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SQL Doc 2 documentation

About SQL Doc

SQL Doc enables you to document Microsoft SQL Server databases in an easy to read web format (.html files), document format (.doc file), or compiled Microsoft HTML Help (.chm) file.

For more information, see the SQL Doc product page.

Quick links

SQL Doc 2.1 release notes

Troubleshooting

Worked example

Requirements

To use SQL Doc you need:

- One of the following Microsoft Windows operating systems:
 - Windows 2000
 - Windows XP
 - Windows Server 2003
 - Windows Vista
 - Windows 7
 - Windows Server 2008
 - Windows 8
- SQL Server client-side tools
- Microsoft .NET Framework 2.0 or later
- MDAC 2.8 or later
- 128 MB RAM
- 200 MB hard disk space

The following versions of Microsoft SQL Server are supported:

- SQL Server 2005
- SQL Server 2008
- SQL Server 2008 R2
- SQL Server on Amazon RDS

Please note that this product has not been tested on an Itanium server.

Installing

Most Redgate products are available as part of a bundle. You can select which individual products to install when you run the installer.

When you install a non-free product, you have 14 days to evaluate the product. For the DLM Automation Suite, DLM Automation Suite for Oracle, SQL Source Control, Schema Compare for Oracle, Data Compare for Oracle, and Source Control for Oracle, you have 28 days. For more information, see Licensing.

To install a Redgate product:

- 1. Download the product from the website.
- 2. Run the installer and follow the instructions.

The product is listed on the **Start** menu under **Red Gate**.

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
- · Activating using the command line
- Manual activation

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:

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

Activate SQL Compare Enter your SQL Compare serial number Serial number Your serial number is on your invoice or you can find it online Track this activation Sends information about this activation (including your machine name) to Red Gate. This is useful if you contact support about your activations. More information If you purchased SQL Compare as part of a bundle, other products may be activated by this process. The products activated are listed when activation is completed. E-mail (optional) Please provide the email address you would like us to send update notifications to: user@example.com I'd also like to receive the Red Gate Newsletter. Read our privacy policy redgate Activate Cancel

2. Enter your serial number.

When you have entered a valid serial number,



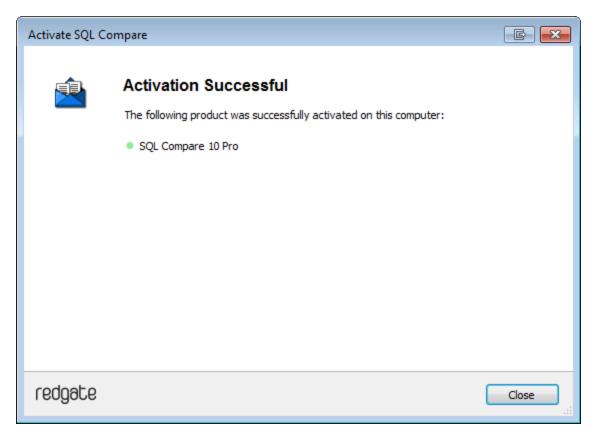
is displayed next to the serial number box:



- 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:

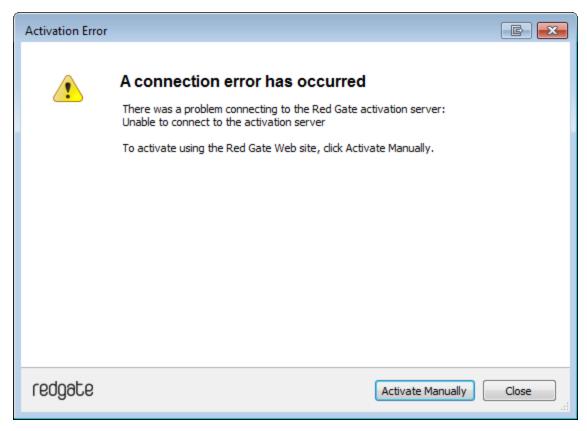
```
sqlcompare /activateSerial:123-456-789012-ABCD
```

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.

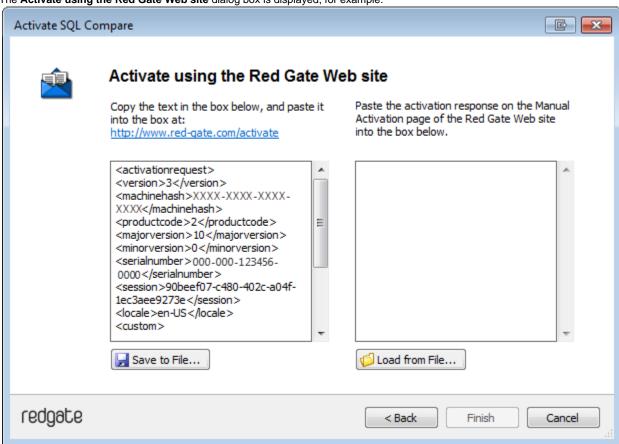
You can use manual activation whenever the **Activation Error** dialog box is displayed and the **Activate Manually** button is available, for example:



