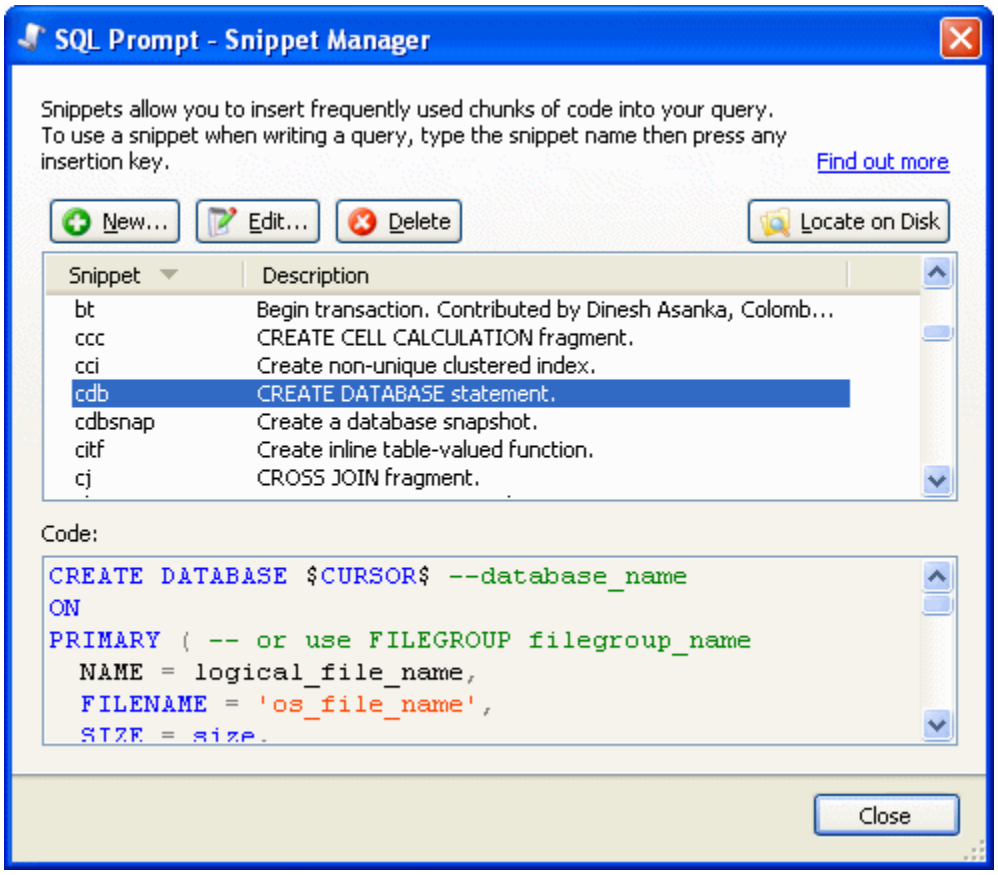
Creating your own snippets

You can create your own snippets, including specifying the position at which SQL Prompt will place the cursor after it has inserted the snippet of code.

See Managing snippets.

Managing snippets

Snippets enable you to insert pre-defined code into your query editor. To view a list of snippets, on the **SQL Prompt** menu, select **Snippet Manager**.



The **Snippet Manager** dialog box displays a list of snippets, sorted alphabetically. To sort by description, click the **Description** column header.

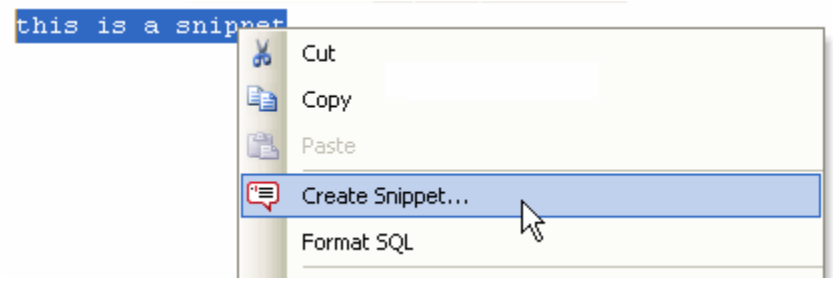
Click on a snippet to view the code for that snippet in the **Code** area.

The snippet code is inserted at the indentation level of your SQL code at the point of insertion.

Creating a snippet from code you have typed

You can create a snippet from code you have typed into the query editor.

Select the code so that it is highlighted, then right-click and select **Create Snippet**.



The Create New Snippet dialog box is displayed, so that you can edit the snippet name or text if required.

The default snippet name is created automatically from the initial letters of the selected text. You can edit this if you want to use a different name.

Creating a new snippet

1. On the **SQL Prompt** menu, select **Snippet Manager**.
2. Click **New**.
3. In the **Snippet** box, type the text that will insert the snippet.
4. Optionally, type a short description of your snippet in the **Description** box.
   The description helps you to identify a snippet if you are unsure of the snippet name. You can leave the Description box blank if required.
5. Type or paste the SQL code in the **Code** box.
   To specify the insertion point at which you want the cursor to be placed when the snippet is inserted, type `$CURSOR$`. For example, `SELECT $CURSOR$ FROM` places the insertion point after `SELECT`.
6. Click **Save**.

Editing snippets

In the **Snippet Manager** dialog box, select the snippet that you want to edit and click **Edit**, or double-click the snippet. Then, in the **Edit Snippet** dialog box, change the details as required and click **Save**.

Sharing snippets

You can send your snippets to other SQL Prompt users, or use snippets they send you.

To use a snippet that someone has emailed you, you need to copy the individual snippet file (*.sqlpromptsnippet* extension) to the Snippets folder:

1. From the **SQL Prompt** menu, select **Snippet Manager**.
2. In the Snippet Manager dialog box, click **Locate on Disk** to view the path to the Snippets folder (by default, this is `C:\Documents and Settings\<your user name>\Local Settings\Application Data\Red Gate\SQL Prompt 4\Snippets`)
3. Close the Snippet Manager dialog box.
4. Copy the *.sqlpromptsnippet* file to the Snippets folder.
5. Re-open the Snippet Manager. The new snippet will be displayed in the list.

Dealing with duplicate snippets

Snippet names are defined by the <Shortcut> tag in the *.sqlpromptsnippet* file.

If a snippet file you have copied to the Snippets folder uses the same name as an existing snippet, a warning is displayed:

Use the green arrow buttons to locate the next/previous duplicate snippet in the list, then do one of the following:

- Click **Delete** to remove the duplicate. (Use the Code preview box to check which snippet you are deleting).
- Click **Edit** and change the name in the **Snippet** box to a unique name.

> You can also edit the *.sqlpromptsnippet* file in a text editor to change the value of the <Shortcut> tag.

Using keyboard shortcuts

Using keyboard shortcuts to select and insert code suggestions in SQL Prompt can dramatically increase the speed of writing your SQL code. You can use the following keyboard shortcuts:

Action	Shortcut
Switch to/from column picker	Ctrl + Left arrow / Ctrl + Right arrow
Move up/down suggestions list	Up arrow / Down arrow
Select column in column picker for insertion	Spacebar
Move up/down the suggestions box filters	Ctrl + Up arrow / Ctrl + Down arrow
Apply format	Ctrl + K, Y (Hold Ctrl, then press K then Y)

Managing SQL Prompt behavior

You can set various options for how SQL Prompt behaves in the SQL Prompt Options dialog box. This page describes the options available on the first page of the SQL Prompt Options dialog, the **Behavior** page; for other more specific options, see the following:

- Customizing inserted code
- Options for formatting your code
- Managing connections and memory
- Changing the location of the settings, cache files and snippets folders

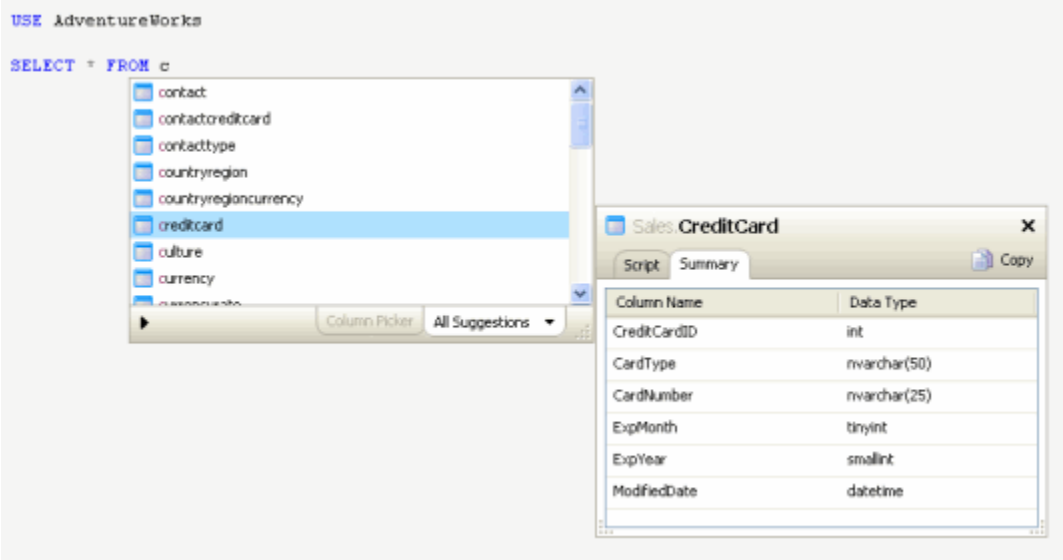
To display the SQL Prompt Options dialog box, on the **SQL Prompt** menu, select **Options**.

Turning off SQL Prompt auto-completion

Clear the **Use SQL Prompt** check box to stop SQL Prompt offering code suggestions. The suggestions box will not be displayed until you select the check box again.

Turning off the object definition box

When you select a suggestion, the object definition box is displayed, containing information about the selected object. By default, for tables and views, a summary is displayed, listing the column names and data types:



To view the object creation script instead, click the **Script** tab.

If you don't want the object definition box to be automatically displayed, clear **Display object definitions**.

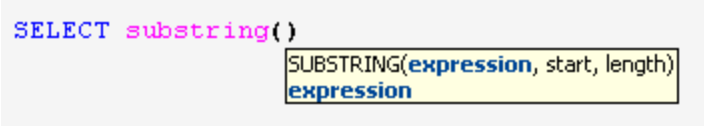
> You can view the object definition for a specific object in your query by clicking its tooltip.

Viewing tooltips

Object tooltips display the fully qualified object name for an object when you move the mouse pointer over the object name in your SQL script.

