Source Control for Oracle documentation

Source Control for Oracle

Source Control for Oracle links your Oracle schemas to your source control system. For more information, see the Source Control for Oracle product page.

Quick links

Creating a new source control project

Checking in changes

Getting changes

Branching and merging

Locking objects

Release notes

Requirements and supported Oracle versions

To use Redgate's tools for Oracle, you need:

- Windows Server 2003, Windows Server 2008, Windows Server 2012, Windows Vista, Windows 7, or Windows 8
- Microsoft .NET Framework version 4.0 or later

Supported Oracle versions

Redgate tools for Oracle are compatible with the following Oracle versions:

- 9i
- 10g
- 11g

> **Oracle 12c**
> Redgate's Oracle tools might work with Oracle 12c, but we don't officially support it yet. If you have problems with Oracle 12c, please tell us on the forums or contact Redgate support.

Required privileges

If you're not the owner of the schemas you want to link to source control, you need:

- `SELECT` privileges for non-PL/SQL objects (eg tables, views, synonyms)
- `EXECUTE` privileges for PL/SQL objects (eg procedures, functions, packages)

If you don't have sufficient privileges for an object, it isn't displayed in the Get latest or Check in tabs.

Privileges required for dedicated schemas

If you have a dedicated copy of a schema, you may also need these privileges to get changes:

- `ALTER <OBJECT TYPE>` or `ALTER ANY <OBJECT TYPE>` to **alter** objects (eg `ALTER ANY PROCEDURE`)
- `CREATE <OBJECT TYPE>` or `CREATE ANY <OBJECT TYPE>` to **create** objects (eg `ALTER INDEX`)
- `DROP <OBJECT TYPE>` or `DROP ANY <OBJECT TYPE>` to **drop** objects (eg `DROP TABLE`)

Supported source control systems

Source Control for Oracle works with:

- Subversion (SVN) 1.5, 1.6, and 1.7
- Team Foundation Server (TFS) 2005, 2008, 2010, 2012, and 2013, and Visual Studio Online

If you'd like Source Control for Oracle to support a different source control system, suggest it on our feature suggestions forum.

Copy of Supported source control systems

Source Control for Oracle works with:

- Subversion (SVN) 1.5, 1.6, and 1.7
- Team Foundation Server (TFS) 2005, 2008, 2010, 2012, and 2013, and Visual Studio Online
- Git 2.3.5 onwards

If your preferred source control system is not supported, or if you don't want Source Control for Oracle to automate any source control operations, you can specify a working folder to use as a source control repository. This option scripts out database changes and saves them to a working folder of your choice. You can then get and commit changes using your source control client.

If you'd like Source Control for Oracle to support a different source control system, suggest it on our feature suggestions forum.

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

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:

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:

Activate SQL Compare

Enter your SQL Compare serial number

Serial number

000-000-123456-0000 ✓

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]