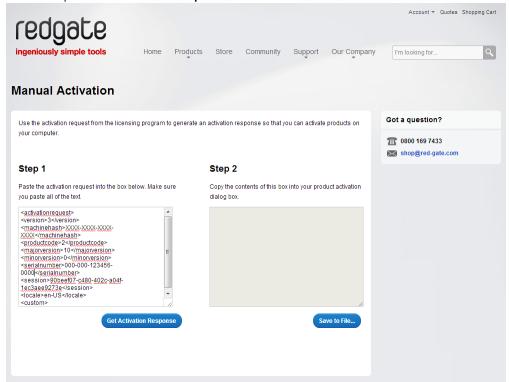
To activate manually:

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

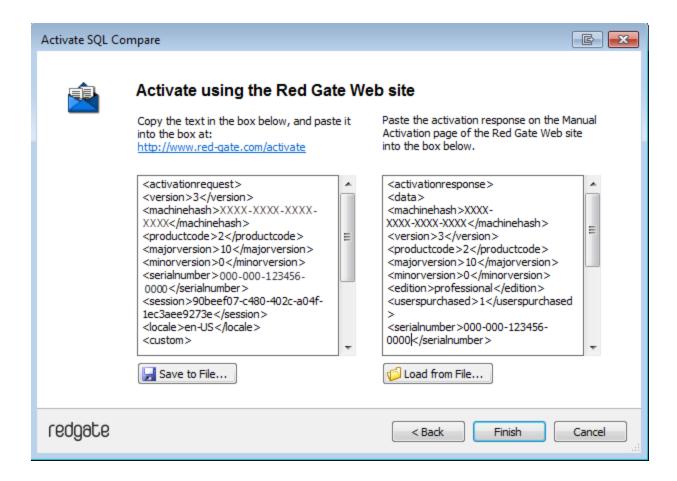
The Activate using the Red Gate Web site dialog box is displayed, for example:



- 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:

oductEXE> /deactivateSerial

For example:

sqlcompare /deactivateSerial

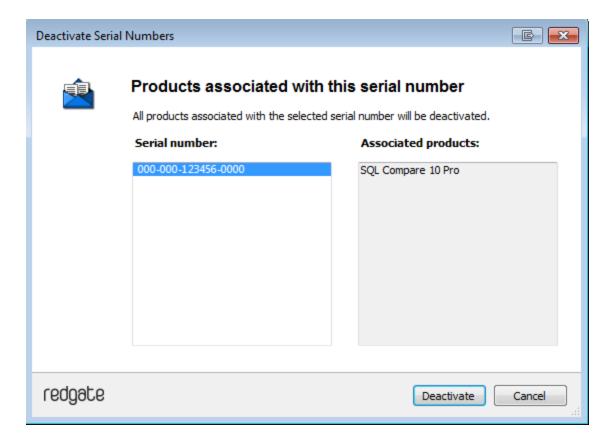
The **Deactivate Serial Numbers** dialog box is displayed. Follow the instructions below.

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 **Deac tivate Serial Number**.

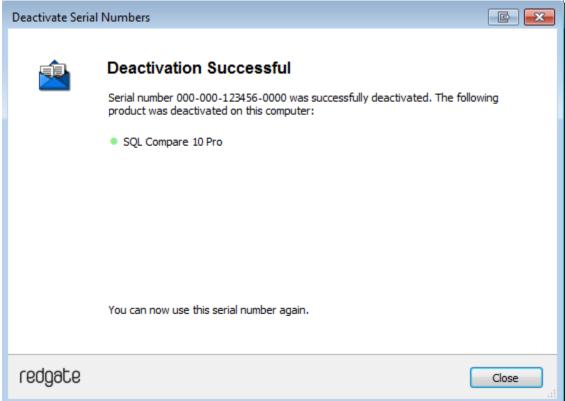
The Deactivate Serial Numbers dialog box is displayed. For example:



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.
- ${\bf 3.}\ \ When your \ deactivation \ has \ been \ confirmed, \ the \ \textbf{Deactivation successful}\ page \ is \ displayed.\ For \ example:$



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 serial number has been disabled
- This serial number was for a trial extension
- This serial number is not registered with the activation server
- This serial number is not for
- This serial number is not for this version
- The activation request is in the wrong format
- · The activation request contains an invalid machine hash
- The activation request contains an invalid session
- The activation request contains an invalid serial number
- · The activation request contains an invalid product code or version number
- There's a problem deactivating your serial number
- This serial number is not activated on this computer
- · Products not activated on this computer

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 cproduct 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-g ate.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.

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.

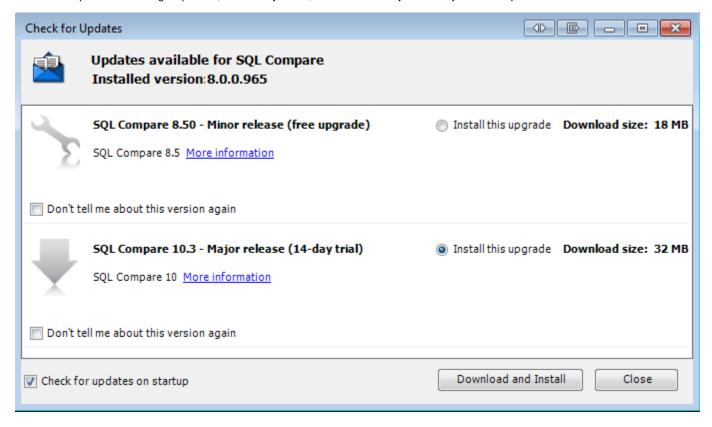
Using Check for Updates

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 **Downlo ad 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 *R GTEMP* 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 *R GTEMP* 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.