For tables, views, and stored procedures, you can click this tooltip to view the object definition.

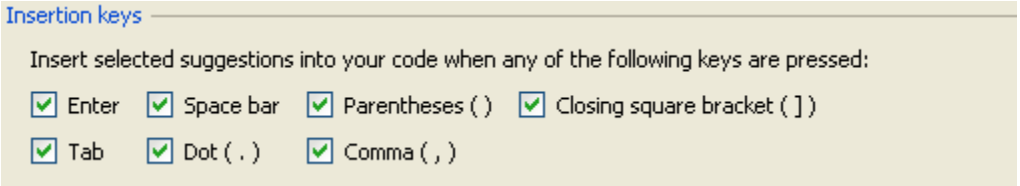
Tooltips can also be displayed for parameters, including parameters for built-in functions.



If you don't want tooltips to be displayed, clear **Objects** or **Parameters** under **Show tooltips for** in the Tooltips section.

Changing the insertion keys

Insertion keys are the keys that insert the currently selected suggestion into your code:



Insertion keys are also used to insert snippet code when you type a snippet into your query. The default insertion keys are ENTER and TAB.

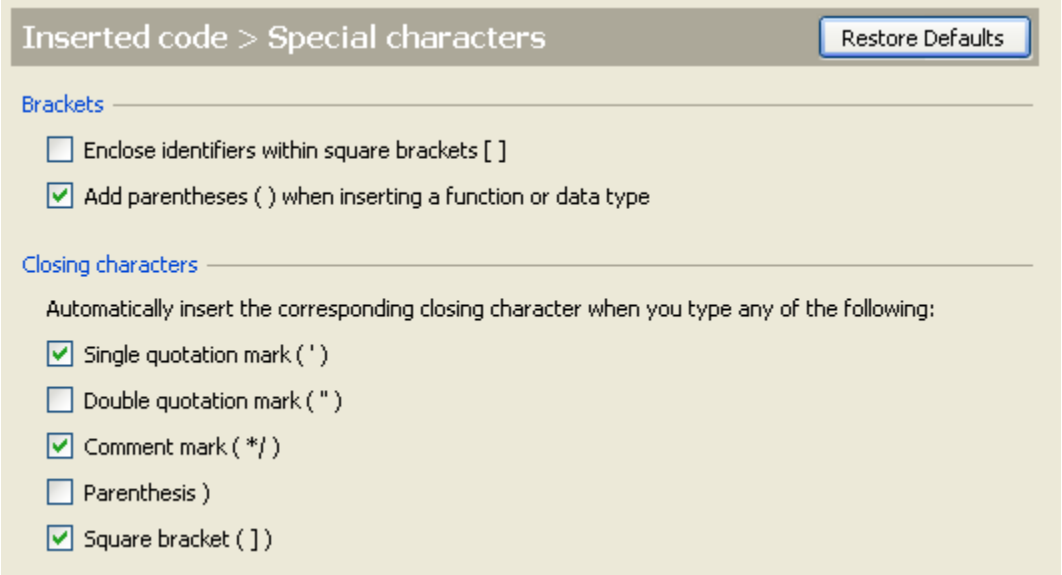
Restoring options to their default setting

You can reset the options in SQL Prompt in two ways:

- for a specific page in the Options dialog box
- for all options

To restore the options on a single page

Click **Restore Defaults** in the top right corner:

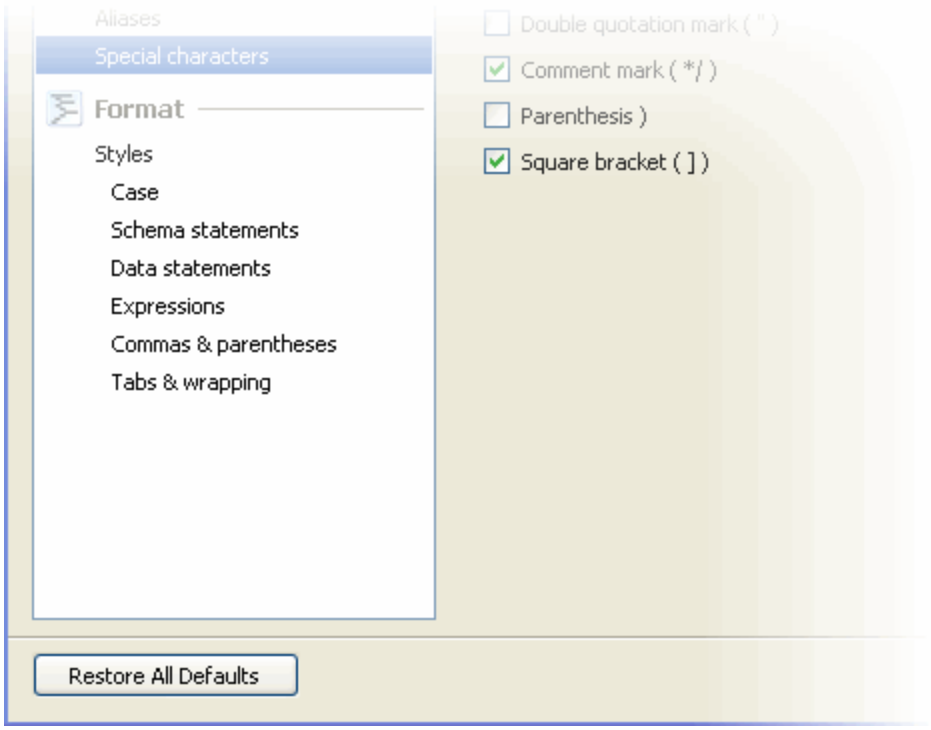


This will restore only the options on this page to the SQL Prompt defaults.

Options on all other pages are not affected.

To restore all SQL Prompt options

Click **Restore All Defaults** in the bottom left corner:

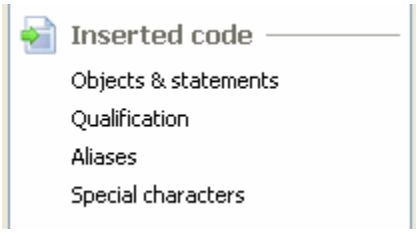


Options on all pages are reset to the SQL Prompt defaults.

> **Restore All Defaults** also resets all formatting options. If you want to save your formatting options, you should save them as a style. This allows you to reapply them, even if you have restored all defaults. See Using styles to format your code.

Customizing inserted code

To customize how SQL Prompt inserts suggestions into your code, use the **Inserted code** pages on the **SQL Prompt Options** dialog box:



To display the SQL Prompt Options dialog box, on the **SQL Prompt** menu, select **Options**.

Objects & statements

Contains options for inserting full syntax for various kinds of statement.

For example, you can specify that SQL Prompt inserts column names, data types and default values for ALTER, EXEC and INSERT statements:

```
INSERT  INTO Sales.Customer
        ( TerritoryID ,
          AccountNumber ,
          CustomerType ,
          rowguid ,
          ModifiedDate
        )
VALUES  ( 0 , -- TerritoryID - int
          '' , -- AccountNumber - varchar(10)
          '' , -- CustomerType - nchar(1)
          NULL , -- rowguid - uniqueidentifier
          '2009-08-03 15:35:51'  -- ModifiedDate - datetime
        )
```

Qualification

Contains options for specifying whether object or column names are qualified when inserted.

Object and column names are automatically qualified in certain cases, for example:

- When columns in more than one table have the same name, and they need to be qualified to avoid ambiguity (only the affected column names are qualified).
- When you insert JOIN conditions from the suggestions box, both column names are qualified.
- For cross-database and linked server queries, qualified column names may also include the owner name.

Aliases

See Working with aliases.

Special characters

Contains options for automatically inserting certain characters into your code:

- Enclose all identifiers in square brackets:

```
USE [AdventureWorks]

SELECT * FROM [Person].[Address]
```

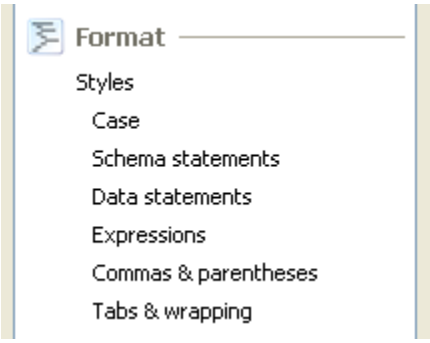
- Add parentheses when inserting a function or data type:

SQL Prompt displays a tooltip containing the expected parameters whenever you type or insert brackets after a function.

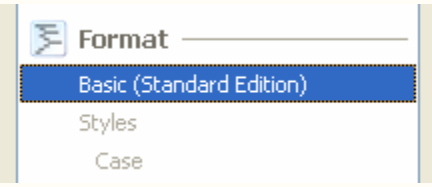
- Automatically insert closing characters
  Insert the matching closing character when you type a quotation mark, comment character, or bracket.

Options for formatting your code

To set formatting options, on the **SQL Prompt** menu, select **Options**. The formatting options are all available in the **Format** group:



If you are using SQL Prompt Standard Edition, the format pages are unavailable; but you can set a number of options for how inserted code is formatted on the Basic (Standard Edition) page:



To review the effect of any changes you make, use the Preview tab:

- The **Sample SQL** view shows how an example query would be formatted using the current options.
- The **Current Query** view shows how the first few lines of the query that is currently active in the editor window of your SQL editing application (eg SQL Server Management Studio) would be laid out using the current options.

Case

Case options are available in both Standard and Pro Editions of SQL Prompt:

- In Standard Edition, case options are on the **Format > Basic (Standard Edition)** page
- In Pro Edition, case options are on the **Format > Case** page

Selecting **UPPERCASE** or **lowercase** will replace any words you have typed with the selected case, and also insert any suggestions using the selected case.

For example, if UPPERCASE is selected:

- If you have already typed `select` or `Select` in your query, SQL Prompt replaces the word with `SELECT`.
- If you type `sel` or `Sel` and then insert SELECT from the suggestions box, SQL Prompt inserts `SELECT`.

Selecting **Leave as is** will leave the case of any letters you have already typed, but insert the remainder of the word using the case of the last typed letter.

For example:

- If you type the entire word `Select`, SQL Prompt leaves the word exactly as typed.
- If you type `Sel`, SQL Prompt will insert `Select`.
- If you type `SEL`, SQL Prompt will insert `SELECT`.

Changing the case in pasted code

When you paste code into your query editor, you can apply your preferred case to that code. This is only available in SQL Prompt Pro Edition.