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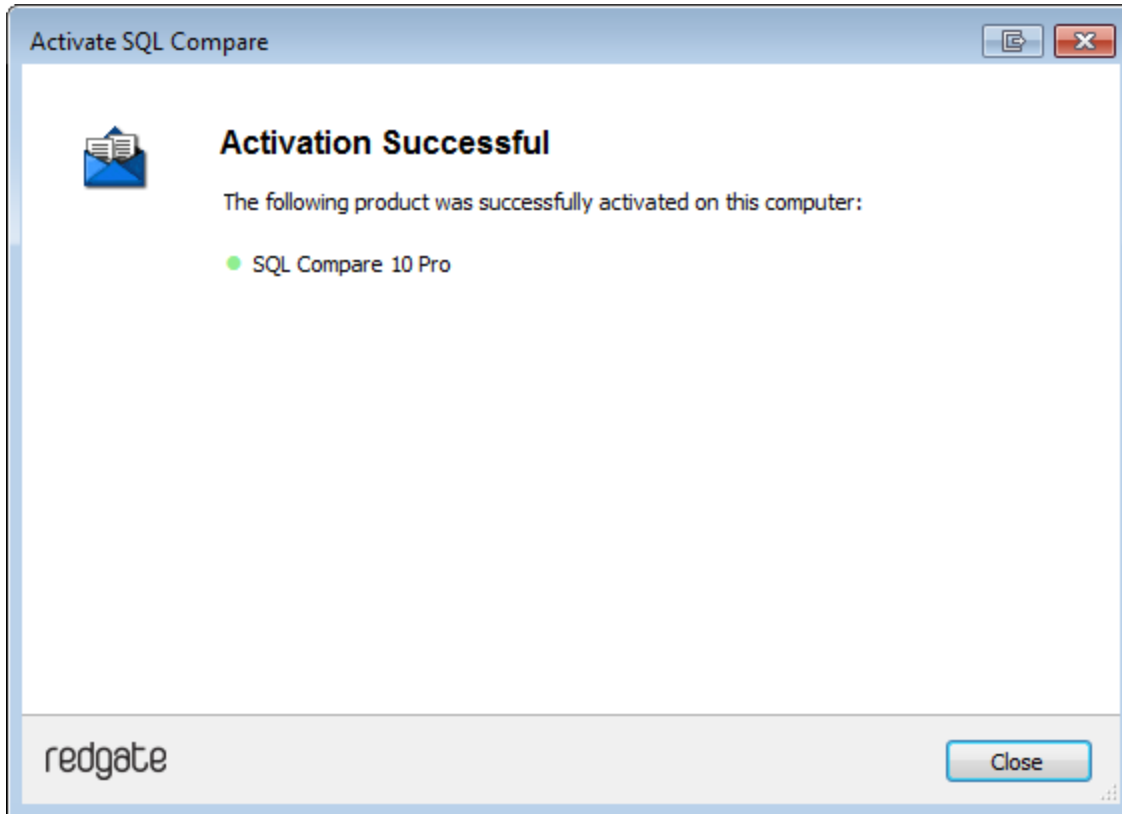
If there is a problem with your activation request, an error dialog box is displayed. For information about activation errors and what you can do to resolve them, see Troubleshooting licensing and activation errors. Depending on the error, you may want to try manual activation.

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:

Activation Error

A connection error has occurred

There was a problem connecting to the Red Gate activation server:
Unable to connect to the activation server

To activate using the Red Gate Web site, click Activate Manually.

redgate
[Activate Manually] [Close]
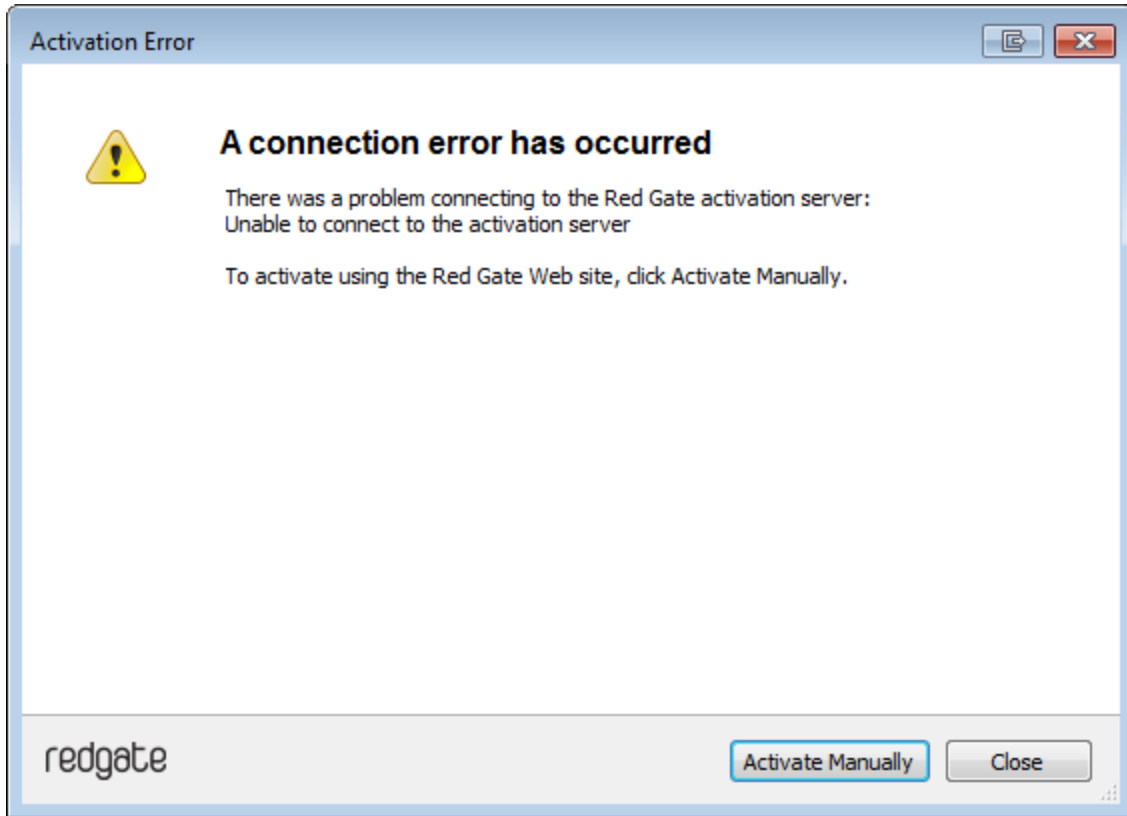
To activate manually:

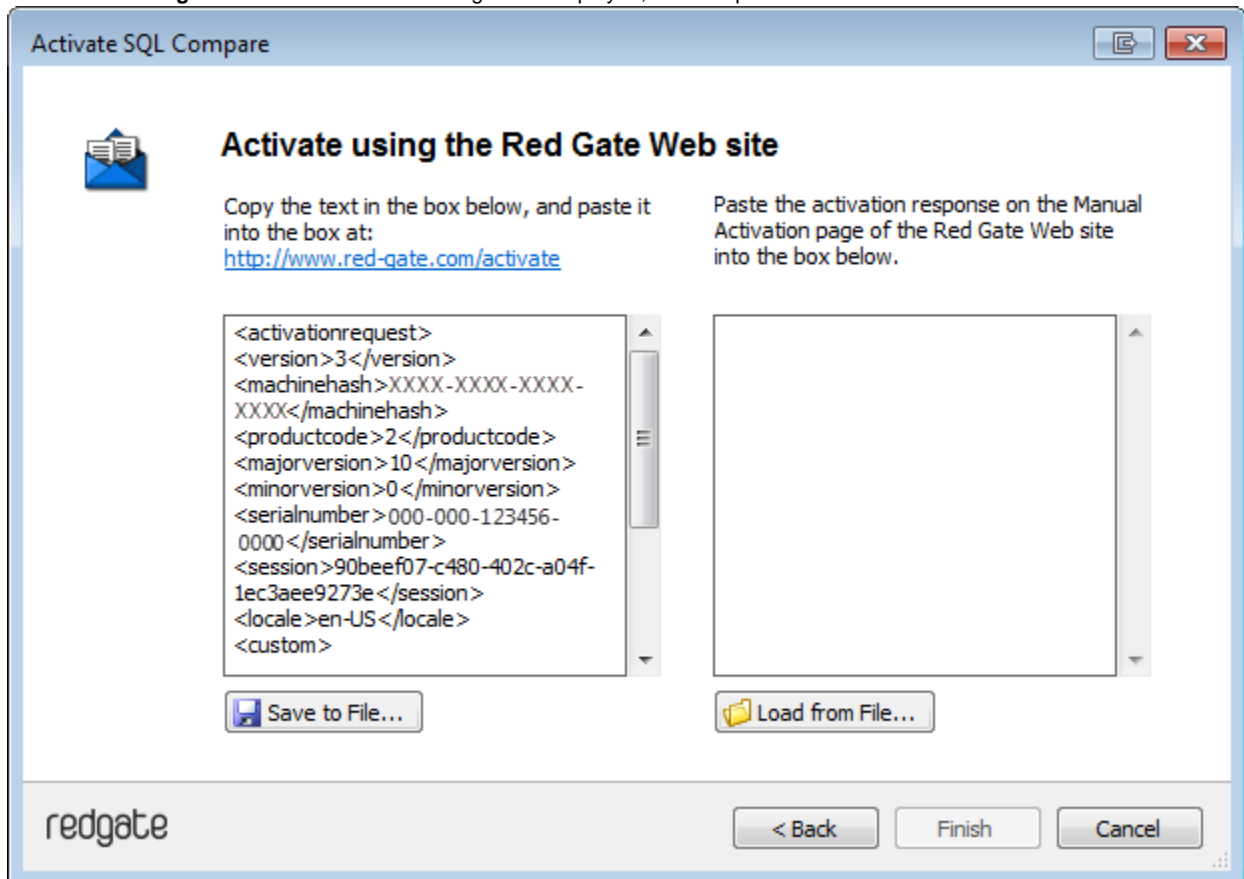1. On the error dialog box, click **Activate Manually**.