Working with projects

Whenever you document your databases, you set up a project.

You can create a new project each time you want to document your databases. Alternatively, if you will always be documenting the same database objects, you can save the project. You can then open the project file at a later date or run it from the command line.

SQL Doc project files are saved with the extension .sqldoc

Alternatively, you can document a database by right-clicking in the SQL Server Management Studio Object Explorer. (SQL Doc 2.1 and later only)

SQL Doc stores the following information as part of the project:

- SQL Server connection
 - You can edit the connection details as part of the project configuration.
- databases and objects to document
 - For more information about adding and removing objects from a project, see Setting up the documentation.
- project and copyright information included on the project information page and footer of the generated documentation.
 You can edit this information as part of the project configuration.

You specify the format for the generated documentation and the location that documentation is saved in when you generate the documentation.

If you save the project after you generate the documentation, SQL Doc stores the settings that you specify and uses the same settings as defaults next time you generate documentation for the same project.

Editing project configuration

To edit a project's configuration:

1. If the project is not currently open, click



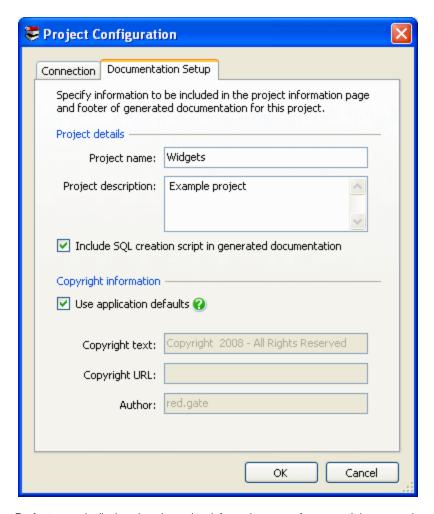
Open Project.

2. Click



Edit Project to open the Project Configuration dialog box.

• The **Documentation Setup** tab contains settings that specify information that is included in the generated documentation:



Project name is displayed on the project information page of generated documentation, and on the title page of documentation in *Document (.doc)* format.

Project description is displayed on the project information page.

Include SQL creation script in generated documentation: choose whether the script is included in the documentation. For example, if you are going to print the documentation, you might want to exclude the script to make the documentation shorter. **Copyright text** is displayed in the footer of generated documentation; if you specify a **Copyright URL**, the copyright text is included as a hyperlink.

Author is displayed on the project information page and the footer of all generated documentation, and on the title page of documentation if you generate documentation in *Document (.doc)* format. You can change the default copyright information used by all projects on the **Application Options** dialog box, if required.

- The Connection tab contains details of the SQL Server connection for the current project.
- 3. When you have edited the settings as required, click **OK** and then click



Save Project on the SQL Doc toolbar to save your changes.

Setting up the documentation

To set up the documentation:

1. Click



New Project to create a new project, and then set up the project as required.

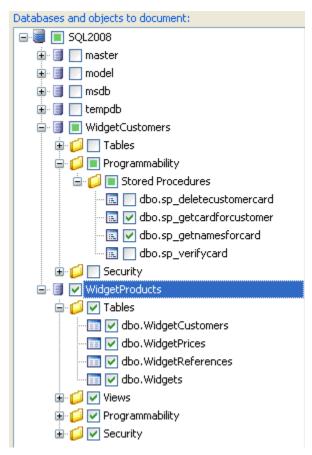
- 2. Preview the documentation, to ensure it contains the objects you want to document.
- 3. If required, edit the object descriptions.
- 4. Click



Generate Documentation to start generating the documentation.

Selecting the databases and objects to document

You specify the objects you want to document by selecting the appropriate check boxes in the Databases and objects to document pane.



SQL Doc only displays the databases and objects for which you have permissions.

If the database structure has been modified while you are working on a documentation project, click



Refresh to update the list. SQL Doc retains your object selection when it refreshes the list of databases and objects.

Editing object descriptions

For each object, SQL Doc displays the text that is stored in the MS_Description extended property in your SQL Server database. For tables, you can edit descriptions for columns, indexes, triggers, and constraints; for views, you can edit descriptions for columns, indexes, and triggers.

To edit an MS_Description extended property, you must have the appropriate permissions.

To edit object descriptions:

1. Click



for the required description.

The Edit Object Descriptions dialog box is displayed:



- 2. Type the description in the box.
- 3. To edit descriptions for other objects that SQL Doc is currently displaying, use the **Previous** and **Next** buttons to navigate between the objects.
- 4. Click Update Database to save all your changes. SQL Doc updates the extended properties in your SQL Server database, and refreshes the documentation preview to show your new descriptions.

Setting application options

The application options enable you to modify the behavior of SQL Doc.

Application options are saved for each Windows user. If you change the application options they will apply to all projects.

Options that control connection settings and documentation setup for particular projects are specified in the project configuration.

To display the application options, on the Tools menu, click Application Options.

Application startup option

Specify how SQL Doc determines which project to open on startup.

Default copyright information options

Copyright information options specify information that is included in the project information page and the footer of generated documentation. You can choose whether to use the default copyright information for a particular project, in the project configuration.

To display the copyright text as a hyperlink, specify a Copyright URL (this must be a well-formed URL).