1. Set the case options for keywords, functions, and data types as required on the **Format > Case** page of the SQL Prompt Options dialog box.
2. Click **OK** to save these settings.
3. In your query editor, select all the lines of code to which want to apply the case.
4. On the **SQL Prompt** menu, select **Format SQL**.

This will also apply all other format settings (such as indentations, new line settings, and so on) to that code.

Schema statements

Options for formatting new lines and indents in CREATE and ALTER statements.

Data statements

Options for formatting new lines, parentheses and indents in SELECT, INSERT, UPDATE and DELETE statements.

Expressions

Options for formatting parts of statements, for example how Boolean and other types of operators should appear.

Commas & parentheses

Options for formatting where commas should appear in your SQL statements (at the end or beginning of lines), and how they should align with other lines of code.

Tabs & wrapping

Options for tabs and spaces and when to wrap lines.

Formatting SQL in your current editor window

To format the SQL code in the current query editor or the highlighted SQL code fragment, do any of the following:

- on the **SQL Prompt** menu, select **Format SQL**
- press Ctrl + K,Y (hold down Ctrl and press K then Y)

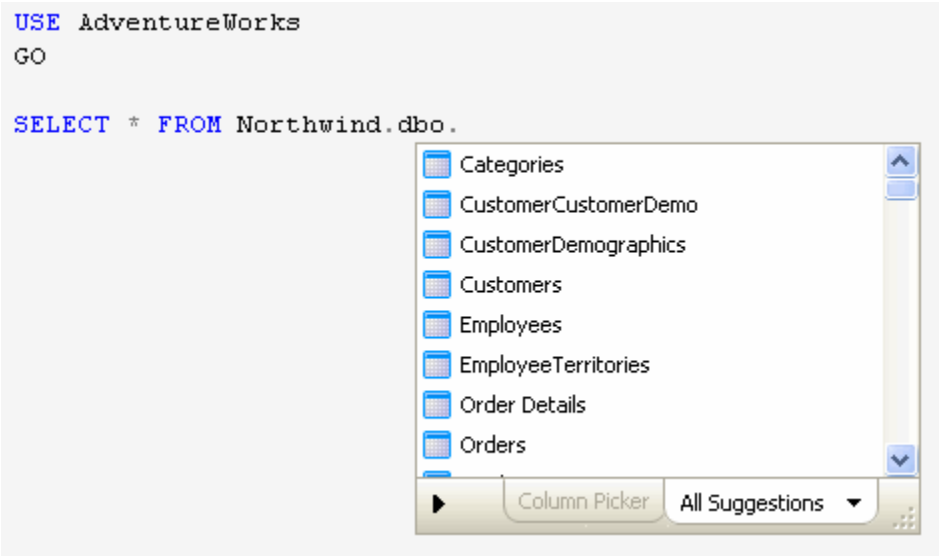
In Query Analyzer, press Ctrl + Shift + Y.

Saving format settings

You can use styles to save your preferences for formatting code. See Using styles to format your code.

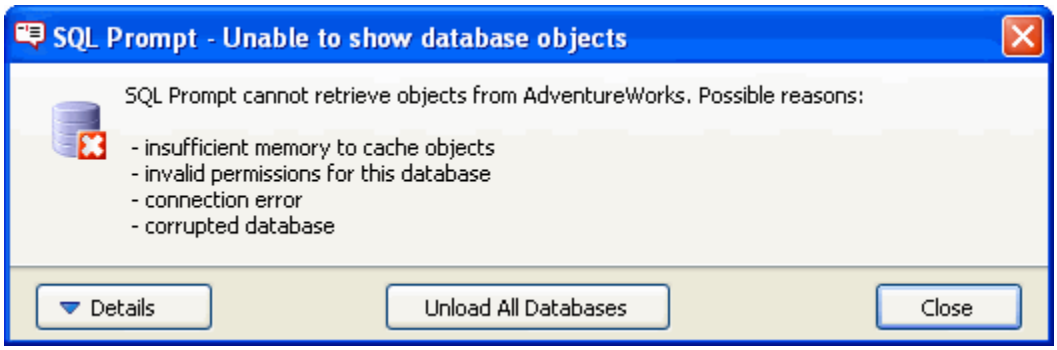
Managing connections and memory

SQL Prompt will automatically connect to other databases specified in your query. For example:

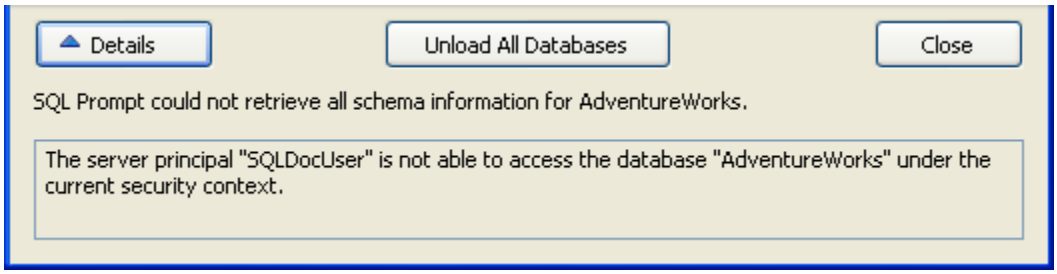


In this example, SQL Prompt loads objects from the Northwind database as soon as you type the database name and then continue with your query. For large databases, you may have to wait a few seconds while SQL Prompt loads the objects.

If you do not have permissions to connect to that database, then a message is displayed:



Click **Details** to see more information about the connection error:



Once you close this message, you can continue to write your query, but no suggestions from that database will appear in the suggestions box.

> This message may also be displayed for reasons other than permissions issues, for example, when SQL Prompt doesn't have enough memory to store the objects for this database.

Connecting to different databases in the same session

If you connect to a number of different databases during the same session, SQL Prompt will load all the objects for each database as required, without unloading any of the previously stored objects. This means that you can go back to previous queries and continue to see suggestions for any database to which you have previously connected.

Refreshing suggestions when a database schema changes

If you are writing a query on a database while someone else is making changes to the structure of that database, the suggestions offered by SQL Prompt may become out of date.

For example, if someone has added several tables to the database while you have been connected to that database, these tables will not appear in the suggestions box.

To reload the database objects, on the **SQL Prompt** menu, select **Refresh Suggestions** or press Ctrl + Shift + D. Any changes to the database structure will now be reflected in the suggestions box.

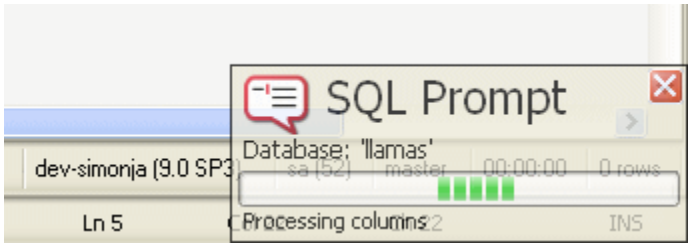
You should also refresh suggestions when you have created a new object in the current query, and executed that block of code. For example, if you create a table `NewObject` and execute the statement, then continue to write the query, the NewObject table will not appear in the suggestions box until you refresh the suggestions.

Notes

- Refreshing suggestions applies only to the database to which you are currently connected.
- SQL Prompt automatically refreshes a database's objects when you close down your query editor application, then re-open it and re-connect to that database.

Managing the SQL Prompt memory

SQL Prompt loads database objects into its memory whenever you connect to a database in SQL Server Management Studio or Visual Studio, in order to display suggestions from that database. For databases with large schemas, a progress dialog may be displayed while SQL Prompt loads the objects into memory:



If you connect to several databases with large schemas, this may eventually result in SQL Prompt running out of memory. In this case, a warning message will be displayed.

If this message is displayed, you can clear the SQL Prompt memory by clicking **Unload All Databases**. SQL Prompt will load each database's objects as required.

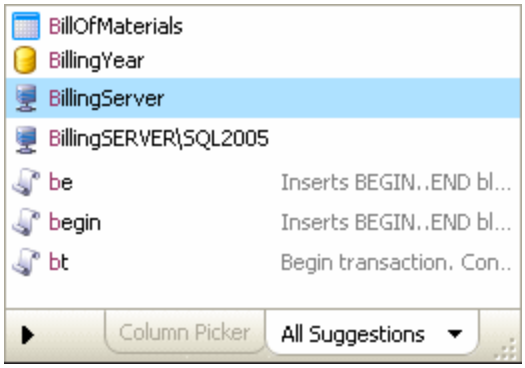
If you close the message, you can continue to write your query, but no objects from that database will appear in the suggestions box.

Clearing the SQL Prompt memory

To clear the SQL Prompt memory at any time, close your editor application. This unloads all objects from all databases from memory.

Connecting to a linked server

Linked server objects for the current instance are displayed in the suggestions box:



When you select a linked server, SQL Prompt attempts to connect automatically to that server, using the mapped credentials for that linked server object.

- If you have permissions to connect to the server, suggestions from that server will be loaded into SQL Prompt's memory.
- If you do not have permissions to connect to that server, a message is displayed. Click **Close** to continue writing your query; no suggestions from the linked server will appear in the suggestions box.

To stop SQL Prompt attempting to connect to linked servers:

1. On the **SQL Prompt** menu, select **Options**.
2. Go to the **Suggestions > Types of suggestions** page.
3. Turn off **Enable linked server support**.

Changing the location of the settings, cache files and snippets folders

By default, the SQL Prompt settings, cache and snippets files are stored in:

- *%LOCALAPPDATA%\Red Gate\SQL Prompt 5* (Windows Vista, Windows 2008 and later)
- *%UserProfile%\Local Settings\Application Data\Red Gate\SQL Prompt 5* (Windows XP and Windows 2003)

To change the locations of these files so they aren't stored in your user profile:

1. Open Registry Editor (regedit.exe).
2. Navigate to the SQL Prompt registry key: *HKEY_CURRENT_USER\Software\Red Gate\SQL Prompt <version number>*
3. Right-click the key and select **New** > **String Value**.
4. Set the string name to *Options Folder*, *Cache Folder* or *Snippets Folder* as appropriate.
5. Right-click the string and select **Modify** to open the Edit String dialog.
6. In the **Value data** box, type the location in which you want to store the files.

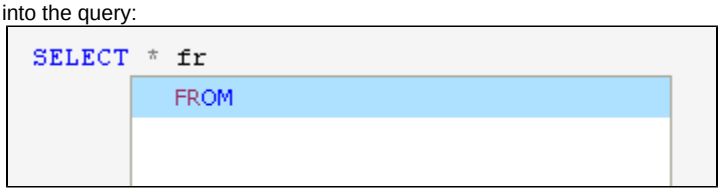
If you want to store existing snippet files in the new location, you will need to move them manually.