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

Activate SQL Compare

Activate using the Red Gate Web site

Copy the text in the box below, and paste it into the box at:
http://www.red-gate.com/activate

```
<activationrequest>
<version>3</version>
<machinehash>XXXX-XXXX-XXXX-
XXXX</machinehash>
<productcode>2</productcode>
<majorversion>10</majorversion>
<minorversion>0</minorversion>
<serialnumber>000-000-123456-
0000</serialnumber>
<session>90beef07-c480-402c-a04f-
1ec3aee9273e</session>
<locale>en-US</locale>
<custom>
```

[Save to File...]

Paste the activation response on the Manual Activation page of the Red Gate Web site into the box below.

[Load from File...]

redgate
[< Back] [Finish] [Cancel]

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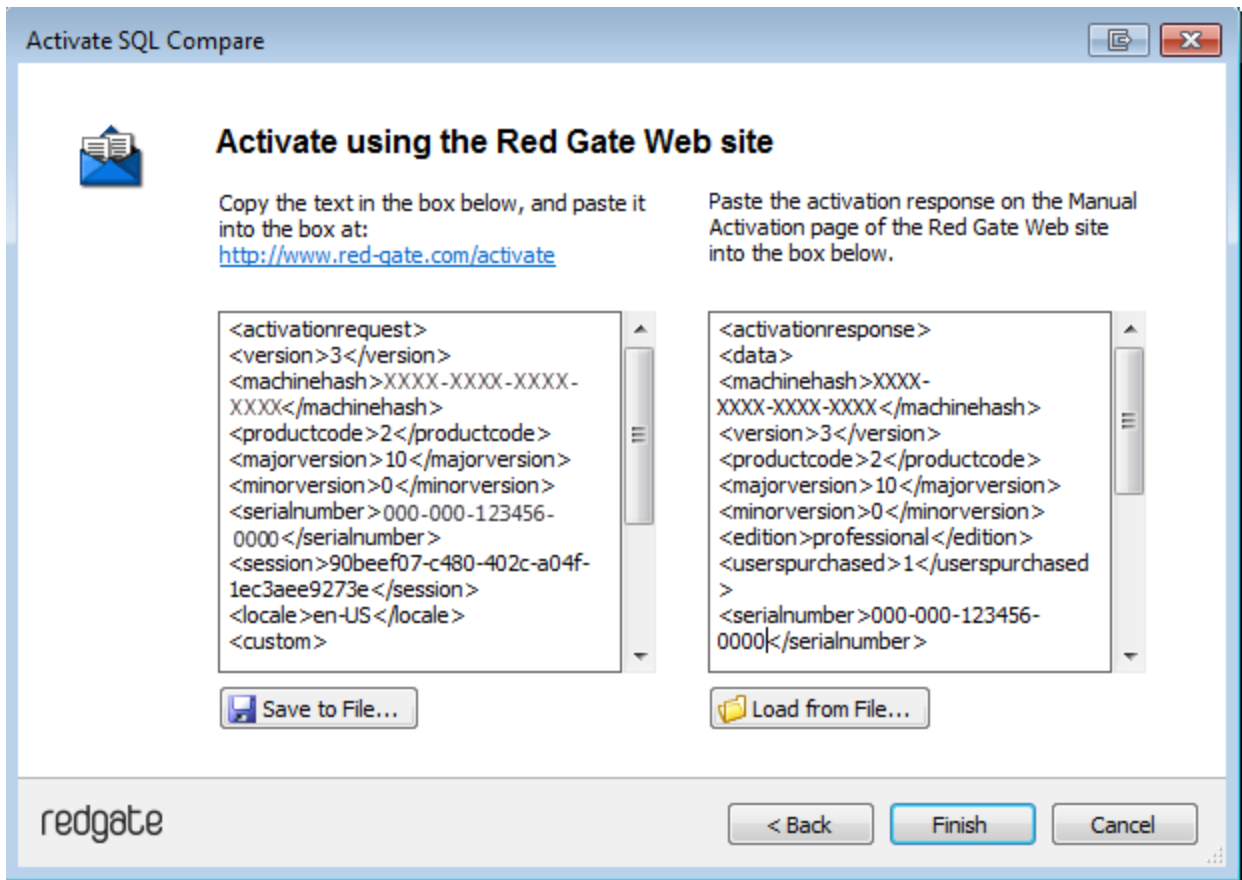
7. Click **Finish**.
   The **Activation successful** page is displayed.
8. Click **Close**.
   You can now continue to use your product.