If you do not want to include a copyright statement in your documentation, clear both the Copyright text box and the Copyright URL box.

When you edit the default copyright information, all projects that use these defaults will pick up the new settings.

Generating and viewing documentation

- What's in the documentation?
- What's not in the documentation?
- About documentation formats
- Generating the documentation
- Viewing documentationCustomizing the documentation

What's in the documentation?

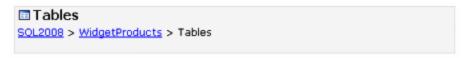
The preview and the generated documentation show almost identical information. For details of differences between these views, and other restrictions on the content of generated documentation, see What's not in the documentation?

Documentation overview

Formatting of generated documentation depends on which file type you choose when you generate the documentation and settings in the application you use to view the documentation. The following examples show formatting with the web page (HTML) file type.

Object type summaries

To see a summary for an object type, click its name. For example, click Tables to see a summary of all the tables in the database.



Name	Description
dbo.WidgetCustomers	Customer contact details
dbo.WidgetPrices	Prices of widgets over time
dbo.WidgetReferences	Lookup table that maps widget identification numbers to reference information
dbo.Widgets	Description of widgets sold by the Magic Widget Company

Created 01 December 2008 15:40 Copyright 2008 - All Rights Reserved

The **Description** column shows the text that has been added to the database using the MS_Description extended property.

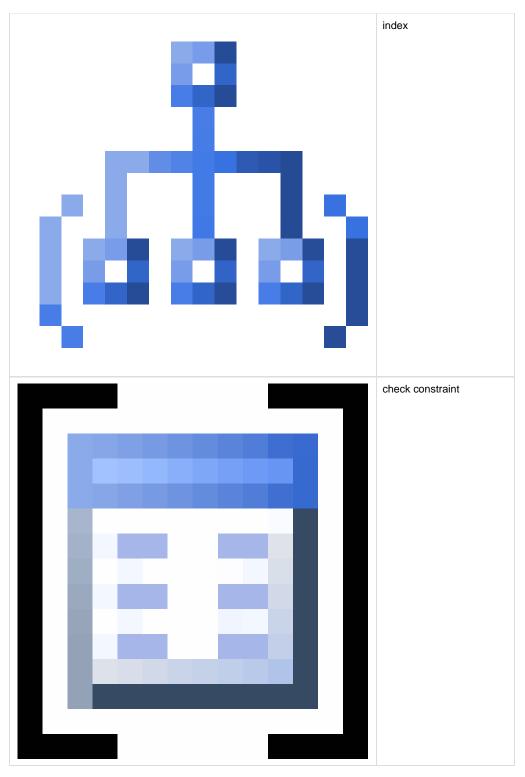
Object documentation

To see information about a particular object, click the object name. The documentation shows the object's properties and SQL creation script.

For tables, the documentation also includes details of columns, indexes, triggers, constraints, permissions, and other extended properties such as input masks. The following icons are used in documentation for tables:







The following example shows the documentation for the WidgetPrices table.



```
Created 14:13:14 26 November 2008
Last Modified 14:13:14 26 November 2008
```

Columns

	Name	Data Type	Max Length (Bytes)	Allow Nulls	Identity	Default	Description
۹.	RecordID	int	4	×	1 - 1		Record identification number
Qф	WidgetID	int	4	✓			Widget identification number
	Price	топеу	8	~			Price of the widget
dh	DateValidFrom	datetime	8	✓		(getdate())	The date from which the price is valid
ф	DateValidTo	datetime	8	✓			The date until which the price is valid
	Active	char(1)	1	✓		('N')	N = Inactive, Y = Active

Indexes 📥

	Name	Columns	Unique
۹ Pi	K_WidgetPrices	RecordID	~
D	_WidgetPrices	WidgetID	
D	(_WidgetPrices_1	DateValidFrom	
D	WidgetPrices 2	DateValidTo	

Foreign Keys 🥄

Name		Columns
FK WidgetPrices	Widgets	WidgetID->[dbo].[Widgets].[RecordID]

Permissions

Type	Action	Owning Principal
Deny	Delete	public
Deny	Insert	public
Deny	References	public
Grant	Select	public
Deny	Update	public

SQL Script

Uses

[dbo].[Widgets] dbo

suppligit same of ogtive range ran

What's not in the documentation?

The following tips contain notes about information that the documentation does not always include.

Extended stored procedures

SQL Doc does not document extended stored procedures.

Encrypted database objects

If you are documenting a SQL Server 2000 database that contains an encrypted user-defined function, stored procedure, trigger, or view and you have system administrator permissions, SQL Doc can decrypt the object and you can view its internal SQL.

SQL Doc does not decrypt views, stored procedures, functions, DML triggers, and DDL triggers that are encrypted in a SQL Server 2008 or SQL Server 2005 database. Therefore, SQL Doc cannot document the SQL creation script for these encrypted objects.

Certificates, symmetric keys, and asymmetric keys

SQL Server severely restricts access to certificates, symmetric keys, and asymmetric keys. Consequently, SQL Doc cannot document all of the properties for these objects.

Replication

SQL Doc does not document stored procedures that have been created for replication.

Numbered stored procedures

SQL Doc documents only one stored procedure for groups of numbered stored procedures.

Object dependencies

Object dependencies are only available in the generated documentation; they are not shown in the preview. This is to enable SQL Doc to display the preview more quickly.