Worked examples

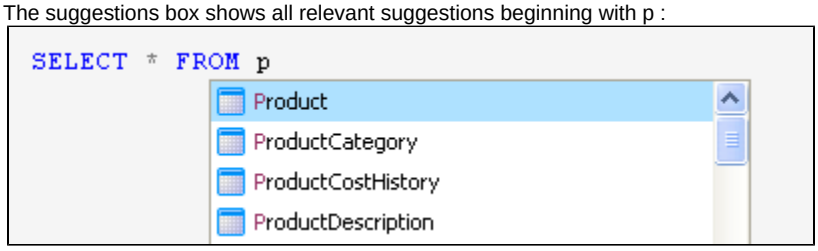
The following examples show how SQL Prompt can help you to write queries more quickly. All these examples use the AdventureWorks database for SQL Server 2005.

Example 1: Writing a simple query

1. In your query editor, start a new query on the AdventureWorks database.
2. Type
   `se` (press Tab) `* fr`
   As you type, the suggestions box is displayed. Whenever you press the Tab key, SQL Prompt inserts the currently highlighted suggestion into the query:

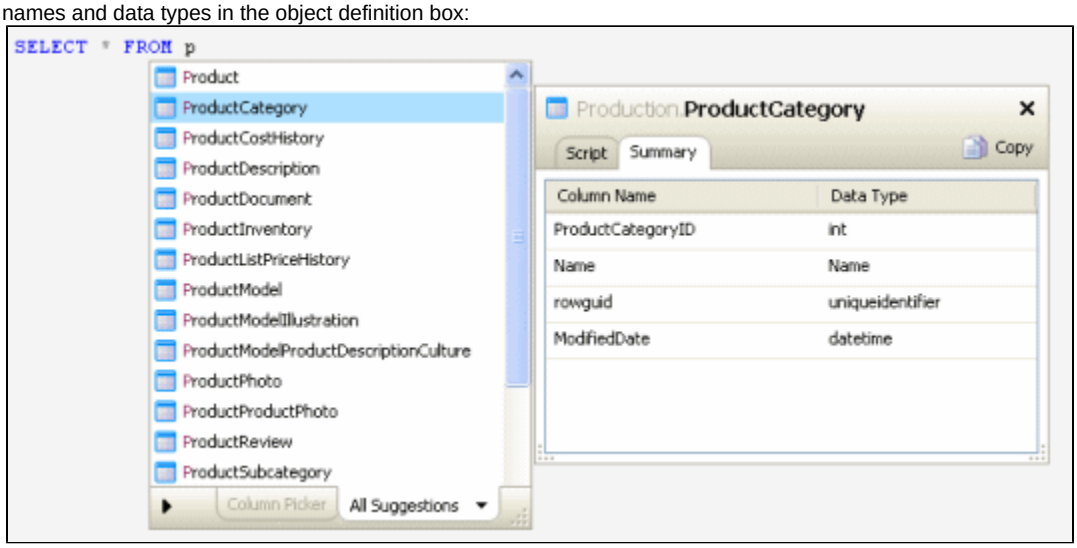


   Press Tab, then the Spacebar, then type:
   `p`
   The suggestions box shows all relevant suggestions beginning with p :



> SQL Prompt always places the most contextually relevant types of suggestions at the top of the list, depending on what you have typed in your query.

3. Press the Down arrow key once to highlight the ProductCategory table. You can check if this is the correct table by looking at the column names and data types in the object definition box:



4. Press Enter to insert the table and complete the query.
5. Your query should now look like this:

```
SELECT * FROM Production.ProductCategory
```

In SQL Server 2005 and 2008, SQL Prompt automatically inserts the schema name for objects in non-default schemas.

- Use the Up and Down arrow keys to move through the list of suggestions.
- Press Tab or Enter to insert the current suggestion. To set other insertion keys, for example Spacebar or Dot (.), see Managing SQL Prompt behavior.
- To view the object creation script for an object instead of a summary, click the **Script** tab in the object definition box. The Script tab will be the default view from this point onwards.
- To turn off the automatic display of the object definition box, see Using the object definition box.
- Note that SQL Prompt automatically replaces lower case keywords with upper case as you type. You can change the case used for keywords. See Options for formatting your code.
- You can also change how object names are qualified when inserted into your code. See Inserting suggestions into your code.

Example 2: Using the Column Picker to select and insert columns

In this example, the Spacebar is used as an additional insertion key. To define the Spacebar as an insertion key:

1. On the **SQL Prompt** menu, select **Options**.
2. In the Options dialog box, go to the **Main > Behavior** page, then under **Insertion Keys**, select **Space bar**, then click **OK**.

From now on, each time you press the Spacebar, the currently highlighted suggestion will be inserted into your query.

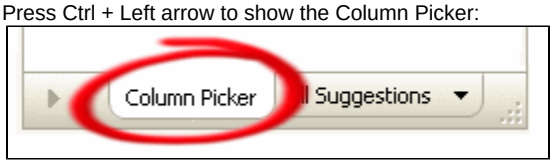
1. Create a new query and type:
   `se * fr` (include all the spaces)

   SQL Prompt will insert the matching suggestion whenever you press the Spacebar, so your query should now look like this:

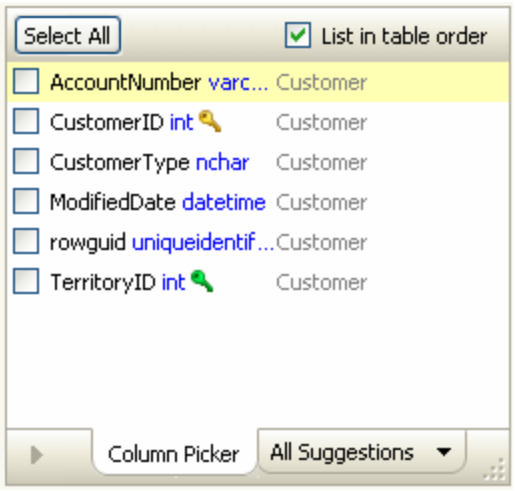
   ```
   SELECT * FROM Sales.Customer
   ```

   You can move the cursor to just after the * and press Tab to insert all columns:

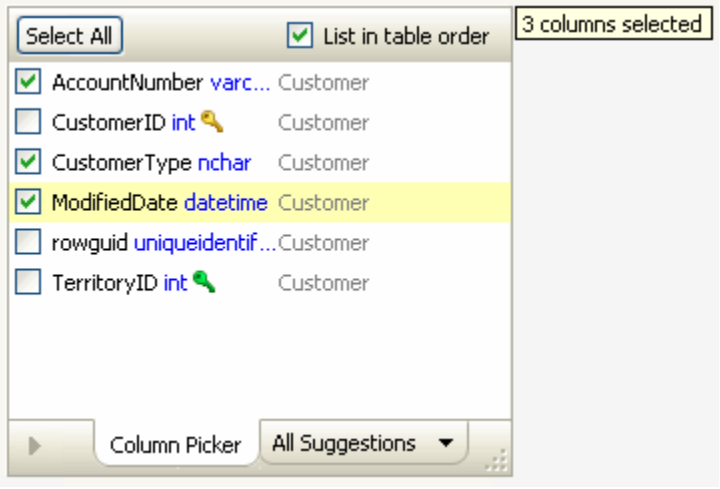
   ```
   SELECT * FROM Sales.Customer
   ```
   Press TAB to expand wildcard
2. To insert specific columns from the CUSTOMER table, rather than all the columns, move the cursor to just after the * (asterisk) and click the Backspace button to delete *.
3. Press Ctrl + Spacebar to display the suggestions box.
4. Press Ctrl + Left arrow to show the Column Picker:

   The column picker allows you to choose multiple columns from the table. Primary key  and foreign key  columns are indicated by key icons.



5. Use the Up and Down arrow keys to move through the list, then press the Spacebar to select a column for insertion. You can also use the mouse to select the check box for each column to be inserted:



6. Press Enter to insert all the columns into your query. Your query should now look like this:

```
SELECT  AccountNumber ,
        CustomerType ,
        ModifiedDate FROM Sales.Customer
```

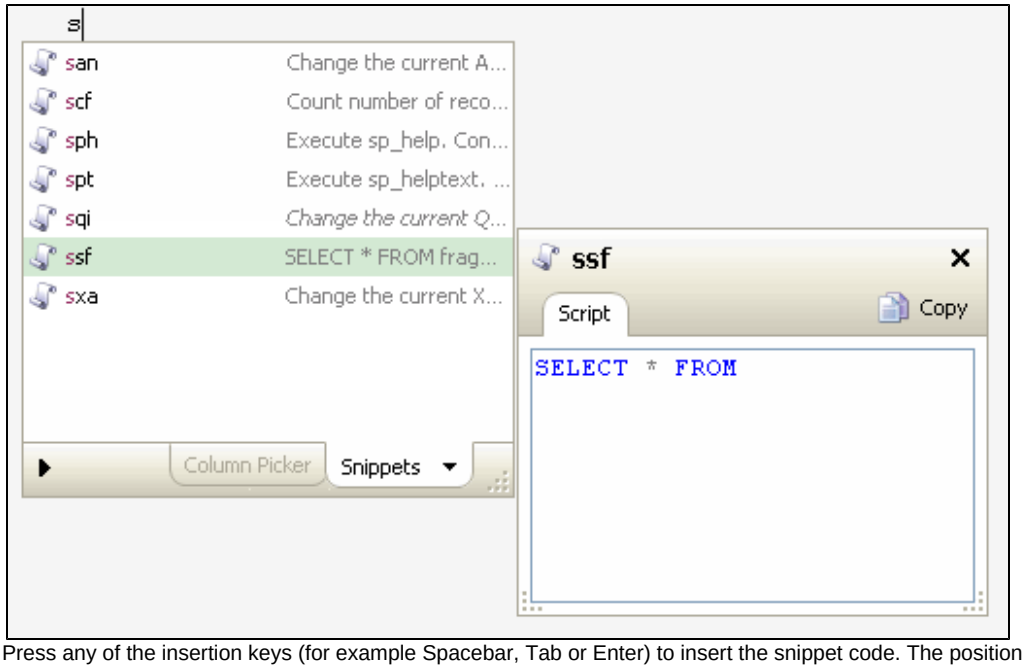
Columns are inserted in the order in which they were selected and automatically formatted based on the options set in the Format pages of the SQL Prompt Options dialog box.