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
```

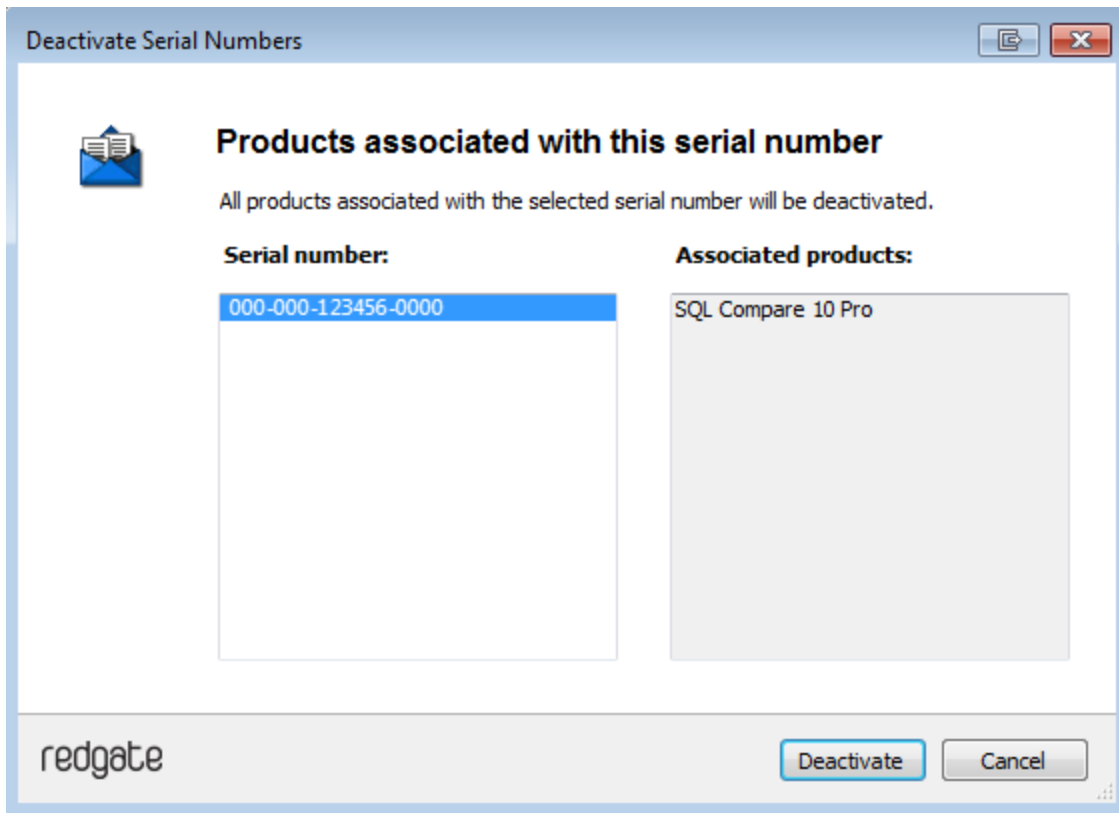The **Deactivate Serial Numbers** dialog box is displayed. Follow the instructions below.

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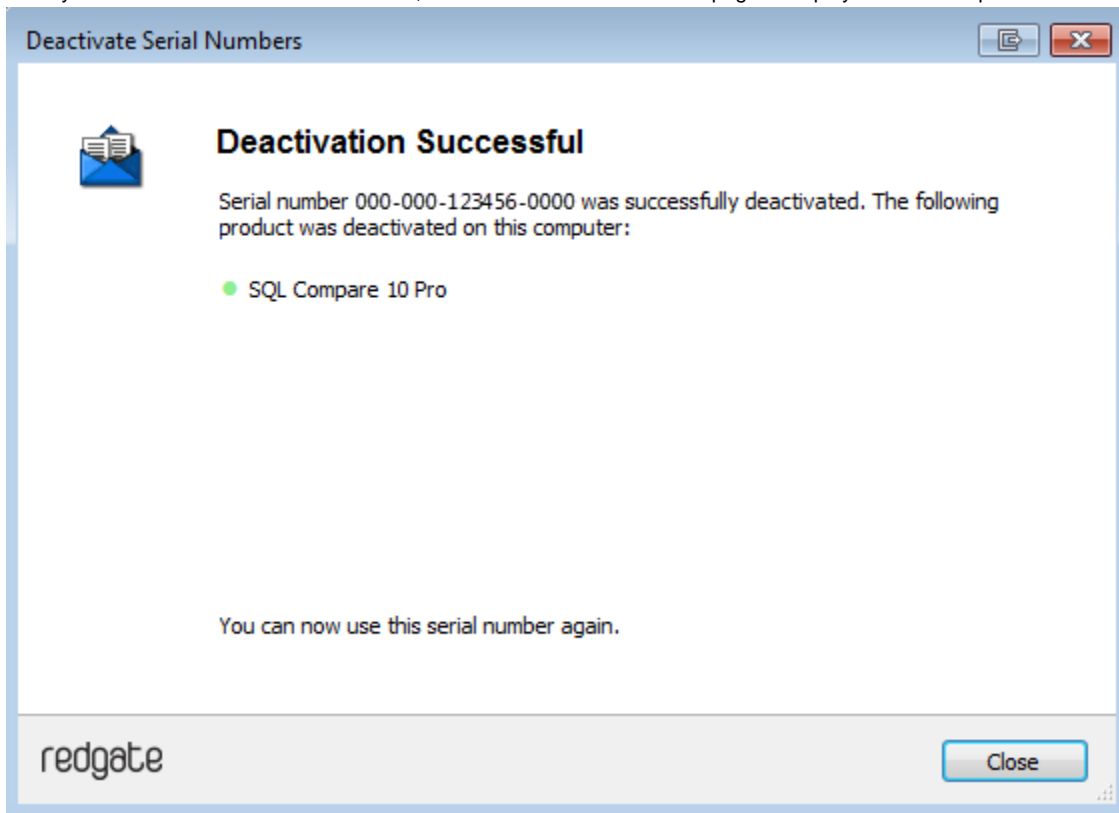
If there's a problem with your deactivation request, an error dialog box is displayed. For information about deactivation errors and how to resolve them, see Troubleshooting licensing and activation errors.

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

Troubleshooting licensing and activation errors

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 <product name>