Row count

Row count is only available in the generated documentation; it is not shown in the preview. This is to enable SQL Doc to display the preview more quickly.

SQL Script

By default, the SQL creation script for an object is included in the documentation. You can exclude it by clearing the **Include SQL creation script** in generated documentation check box on the project configuration dialog box.

About documentation formats

SQL Doc generates documentation in the following file types:

- Document (.doc)
- Web pages (.html)
- Help file (.chm)

You select the documentation file type when you generate your documentation.

For details of what information is included in your generated documentation, see What's in the documentation?

For information about how you can modify the format of the generated documentation, see Customizing the documentation.

Document (.doc)

This is suitable for viewing in Microsoft Word and OpenOffice.org Writer.

We recommend the following versions (other versions may also be compatible): Microsoft Word 2003, Microsoft Word 2007, OpenOffice.org Writer 3.0.

Document is recommended if you want to print the document or create a PDF version.

This format is not recommended if you are documenting large databases, because of the large file size.

Web pages (.html)

SQL Doc generates a set of web pages. This is recommended if you are documenting large databases.

You can choose to generate the documentation with frames or without. The database and object navigation tree is created in a separate frame from the details of your database objects.

SQL Doc generates database documentation with frames much more quickly and the file sizes are smaller. We recommend you use frames if you are documenting large databases.

The navigation tree requires JavaScript to be enabled on your web browser. If you cannot enable JavaScript, we recommend you generate the documentation without frames.

Help file (.chm)

This is recommended if you are documenting large databases and you need to share the documentation. The help file is generated as a compiled Microsoft HTML Help file (.chm), which includes search functionality and an index.

To generate your database documentation as a help file you must first download and install the Microsoft HTML Help Workshop. This is available for free from the HTML Help Workshop download page: download htmlhelp.exe and run the installer as normal.

If you install HTML Help Workshop as a limited user, the installation fails. You must run the installer as an administrative user.

Creating a PDF

SQL Doc does not support generating documentation directly in PDF format, but you can create a PDF by generating a Document (.doc) file, and then converting it to PDF.

Generating the documentation

When you have selected the objects that you want to document, you can generate the database documentation.

- 1. Create the project and select the databases and objects to document.
- 2. Click



Generate Documentation.

- 3. On the **Generate Documentation** dialog box, in the **Save in** box, specify the location where you want SQL Doc to create the documentation.
- 4. Select a **File type**. If you choose *Document* or *Help* file, you also need to specify a file name; for web pages you don't specify a file name: instead the documentation is generated as a set of files, saved in a time-stamped folder.

 Find out more about the available file types
- Click Generate Documentation to start generating the database documentation.SQL Doc displays a message dialog box that shows the progress of your database documentation.

If you select the **Close message box on completion** check box, SQL Doc closes this message dialog box automatically the next time you generate database documentation for a project.

6. If necessary, click **OK** to close the message box.

To use the same settings next time you generate documentation for this project, click



Save Project.

Find out about generating documentation from the command line.

Viewing documentation

By default, SQL Doc opens the documentation when it has finished generating. If you do not want SQL Doc to open the generated documentation automatically, clear the **Open documentation on completion** check box on the **Generate Documentation** dialog box.

SQL Doc creates your documentation in the folder you specify on the Generate Documentation dialog box.

Document (.doc)

To view the documentation, open the *Project.doc* file (see About documentation formats for a list of recommended applications for viewing the document).

If you are viewing in Microsoft Word, follow the instruction on the Table of Contents page to generate a table of contents.

Web pages (.html)

HTML documentation is created in a time-stamped subfolder. To view the documentation:

For web pages created with frames:

• open the main.html file

For web pages created without frames:

• open the index.html file

If you selected **Use frames** when you generated the documentation, the database documentation uses JavaScript. Your web browser may restrict access to this content; refer to your web browser documentation for more information.

Help file (.chm)

To view the documentation, open the Project.chm file. The help is opened in the Microsoft HTML Help browser.

These files cannot be opened across a network.

Find out more about what is included in the documentation.

Customizing the documentation

You can modify the style sheets that SQL Doc uses to generate the database documentation, if required. In addition, when the documentation has been generated, SQL Doc provides all the source files so that you can edit them if required.

Modifying style sheets

SQL Doc uses Cascading Style Sheets (CSS) to determine the appearance of the database documentation. You can edit the master style sheet using a CSS editor, for example to change fonts, font sizes, font colors, text alignment, or table properties.

The SQL Doc master style sheet (master.css) determines the appearance of the **Preview** pane and the generated documentation. The style sheet is located in the subfolder *Style1/Style* where you installed SQL Doc.

We recommend you make a copy of the master style sheet before you edit it.

Modifying Microsoft HTML Help (.chm) documentation

To customize a Microsoft HTML Help file, edit the source files then recompile the help using Microsoft HTML Help Workshop. For example, the default project language is English; if your database documentation contains characters from a different Unicode character set, you may want to change the language setting in the project (.hhp) file and then recompile the help so that the characters are displayed correctly.