Tips

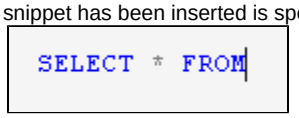
- By default, columns are listed in alphabetical order. To list them in the order they are defined in the table, select **List in table order**. When inserting columns from more than one table, **List in table order** groups columns by table rather than in a single alphabetical list.
- When the Column Picker is displayed, type the first few letters of a column name to filter the list. Any columns already selected are displayed at the bottom of the list and will still be inserted.
- Clicking **Select All** toggles between selecting all columns and selecting none.
- You can change how SQL Prompt lays out the inserted code (for example, to place each column on a new line). See Formatting your code.
- The first time you display the column picker, a callout message box appears; click **X** to close it. Once you close it, the tooltip will not reappear.

Example 3: Using a snippet to insert a block of code

1. Create a new query and type s. The suggestions box shows all suggestions that start with s.
2. Press Ctrl + Down arrow twice to change the category of suggestions to **Snippets**.
3. Press the Down arrow key to move down the list of snippets to highlight `ssf`.



4. Press any of the insertion keys (for example Spacebar, Tab or Enter) to insert the snippet code. The position of the cursor after the snippet has been inserted is specified as part of the snippet definition.



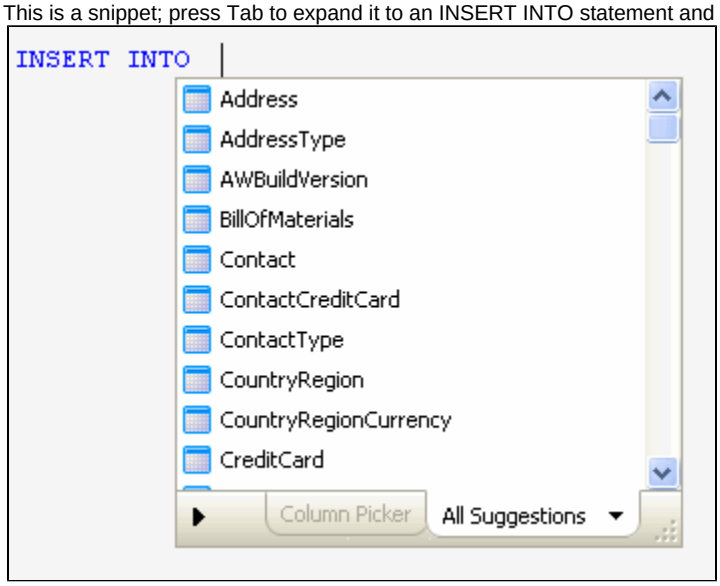
Quick tips:

- Use Ctrl + Down to change the category of suggestion (for example, to see only views or stored procedures in the suggestions box).
- To make a snippet from a block of code in your editor, highlight it, then right-click and select **Make Snippet**.
- SQL Prompt is pre-configured with a large number of default snippets. To see a list of all snippets, and to edit, delete or create new snippets, on the **SQL Prompt** menu, select **Snippet Manager**.

For more information on snippets, see Managing snippets.

Example 4: Writing a full INSERT statement

1. Create a new query and type `ii`.
2. This is a snippet; press Tab to expand it to an INSERT INTO statement and press the Spacebar to display the suggestions box again:



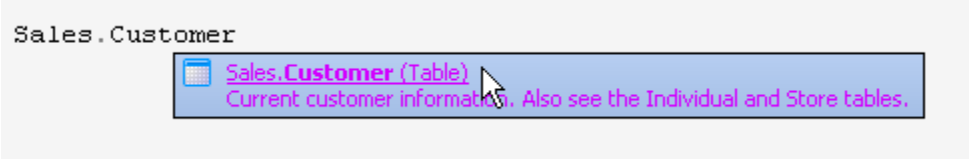
3. Type `cus` to filter the list to the two customer tables, then press Enter to insert the first (highlighted) table: `Customer`.
SQL Prompt completes the syntax of the INSERT statement, and inserts the name, data type, and default value for each column as comments:

```
INSERT INTO Sales.Customer
        ( TerritoryID ,
          AccountNumber ,
          CustomerType ,
          rowguid ,
          ModifiedDate
        )
VALUES  ( 0 , -- TerritoryID - int
          '' , -- AccountNumber - varchar(10)
          '' , -- CustomerType - nchar(2)
          NULL , -- rowguid - uniqueidentifier
          '2009-05-29 10:21:37'  -- ModifiedDate - datetime
        )
```

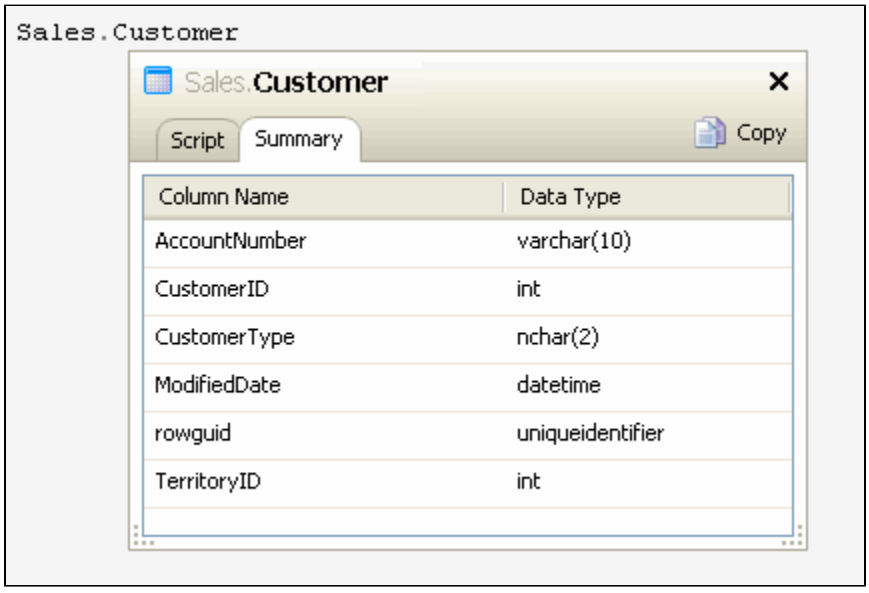
The insertion point is positioned for you to insert the values.

Quick tips:

- By default, column names, data types and default values are automatically inserted when you write an INSERT statement. You can turn off some or all of these defaults using the SQL Prompt options dialog. See Customizing inserted code.
- To see a list of columns in a table, and their data type, move the mouse pointer over a table name to display the tooltip, then click the tooltip:

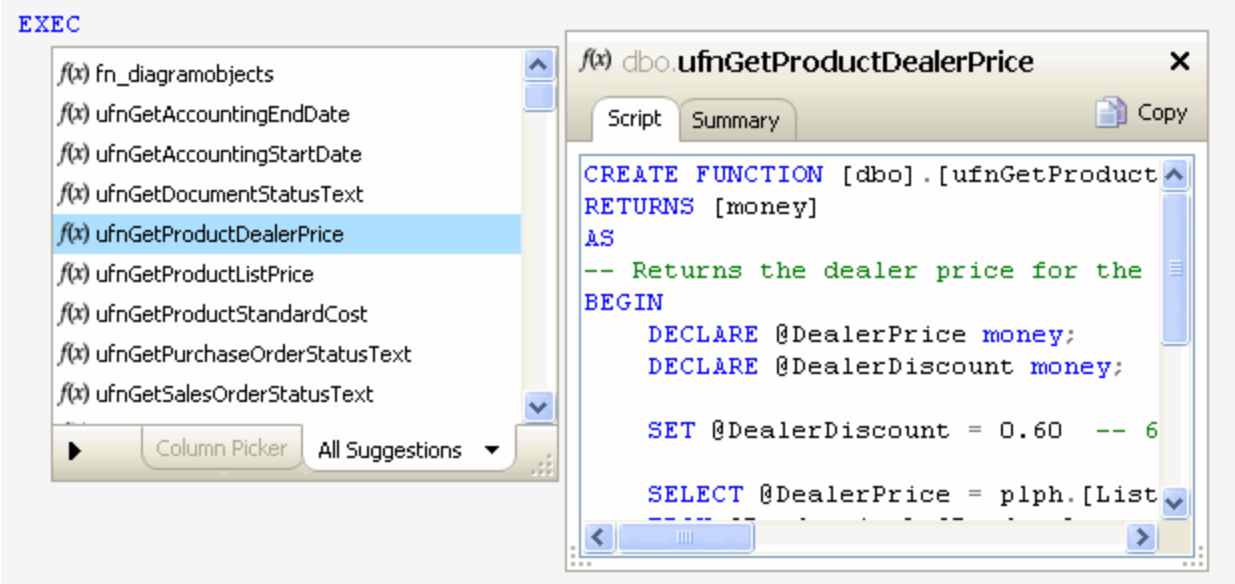


The object definition box is displayed, showing the summary for the object. If the Script tab is displayed instead, click Summary:

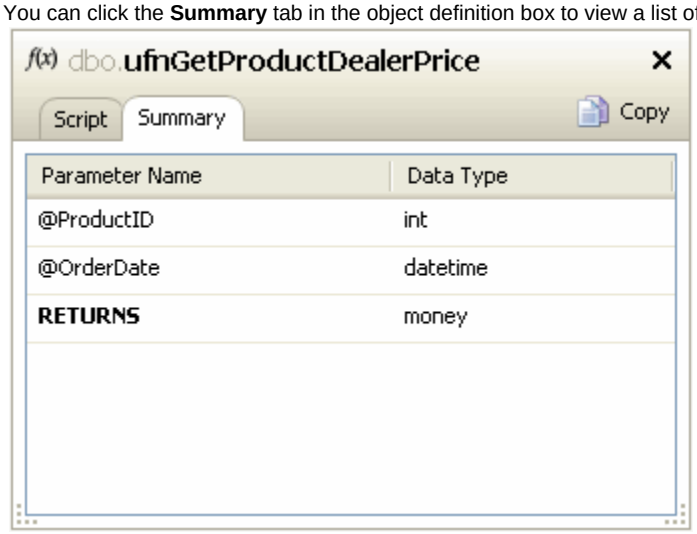


Example 5: Executing functions and stored procedures

1. Create a new query and type `EXEC`
2. Press the Spacebar.
   The suggestions box is displayed, with all the functions and stored procedures at the top of the list. Select a function in the list, then click the Script tab to see a preview of the object creation SQL script in the object definition box for the selected object.