By default, SQL Doc erases the source files (HTML, index files, and HHW project files) when the CHM is built successfully. To retain these source files in the same folder as the CHM output after successful compilation, create a registry value as follows:

 Open the Windows Registry Editor (regedit.exe), and navigate to the sub-key appropriate to your version of SQL Doc: Version 1.x

HKEY_CURRENT_USER\Software\Red Gate\SQL Documentor Version 2.x

HKEY_CURRENT_USER\Software\Red Gate\SQL Doc 2\Options

- 2. Right-click the sub-key and select New > String Value.
- 3. Name this new value KeepIntermediate, and set its value to True.

To revert to the default setting, change the KeepIntermediate value to False.

To open Windows Explorer at the location of the saved project documents, open the project in SQL Doc then press Alt+E.

Worked example - documenting two databases

This worked example demonstrates how to generate database documentation for objects in two SQL Server databases.

In this example, the Magic Widget Company runs a SQL Server instance to support their website and company activities. This instance contains two databases. The first database contains the company's product and customer information. It is primarily accessed by the company's intranet. The second database contains customers' credit card information, and access to this database is controlled. The Magic Widget Company's development team have been asked to document these databases.

You can follow the example on your own system. You will need access to a SQL Server to do this.

This example uses SQL Server 2008; if you are using SQL Server 2005 or SQL Server 2000, you can follow the example, but you will see slightly different results.

1. Setting up the databases

The worked example uses the following databases:

- WidgetProducts
- WidgetCustomers

To create these two databases on your SQL Server:

- 1. If they already exist, delete the databases WidgetProducts and WidgetCustomers from your SQL Server.
- 2. Click here to download the SQL creation script for the databases.
- Copy the script, paste it in your SQL application, and then run it. The databases and their schema are created.

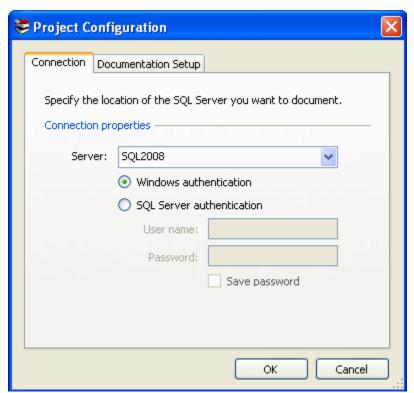
2. Setting up the documentation project

1. If you have not yet started SQL Doc, select it from your Start menu; if it is already running, click



New Project to open the Project Configuration dialog box.

On the Connection tab, in the Server list, type or select the SQL Server instance for the WidgetProducts and WidgetCustomers databases.



3. On the **Documentation Setup** tab, in the **Project name** box, type *Widgets*. In the **Project description** box, type *Example project*. These

details will be included on the project information page of the generated documentation. For this example, you are going to include the default copyright information in the project information page and footer of the documentation, so the project configuration is now complete. Click **OK** to save the settings.

3. Viewing the database objects

SQL Doc displays a list of databases for the SQL Server instance in the main window.

To view the objects in the WidgetProducts database, click $\stackrel{\bullet}{+}$

to expand the database.



To see a list of objects of a particular type, click the object type; to see a summary for a particular object, click

to display objects, and then click the object's name. SQL Doc displays a preview of the documentation for the object you select.

For example, display the WidgetCustomers table: the preview shows the table's properties, column details, index details, permissions details, and SQL creation script.



The preview does not show row count information or object dependencies; these will be included in the generated documentation.

Find out more about what information is included in the documentation

Editing an object description

In the preview, the text at the bottom of the main object box and in the **Description** column shows the MS_Description extended property values from the database. You can edit this description by clicking



For example on the preview for the WidgetCustomers table, click



in the grey box at the top of the preview. In the **Edit Object Descriptions** dialog box, at the end of the description, type 2008, then click **Update Database** to save your change. SQL Doc updates the extended property in the WidgetProducts database and refreshes the documentation

preview to show your new descriptions.

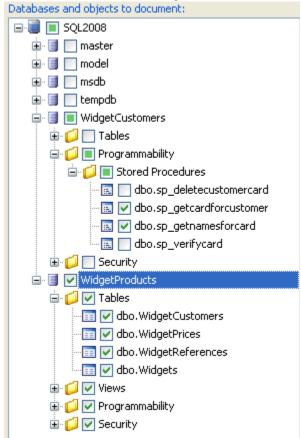


4. Selecting the databases and objects to document

To include objects in the database documentation, you select the objects using the appropriate check boxes.

For this worked example, we will select all the objects in the WidgetProducts database and only the *sp_getcardforcustomer* and *sp_getnamesforc* ard stored procedures in the WidgetCustomers database.

- 1. Select the check boxes for the dbo.sp_getcardforcustomer and dbo.sp_getnamesforcard stored procedures.
- 2. Select the check box next to the WidgetProducts database; all the objects in the database are also selected.



You can select objects using the arrow keys on your keyboard. For example, use the Up Arrow key to move up the list so that Tables is highlighted, under WidgetCustomers. Press Right Arrow to expand Tables and then press Down Arrow to highlight dbo.CustomerCards. To select the object, press Space; to clear the selection, press Space.

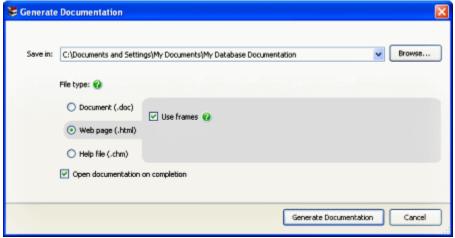
5. Generating the documentation

The documentation project is now set up, and you can generate the documentation.

1. Click



Generate Documentation.



- 2. On the **Generate Documentation** dialog box, in the **Save in** box, specify the location where you want SQL Doc to create the documentation.
- 3. Select a File type. For this example, use the Web page (.html) file type. Select the Use frames check box if it is not already selected.
- 4. Click **Generate Documentation** to start generating the database documentation.
- 5. Click **OK** to close the message box.
- 6. Click



Save Project on the SQL Doc toolbar to save the project. The project configuration, object-selection, and generation settings are stored so they are available next time you open the project.

6. Viewing the documentation

SQL Doc opens the database documentation:



If JavaScript is not enabled by your web browser, a message is displayed to inform you that you cannot use the navigation on the left of

the window.

Find out more about what information is included in the documentation

Using the command line

SQL Doc provides a command line interface so that you can generate database documentation from the command line or in script or batch files.

Before you can use the command line to generate documentation, you must set up a documentation project, generate the documentation at least once, and then save the project. This creates a project file that contains information such as the connection details and objects to document.

To generate documentation, enter a command in the form:

```
sqldoc /project:project_file
```

To generate documentation to a different file type, use the /filetype switch to specify the file type. For example:

```
sqldoc /project:project_file /filetype:doc
```

The available file types are as follows:

doc	document (.doc)	
html	web pages (.html), no frames	
html-frames	web pages (.html), using frames	
chm	help file (.chm)	

For more information about the file types, see About documentation formats.

If the SQL Server for the database has SQL Server authentication and you have not saved the password, use the /password switch to specify the password:

```
sqldoc /project:project_file /password:password
```

Getting help from the command line

To display help from the command line, enter:

```
sqldoc /help
```

This displays basic help on all the command line switches. For more detailed help, enter:

```
sqldoc /help /verbose
```

This displays a detailed description of each switch and the values it can accept (where applicable), and all exit codes. To output the help in HTML format, enter:

```
sqldoc /help /verbose /html > filename.html
```

Entering a command

When you enter a command line, the order of switches is unimportant. Separate a switch from its values using a colon as shown below.

/project:MyProject.sqldoc

The colon must not be followed by a space; values that include spaces must be delimited by double-quotes. For example:

/project:"c:\My Project.sqldoc"

Aliases

Many of the switches have an alias. The alias provides a convenient short-hand way to specify the switch. For example, /? is the alias for the /help switch, and /v is the alias for the /verbose switch.

Switches and aliases are not case-sensitive.

Exit codes used in the command line

Code	Description	Additional information	
0	Success		
1	General error code		
3	Illegal argument duplication	Some arguments may not appear more than once in a command-line. If such arguments appear more than once this exit code will be returned.	
8	Unsatisfied argument dependency or violated exclusion when user runs command line	For example, /arg2 depends on /arg1 but you have specified /arg2 without specifying /ar g1. Alternatively, /arg2 cannot be used with /arg1 but you have tried to use them both.	
32	Value out of range	Numeric value supplied for an argument that is outside the range of valid values for that argument.	
33	Value overflow	The magnitude of a value supplied for an argument is too large and causes an overflow.	
34	Invalid value	The value supplied for an argument is invalid.	
35	No / invalid software license or trial period has expired.		
63	Error		
64	General command-line usage error		
65	Data error	Some input data required by the tool is invalid or corrupt.	
69	A resource or service required to run the tool is unavailable.		
70	Internal software error	This code is returned when SQL Doc fails with an unknown exception. If SQL Doc returns this exit code, contact support.	
		If you submit a support request, it's useful for us if you attach a log file.	
73	Failed to create report		
74	IO error occurred	Generally returned if the program attempts to write to a file that already exists without the user having specified the /force option.	
77	Action cannot be completed because the user does not have permission		
126	Execution failed because of an error		
130	Execution stopped because Ctrl+Break		
400	The command line arguments cannot be properly executed		
402	There is no acceptable license	For information about finding your serial number and activating your license, see Licensi ng.	
499	Activation was cancelled because the Cancel button was pressed during the process		
500	An unhandled exception occurred.	The exception's message and stack trace will be included. If the error persists, please contact Red Gate Support.	

Troubleshooting

- Logging and log files
- Minimum database permissions required for the user running SQL Doc
 Error messages
- - 'Object reference not set to an instance of an object' failure
 Assertion failure outputting in CHM format

Logging and log files

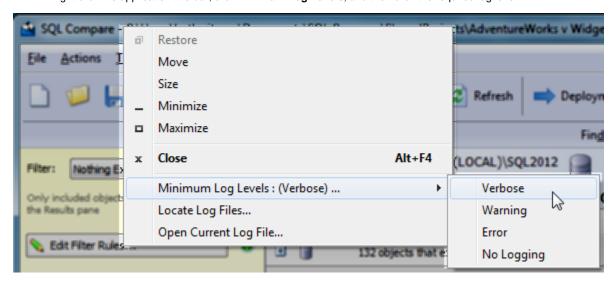
Log files collect information about the application while you are using it. These files are useful if you're working with Redgate support to fix a problem.

By default, logging is disabled and no log files are stored.

Enabling logging

To enable logging, select the log level you require:

• Right-click the application title bar, click **Minimum Log Levels**, and then click the required log level.