You can click the **Summary** tab in the object definition box to view a list of parameters for that function:

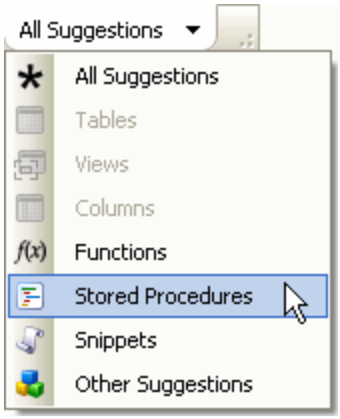


3. Press Enter to insert the function into your code:

```
EXEC dbo.ufnGetProductDealerPrice @ProductID = 0, -- int
    @OrderDate = '2009-05-29 10:29:45' -- datetime
```

Quick tips:

- By default, parameters are automatically inserted into functions and stored procedures, and the data type and default value is displayed for each paramater. You can change this behavior in the SQL Prompt Options dialog box. See Customizing inserted code for more details.
- To see only stored procedures in the suggestions box, click the **All Suggestions** tab at the bottom of the suggestions box, then click **Stored Procedures**:

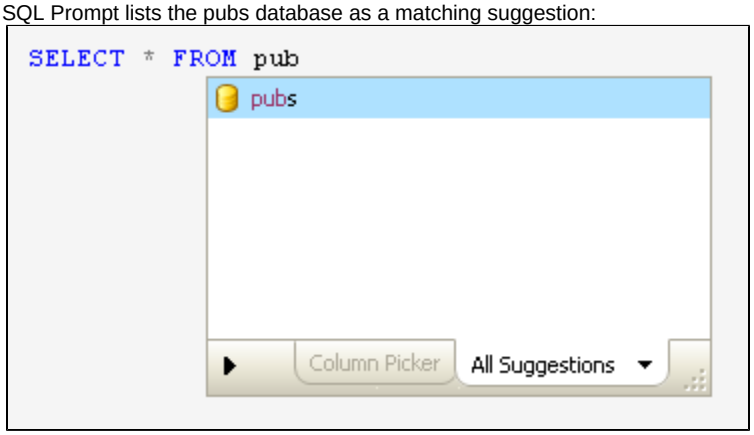


- To view system functions and stored procedures in the suggestions box, select **List system objects** on the **Suggestions > Types of suggestion** page in the SQL Prompt Options dialog box.

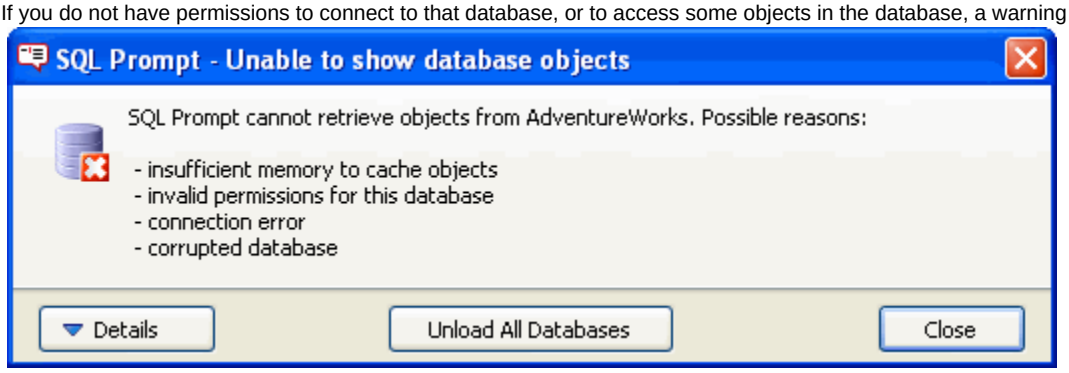
Example 6: Writing a cross-database query

Cross-database queries are automatically supported in SQL Prompt. You do not need to select an option to enable them.

1. Create a new query on the AdventureWorks database.
2. Type `SELECT * FROM pub`
3. SQL Prompt lists the pubs database as a matching suggestion:



4. Press Tab to insert the database name into your query, then type . (Dot). As soon as you press Dot, SQL Prompt reads all the database objects from the pubs database. For large databases, this may take a few minutes.
5. If you do not have permissions to connect to that database, or to access some objects in the database, a warning dialog is displayed:



> This warning may also be displayed if SQL Prompt has run out of memory to store the objects from this database. For more information, see Managing connections and memory.

Troubleshooting

If you are encountering an issue with the current version of SQL Prompt (5.3), the following pages may help:

- Accessing the SQL Prompt log files
- Configuring permissions for SQL Prompt

Error messages

- SSMS failed to load SQL Prompt add-in 80070002
- Using Layout SQL crashes SQL Server Management Studio

Common issues

- SQL Prompt is not showing all linked servers
- Removing SQL Prompt menu item after uninstalling
- SQL Server Management Studio runs slowly after uninstalling SQL Prompt

Previous versions

If you have an older version of SQL Prompt (prior to 5.x) these pages may help:

- SQL Prompt is showing an old version of my stored procedure
- Candidate suggestions being displayed slowly
- Suggestions to improve performance for pre-formatted SQL
- SQL Prompt menu does not appear in Query Analyzer
- Add-in failing to load into SQL Server Management Studio on Vista
- Unable to cast object of type 'System.DBNull' to type 'System.String'
- Uninstalling the Visual Studio 2005 add-in

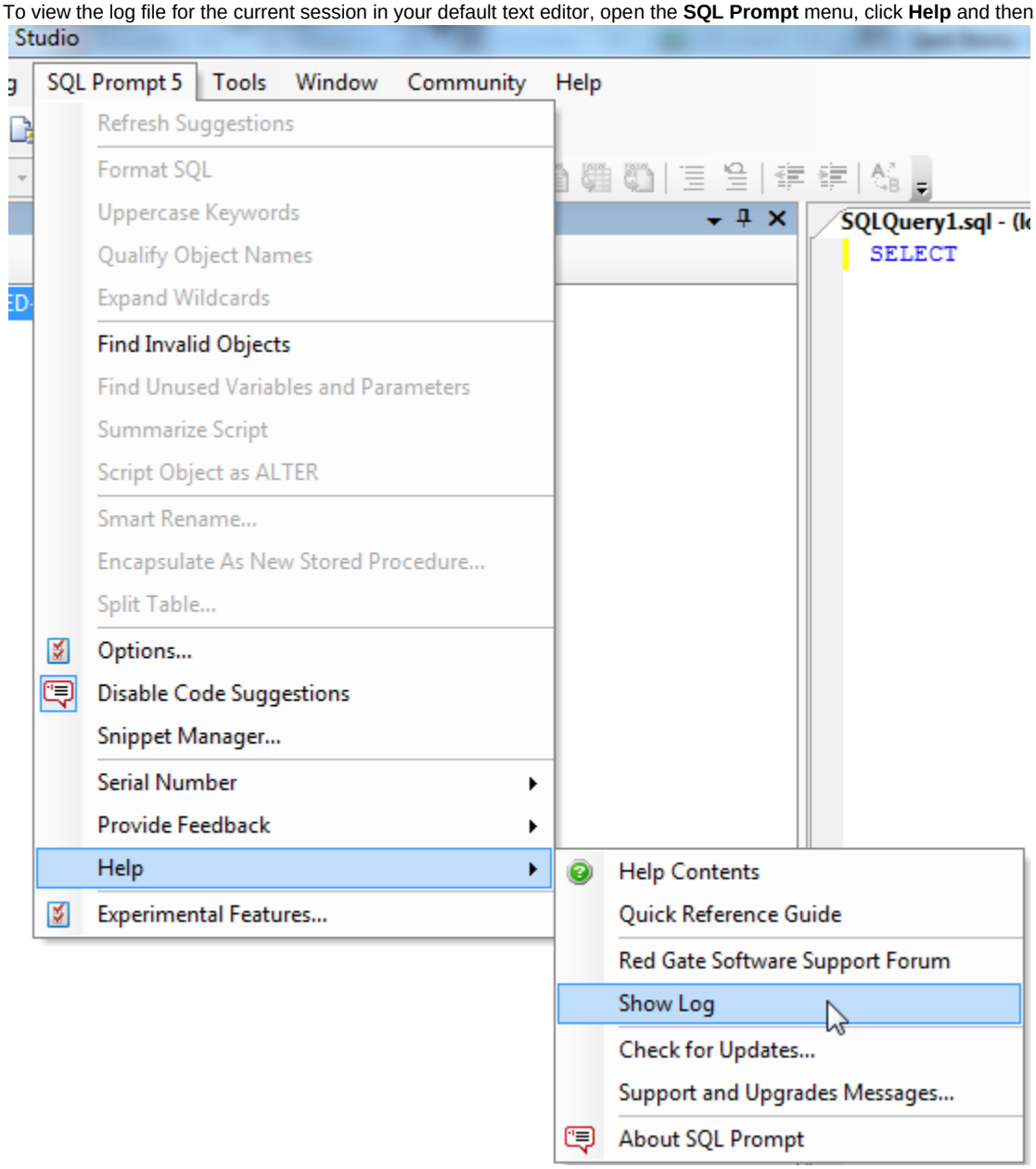
Further help

If you are experiencing an issue with SQL Prompt which is not listed above, try the forums or contact our support team.

Accessing the SQL Prompt log files

Log files collect information about the application while you are using it. These files are useful to us if you have encountered a problem.

To view the log file for the current session in your default text editor, open the **SQL Prompt** menu, click **Help** and then click **Show Log**.



By default the log files are stored in:

- *%LOCALAPPDATA%\Red Gate\SQL Prompt 5* (Windows Vista, Windows 2008 and later)
- *%UserProfile%\Local Settings\Application Data\Red Gate\SQL Prompt 5* (Windows XP and Windows 2003)

Configuring permissions for SQL Prompt

The following account permissions are required by SQL Prompt:

- For SQL Server 7 or SQL Server 2000, SQL Prompt requires administrative or dbo or Sys Admin permissions.
- For SQL Server 2005 you can use the same permissions as for SQL Server 7/2000 or alternatively you can use the GRANT VIEW DEFINITION TO [{username}] which provides SQL Prompt with permission to retrieve the metadata without giving dbo access.
- For SQL Server 2008 and SQL Server 2012, it may be necessary to grant VIEW SERVER STATE to access information about encryption keys otherwise a 'User does not have permission to perform this action' message may prevent the display of candidates.

Error messages

- SSMS failed to load SQL Prompt add-in 80070002
- Using Layout SQL crashes SQL Server Management Studio

SSMS failed to load SQL Prompt add-in 80070002

When launching SQL Server Management Studio after installing SQL Prompt, the following error message may appear:

> SSMS failed to load SQL Prompt add-in 80070002

To resolve this problem:

1. Open a command prompt and change directory to the SQL Prompt installation folder.
2. Run the following:
   For version 3.x : %SYSTEMROOT%\Microsoft.net\Framework\v2.0.50727\regasm "%ProgramFiles%\Red Gate\SQL Prompt 3\RedGate.SQLPrompt.SSMSUI.dll"
   For version 4.x: %SYSTEMROOT%\Microsoft.net\Framework\v2.0.50727\regasm "%ProgramFiles%\Red Gate\SQL Prompt 4\RedGate.SQLPrompt.SSMSUI.dll"
   For version 5.x: %SYSTEMROOT%\Microsoft.net\Framework\v2.0.50727\regasm "%ProgramFiles%\Red Gate\SQL Prompt 5\RedGate.SQLPrompt.SSMSUI.dll"
   This will register SQL Prompt as a Management Studio add-in.
3. If the command is successful, run `Sqlwb.exe /setup` (SQL Server Management Studio 2005) `SSMS.exe /setup` (SQL Server Management Studio 2008, 2008 R2 and 2012) to re-initialize SQL Server Management Studio's interface.

If the problem persists, it may be necessary to reinstall SQL Prompt:

1. Open Add/Remove Programs or Programs and Features from the Windows Control Panel.
2. Select SQL Prompt then click **Repair**.

Using Layout SQL crashes SQL Server Management Studio

Using Layout SQL causes SQL Server Management Studio to hang and have to use Windows Task Manager to kill the process.

Error text

```
System.ApplicationException: Exception within progress task --->
System.InvalidCastException: Unable to cast COM object of type 'System.__ComObject' to
interface type 'Microsoft.VisualStudio.TextManager.Interop.IVsTextView'. This
operation failed because the QueryInterface call on the COM component for the
interface with IID '{BB23A14B-7C61-469A-9890-A95648CED5E6}' failed due to the
following error: No such interface supported (Exception from HRESULT: 0x80004002
(E_NOINTERFACE)).
   at Microsoft.VisualStudio.TextManager.Interop.IVsTextView.GetSelection(Int32&
piAnchorLine, Int32& piAnchorCol, Int32& piEndLine, Int32& piEndCol)
   at RedGate.SQLPrompt.CommonVS.Editor.VSEditorWindow.get_Selection()
   at RedGate.SQLPrompt.CommonUI.Refactor.Refactor.a(EditorWindowBase , b , c& )
   at RedGate.SQLPrompt.CommonUI.Refactor.Refactor.a(EditorWindowBase , c& , b[] )
   at RedGate.SQLPrompt.CommonUI.Refactor.Refactor.a.Run()
   at RedGate.SQLPrompt.CommonUI.Progress.TaskAggregator.Run()
   at RedGate.SQLPrompt.CommonUI.Forms.ProgressDialogue.a()
   --- End of inner exception stack trace ---
   at RedGate.SQLPrompt.CommonUI.Forms.ProgressDialogue.ShowProgress(ITaskRunner task)
   at RedGate.SQLPrompt.CommonUI.Refactor.Refactor.a(a )
   at RedGate.SQLPrompt.CommonUI.Refactor.Refactor.LayOutSql(EditorWindowBase editor,
SqlPromptOptions options)
   at b.Execute()
   at RedGate.SQLPrompt.CommonVS.Commands.VSCommandControler.Exec(String CmdName,
vsCommandExecOption ExecuteOption, Object& VariantIn, Object& VariantOut, Boolean&
Handled)
```

Cause

Sometimes without apparent cause SQL Server Management Studio installations can delete the interface that Prompt and Refactor need to get access to the query window.

How to fix

Run the following command from a Command Prompt:

```
regsvr32 "%commonprogramfiles%\microsoft shared\msenv\textmgrp.dll"
```

If you continue to experience problems, please contact Red Gate Support.

Common issues

- SQL Prompt is not showing all linked servers
- Removing SQL Prompt menu item after uninstalling
- SQL Server Management Studio runs slowly after uninstalling SQL Prompt

SQL Prompt is not showing all linked servers

SQL Prompt may not show all linked servers as candidates.

Cause

This can happen if the server at the other end of the "link" is not a Microsoft SQL Server.

SQL Prompt is looking for linked servers that use the SQLNCLI (SQL Server Native Client) or SQLOLEDB (SQL Server OLE) drivers. There are some multi-purpose drivers that can connect to SQL Server, but not exclusively, such as MSDASQL. Linked servers using this driver will not be selected as candidates by SQL Prompt.

How to fix

Your account needs to have the VIEW SERVER DEFINITION user rights to be able to catalog the list of linked servers. The account used to connect by SQL Prompt must be able to successfully run the following query:

```
SELECT srvname, srvproduct, providername FROM master..sysservers
```

If you continue to experience problems, please contact Red Gate Support.

Removing SQL Prompt menu item after uninstalling

After uninstalling SQL Prompt, the SQL Prompt menu item may still be included in the SQL Server Management Studio and/or Visual Studio toolbar. If this happens, you will need to remove the menu item manually.

To remove the menu item from SQL Server Management Studio 2005 or 2008 or from Visual Studio 2008:

1. From the **Tools** menu, select **Customize**.
2. Select the **Commands** tab and click **Rearrange Commands**.
3. In the Rearrange Commands dialog, select **Toolbar**.
4. From the **Controls** list, select **SQL Prompt**, then click **Delete**.
5. Close the Rearrange Commands and Customize dialog boxes. The SQL Prompt menu item is no longer displayed on the toolbar.

To remove the menu item from Visual Studio 2010 and later:

1. From the **Tools** menu, select **Customize**.
2. Open the **Commands** tab.
3. From the **Controls** list, select **SQL Prompt**, then click **Delete**.
4. Click **Close** to close the dialog. The SQL Prompt menu item is no longer displayed on the toolbar.

SQL Server Management Studio runs slowly after uninstalling SQL Prompt

After uninstalling SQL Prompt, SQL Server Management Studio can run more slowly than before. This may occur if SQL Server Management Studio attempts to load the add-in after it has been uninstalled.

To resolve this problem:

1. Close SQL Server Management Studio.
2. Open Registry Editor (regedit.exe).
3. Navigate to the following registry key (where *version* is the SQL Server version): *HKEY_CURRENT_USER\Software\Microsoft\Microsoft SQL Server\<version>\Tools\Shell\PreloadAddinState*
4. Delete the *RedGate.SQLPrompt.SSMSUI* registry value.
5. Close Registry Editor.
6. Open a Command Prompt window and run `SqlWb.exe /setup` (SQL Server Management Studio 2005) or `SSMS.exe /setup` (SQL Server Management Studio 2008, 2008 R2 and 2012) to re-initialize SQL Server Management Studio's interface.

Older versions of SQL Prompt

The following pages apply to non-current versions of SQL Prompt:

- SQL Prompt is showing an old version of my stored procedure
- Candidate suggestions being displayed slowly
- Suggestions to improve performance for pre-formatted SQL
- SQL Prompt menu does not appear in Query Analyzer
- Add-in failing to load into SQL Server Management Studio on Vista
- Unable to cast object of type 'System.DBNull' to type 'System.String'
- Uninstalling the Visual Studio 2005 add-in

SQL Prompt is showing an old version of my stored procedure

> This page applies to SQL Prompt versions 3.x

When viewing the creation SQL for an object using the candidate list or any of the features that insert SQL e.g. the insertion of the object definition after an ALTER statement. SQL Prompt will use the version of the SQL code in its cache file and not retrieve that latest version from the database.

This means that you will see the SQL code from the last time the cache was updated and not what is currently on the server. If you are using the auto insertion of object definition after the ALTER statement and you haven't updated your cache after somebody has changed a stored procedure, it is possible to accidentally overwrite the new version of the stored procedure with the old version stored in the cache file.

Cause

SQL Prompt is using the version of SQL code in its cache file.

How to fix

Update the cache if you know that someone might have modified the procedure. You may update the cache using the cache management option from the SQL Prompt menu.

> If you are editing SQL on a database when you know the schema has been changed then make sure you refresh the cache before using the auto insertion of SQL features.

If you continue to experience problems, please contact Red Gate Support.

Candidate suggestions being displayed slowly

> This page applies to SQL Prompt versions 4.x and below

In some circumstances, the candidate list produced by SQL Prompt may be slow to load, and you may notice that the performance of SQL Server Management Studio deteriorates the longer you continue editing queries in the query windows.

Possible causes

A possible cause of the problem is that the video drivers are not functioning properly

How to fix

To troubleshoot, access the display properties of the Windows desktop. If an "acceleration" setting is available, try lowering it or turn it off altogether. If performance improves, consider leaving your display at this setting or update your graphics card drivers.

If you continue to experience problems, please contact Red Gate Support.

Suggestions to improve performance for pre-formatted SQL

> This page applies to SQL Prompt versions 3.x

You may experience performance issues when pasting SQL from notepad or other text editor into SQL Server Management Studio.

Cause

SQL Prompt is optimized for use with large scripts when you first install it. However, if you experience slow performance, for example because you have a slow processor, you can reduce the number of lines of SQL code that SQL Prompt parses when it populates the candidate list.

How to fix

To reduce the number of lines of SQL code that SQL Prompt parses when it populates the candidate list:

1. On the **Options** dialog box, click **Listed Candidates > Performance**
2. Ensure that **Search a fixed number of lines from the caret** is selected, and then reduce the number of lines to search for variables and parameters.

> Decreasing the number of lines speeds up performance. However, if you reduce this value too much you may experience problems

When you open a SQL file or paste text into your query editor, SQL Prompt will automatically parse the new code for any scripted objects and assigned aliases. For large files and scripts, this may take a few seconds. If you do not want SQL Prompt to scan pasted text or opened SQL files, in the **Listed Candidates > Performance** page, clear the **Search for objects and aliases when opening or pasting text check box** option.

> SQL Prompt stops searching an opened file or a pasted block of text after 5 seconds. For very large scripts, this may not be long enough to parse all the scripted objects and aliases. You can increase the length of time SQL Prompt scans the text; to do this, increase the value of the **MaximumScanTimeMilliseconds** property in the **EngineOptions.xml** file from its default value of 5000 milliseconds.
>
> The EngineOptions.xml file is stored by default in your local user profile's application settings, for example `C:\Documents and Settings\<username>\Local Settings\Application Data\Red Gate\SQL Prompt 3`. To specify that SQL Prompt should always scan the whole file or block of text with no time limit, set the value to 0

.