Select a minimum log level based on how much information you need to be reported:

Verbose	Reports all messages in the log file.
Warning	Reports warning and error messages.
	For example, a warning message might report a handled exception, or a problem which doesn't stop you using the application.
Error	Reports serious and fatal errors.
	For example, an error message might report a failed operation.
No Logging	Disables logging.

The selected log level may affect performance. Verbose logging reports all messages, and so writes the most information to disk and produces the largest log files.

If you don't need logging, we recommend you select No Logging.

Locating the log files

To open the folder where the log files are stored, click **Locate Log Files**. By default, log files are located in: *%ALLUSERSPROFILE%\Application Data\Red Gate\Logs*

To view the current log file in your default text editor, click Open Current Log File.

If the minimum log level is set to No Logging, you cannot locate or open log files from within the application.

Minimum database permissions required for the user running SQL Doc

When producing documentation for a database using SQL Doc, the user connecting to the database will need to be granted permissions to the database and its objects.

SQL Doc uses the SQL Compare engine, so the permissions required are the same as SQL Compare. See Permissions required to use SQL Compare.

In addition, the user will need to have modify permissions to the database to be able to add the descriptions, specifically EXEC rights to the system stored procedures $sp_addextendedproperty$, $fn_listextendedproperties$, and $sp_dropextendedproperty$.

Error messages

- 'Object reference not set to an instance of an object' failure
 Assertion failure outputting in CHM format

'Object reference not set to an instance of an object' failure

SQL Doc may fail when attempting to generate the documentation for a SQL 2000 database at the Documenting stage with the error:

Object reference not set to an instance of an object.

This error can happen when the user account you used to connect to the database does not have sufficient permissions.

Fix

Using an account that has server-level administration permissions such as SYSADMIN or SERVERADMIN may resolve the problem.

Assertion failure outputting in CHM format

When creating database documentation in Compiled HTML Help (CHM) format, the following error may occur: Assertion failure: (pszTmp == $m_pCompiler->m_pHtmlMem->psz$).

There is a limitation on the index size acceptable by Microsoft HTML Help Studio, which SQL Doc uses to create the CHM file. Once the index grows past 3300 entries, HTML Help Studio crashes with this error. Since this software has been supplied by Microsoft, we can't resolve the issue.

Workarounds

One possible workaround is to include fewer databases or fewer database objects in the database documentation.

The other possibility is to manually trim the index. SQL Doc should leave all of the CHM source files in the same folder that you have chosen as the output location, in a subfolder whose name contains "_src_".

Open the SQLDoc.hhk file and trim it by removing all text between <OBJECT> and </OBJECT> for each node that you want to exclude from the index. After you have trimmed the index, you may attempt to compile the project manually using Microsoft HTML Workshop.

Release notes and other versions

Version 3.0 (current)	November 17th, 2015 (latest)	Release notes	Documentation
Version 2.1	October, 2011	Release notes	Documentation
Version 2.0	December 4th, 2008	Release notes	
Version 1.3	July 14th, 2008	Release notes	Not available
Version 1.0	November 25th, 2006	Release notes	Not available

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

SQL Doc 2.1 release notes

Version 2.1.2 - May 2012

SQL Doc 2.1.2 fixes a bug with extended properties not showing correctly (internal issue number SDOC-1467).

Upgrading

Please upgrade by selecting the Help > Check for Updates.

Licensing

- Licensed users of SQL Doc 2: SQL Doc will remain activated when you install SQL Doc 2.1.2.
- Existing users of SQL Doc 1 without the Support and Upgrades package: You will have a trial license when you install SQL Doc 2.1.2. To continue using SQL Doc after the trial period, you will need to purchase a new license.
- Existing users of SQL Doc 1 with the Support and Upgrades package: If you already have a valid license number for version 1 of SQL Doc, purchased with the Support and Upgrades package, then you can use the same license to activate SQL Doc 2 manually.

Version 2.1.1 - December 2011

- Support for SQL Server 2012: SQL Doc 2.1.1 will now be accessible from within SSMS 2012's Object Explorer menu.
- SQL Doc's output will now say "SQL Server 2012" rather than "SQL Server Denali".
- This error has been fixed: "Unable to cast object of type redgate.sqlcompare.engine.statistics to type redgate.sqlcompare.engine.relationalindex"

Version 2.1 - October 2011

- SQL Server 2008 R2 support
- Launch SQL Doc from within SSMS

You can now document databases by right-clicking a database in the Object Explorer. SQL Doc launches with the database details pre-populated so you can document the schema with a couple of clicks.

- · Custom output paths in the command line
 - The command line now includes the switch /OutputFolder. This allows you to specify the output folder for documentation.
- The specified path can be a relative path. The switch has the alias /of
 The ability to specify relative output paths simplifies automation.

SQL Doc 2.0 release notes

December 4th, 2008

Version 2.0 is a major release of SQL Doc. As well as numerous bug fixes and minor improvements it includes:

- Export documentation to Microsoft Word format.
 Streamlined object description editor.
 Per-project configuration options.

SQL Doc 1 release notes

Version 1.3 - July 14th, 2008

• SQL Server 2008 support

Version 1.2 - March 21th, 2007

• Bug fixes

Version 1.1 – January 17th, 2007

- Bug fixesSupport for Windows VistaSupport for Microsoft HTML Help (CHM)

Version 1.0 - November 25th, 2006

• Original release