If you continue to experience problems, please contact Red Gate Support.

SQL Prompt menu does not appear in Query Analyzer

If the SQL Prompt menu does not appear in the menu bar of Query Analyzer, try the following:

- Ensure SQL Prompt is configured to start with Query Analyzer.
  To do this, double-click the SQL Prompt icon in the system tray and select **Start SQL Prompt when you start Query Analyzer**.
- Launch Query Analyzer from the Start menu.
  SQL Prompt cannot detect that Query Analyzer has been started if it is launched from the SQL Server Enterprise Manager Tools menu or by using the RunAs command.

Add-in failing to load into SQL Server Management Studio on Vista

> This page applies to Windows Vista with Service Pack 1

After installing SQL Prompt or SQL Refactor and launching SQL Server Management Studio, the following error may appear:

Add-in failed to load: Class not registered

Possible cause

The service pack update to Windows Vista has been known to change permissions to the registry in a way that prevents user access to the information about installed classes: HKEY_CLASSES_ROOT. This prevents SQL Server Management Studio from loading the add-ins into the environment.

How to fix

To correct this problem, it's necessary to assign permissions to the registry for the logged-in user.

1. Open the Registry Editor (regedit.exe) using the "Run As Administrator" option.
2. Right-click HKEY_CLASSES_ROOT, select "Permissions", and give the logged-in user full control.
3. The following permissions needed to be added to HKEY_CLASSES_ROOT as well:
   Users: read
   System: full control
   CREATOR OWNER: full control on subkeys only

Unable to cast object of type 'System.DBNull' to type 'System.String'

> This page applies to SQL Prompt versions 3.x

When caching a database in SQL Prompt, you may be presented with one of the following errors -

```
"Unable to cast object of type System.dbnull to type System.String."
```

```
"An unexpected null value has been encountered while querying the database system tables. Please make sure that the database is in a consistent state by running DBCC CheckDB."
```

Possible causes

Often these errors are reported because SQL Prompt is unable to retrieve certain metadata from the server using the account that SQL Prompt is logged in as.

How to fix

You will need to first check the account permissions and make sure that the logon account meets the minimum requirements. Here is an article outlining the account permissions needed:

Configuring permissions for SQL Prompt

If the account is not the problem, then there may be an issue with the underlying schema. It is possible that there is some corruption or misconfiguration of an object or meta-data that SQL Prompt doesn't know how to handle. For example, we've seen this happen before when certain objects have been found to be without an owner. You may be able to find out more information if you use SQL Compare and compare the problem database with a non problematic database (SQL Prompt uses the SQL Compare engine to register the database). Hopefully SQL Compare should give you a better error message or point you towards the specific object that is causing the problem.

If SQL Compare doesn't present you with any extra information regarding the cause of the error, then you can do some further troubleshooting.

1. Start a default SQL Server Profiler Trace (http://msdn.microsoft.com/en-us/library/ms187929(SQL.90).aspx) on the server that is hosting the problem database.
2. Re-run the SQL Compare comparison to reproduce the error.
3. Stop the SQL Server Profiler trace and look through the results to find the last query run by the application "Red Gate Software - SQL Tools".
4. Copy this query into a new Management Studio query window opened against the original database, and execute it.
5. Have a look through the returned results for NULLs that exist in fields that shouldn't allow them. This should, hopefully, allow you to track down the object that is causing the issue. T
6. he results can often be hard to analyze and knowing where NULLs are allowed and where they're not sometimes comes down to experience. If you do require assistance analyzing the data then if you could send the query that you ran and your results set to support @red-gate.com, we'll look into it for you.

Uninstalling the Visual Studio 2005 add-in

SQL Prompt 3.5 and later ship with add-ins for SQL Server Management Studio, Query Analyzer, and Visual Studio 2005. The VS2005 add-in will allow intelligent code completion from inside Visual Studio when editing SQL files that are part of a database project. Since the SQL Prompt installer installs all add-ins automatically, it is necessary to remove SQL Prompt from Visual Studio 2005 manually after installation.

It is possible to disable only the Visual Studio 2005 add-in for SQL Prompt and leave the other add-ins intact. This must be done through Visual Studio 2005:

1. Open Visual Studio 2005
2. Go to the Tools menu, then Options, then click 'add-in/macro security'
3. Click the add-in path to SQL Prompt 3 (c:\program files\red gate\sql prompt 3), then click remove
4. Exit VS 2005
5. Open the Visual Studio Command Prompt from the Visual Studio 2005 tools program group
6. Run devenv /resetaddin RedGate.SQLPrompt.VSUI.Connect
7. When VS2005 starts, right-click the menu bar and select Customize
8. Drag the 'ghosted' SQL Prompt menu off onto the customization Window

Visual Studio 2005 will no longer load the SQL Prompt add-in or automatically complete SQL code unless it is re-installed. This can be done by re-installing SQL Prompt, or using the "'add-in/macro security" option available through VS2005's Tools > Options menu.

Release notes and other versions

Version 7.0 (latest)	August 18th, 2015	Release notes	Documentation
Version 6.5	March 26th, 2015	Release notes	Documentation
Version 6.4	September 16th, 2014	Release notes	
Version 6.3	April 8th, 2014	Release notes	
Version 6.2	December 18th, 2013	Release notes	
Version 6.1	September 23rd, 2013	Release notes	
Version 6.0	September 4th, 2013	Release notes	
Version 5.3	March 22nd, 2012	Release notes	Documentation
Version 5.2	November 3rd, 2011	Release notes	
Version 5.1	April 12th, 2011	Release notes	
Version 5.0	December 15th, 2010	Release notes	
Version 4.0	August 10th, 2009	Release notes	Documentation
Version 3.9	July 14th, 2008	Release notes	Documentation (PDF)
Version 3.8	April 23rd, 2008	Release notes	*See version 3.9 documentation*
Version 3.6	September 17th, 2007	Release notes	
Version 3.5	July 26th, 2007	Release notes	
Version 3.1	March 22nd, 2007	Release notes	
Version 3.0	January 22nd, 2007	Release notes	

If you need to install an old version of SQL Prompt, go to Download old versions of products.

SQL Prompt 4.0 release notes

August 10th, 2009

- **Enhanced user interface**
  The user interface for intellisense suggestions and object definitions has been redesigned to be less intrusive and to make SQL Prompt's features more easily discoverable.
  The Options dialog box has also been completely reinvented, with better navigation and a rationalised set of options.
- **Improved SQL Grammar support**
  Enhanced T-SQL grammar support for SQL 2000, SQL 2005 and SQL 2008 SQL server editions. Suggestions are more accurate and reliable, and cover a more extensive scope of T-SQL.
- **Performance improvements**
  SQL Prompt 4 caches database objects dramatically faster than SQL Prompt 3, and does so much more quickly across high latency networks.
- **Snippet enhancements**
  Snippets are now stored as separate files, and so can be easily shared among other SQL Prompt users.
  There is a new, separate interface for creating and managing your snippets, including an option to go to the folder where snippets are stored.
- **Column picker**
  The column picker has been radically improved, so that it is simpler to find and use, for example it is now clearly labelled, and shows the number of columns currently selected.
- **Options**
  Many SQL Prompt 3 options have been removed and replaced with sensible defaults, to simplify the configuration and make more intuitive behavior. The Options dialog box itself has been drastically re-engineered so that it is much quicker to find the option you want, understand its purpose, and preview its effect.
- **Right-click context menus**
  Right-click context menus have been implemented inside your query editor for creating SQL Prompt snippets and applying your preferred formatting to code.
- **Temporary storage only of database objects on disk**
  Database objects are only cached during your current session. When closing down your query editor, the SQL Prompt object cache is emptied, to save disk space. Offline mode working is therefore no longer supported.
- **Format styles (Pro feature)**
  Styles allow you to save and share your format options with other SQL Prompt users.
- **Decrypts encrypted objects: (Pro feature)**
  SQL Prompt 4 can now decrypt encrypted objects from SQL 2000, SQL 2005 and SQL 2008 to allow you to view their creation script.
- **Importing snippets and aliases**
  As a major new installation, existing user-created snippets and aliases or your old configuration options will not automatically be imported into v4. Red Gate offers two free tools that help migrate snippets and aliases from v3.9. For more information, please see the following forum posts:

  Snippet migrator: http://www.red-gate.com/MessageBoard/viewtopic.php?t=9361
  Alias importer: http://www.red-gate.com/MessageBoard/viewtopic.php?t=9362

> Installing SQL Prompt 4 will disable SQL Prompt 3 and start a new trial period. If you wish to re-enable SQL Prompt 3 you will need to uninstall SQL Prompt 4. If you have user-defined aliases or snippets in SQL Prompt 3 which you wish to retain, we have a migration tool available.

SQL Prompt 3.9 release notes

July 14th, 2008

- SQL 2008 support including data types and new keywords
- Layout support for SQL Server 2008 syntax
- Fixed a problem with Visual Studio integration
- Fixed a possible exception with layout

SQL Prompt 3.8 release notes

April 23rd, 2008

- Pro and Std Editions
- Object definition hints
- Function parameter hints
- Layout (Pro Edition)
- Summarized object view in Schema Panel
- Improved logging support
- VS.NET 2008 support

SQL Prompt 3.6 release notes

September 17th, 2007

- Data Dude support
- Improved VS 2005 support
- CTEs
- Scripted tables, views, stored procs and functions
- GRANT, REVOKE, DENY permissions
- IF, WHILE and other control flow statements
- Transaction control statements (BEGIN, COMMIT, ROLLBACK)
- ENABLE/DISABLE TRIGGER

SQL Prompt 3.5 release notes

July 26th, 2007

- Visual Studio 2005 database project support
- Cross-database queries
- Distributed queries across linked SQL Server instances
- Correlated subqueries
- 3 – 5 times faster metadata retrieval
- Works well with large SQL scripts (>1000 lines)
- 40 – 95% decrease in memory footprint
- Bug fixes and other enhancements

SQL Prompt 3.1 release notes

March 22nd, 2007

- Support for SQL Server Management Studio Express
- Improved auto closing and auto casing
- Now prefers exact matches for the current filter string
- Bug fixes to improve stability of the product

SQL Prompt 3.0 release notes

January 22nd, 2007

- Direct integration into SQL Server Management Studio and Query Analyzer
- Full SELECT support: aliases, derived tables, subqueries, joins
- INSERT, UPDATE, DELETE support
- Variables
- Column picker
- Wildcard auto-expansion
- Advanced completion list
- User object schema definitions