- 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 <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* 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 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. When 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:
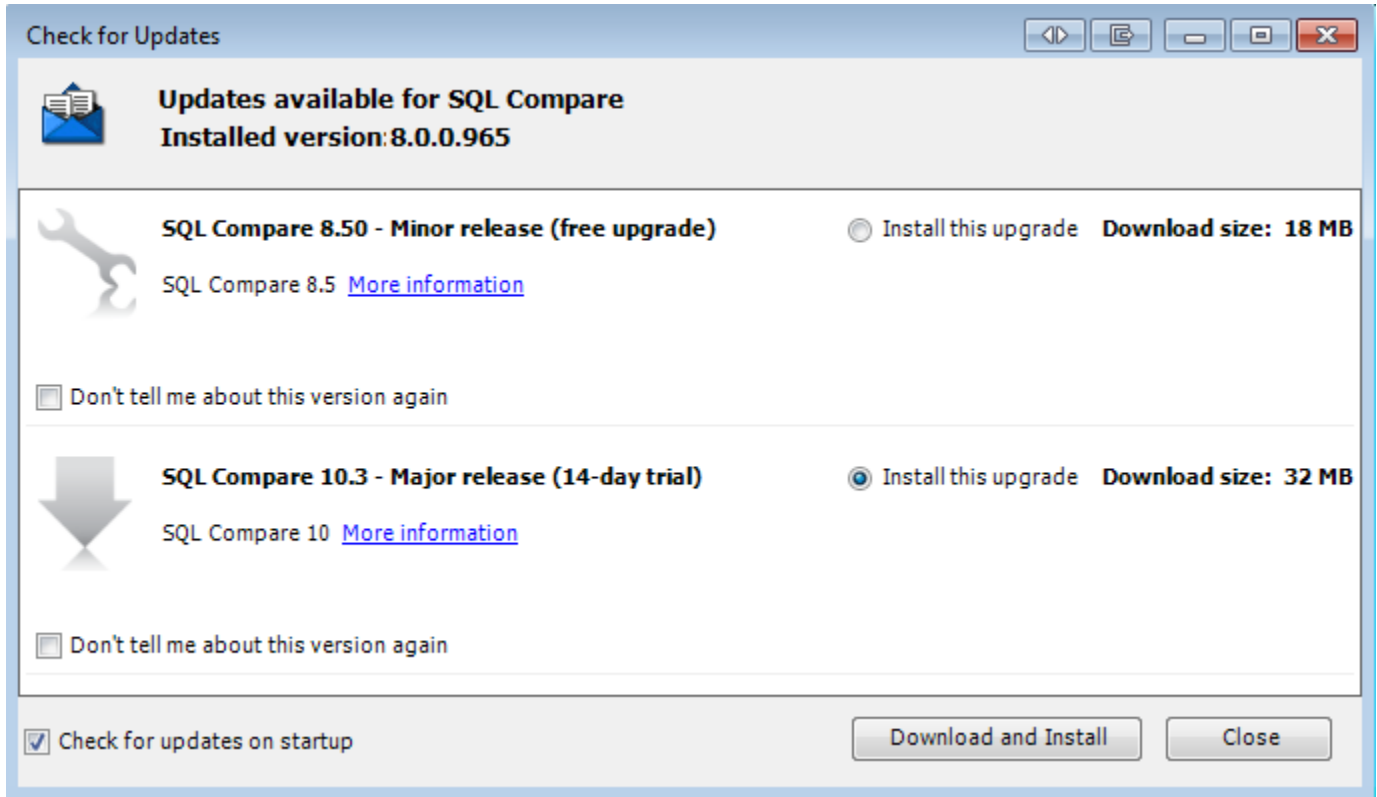
To view the full release details in your default web browser, click **More information**.

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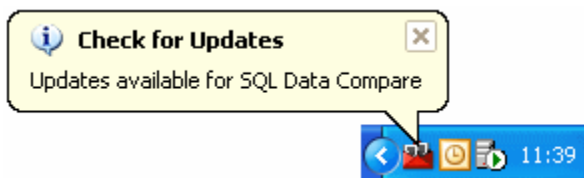
If you don't want to receive these notifications for the product, clear the **Check for updates on startup** check box.

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.

Setting up

- Creating a new source control project
- Using the evaluation repository
- Copy of Creating a new source control project

Creating a new source control project

A source control project connects your schemas to your source control repository. This allows Source Control for Oracle to monitor changes.

To create a new source control project, on the entry page or the source control projects page, click **Create a new source control project**, then follow the steps in the wizard:

- Step 1 of 5: Connect to development database
- Step 2 of 5: Select source control system
- Step 3 of 5: Select schema
- Step 4 of 5: Select folder
- Step 5 of 5: Summary

Step 1 of 5: Connect to development database

1. Specify connection details for the database you want to link to source control.
   Use the **TNS connection** tab if you have an Oracle client installed, or connect manually in the **Manual connection** tab.
2. Click **Next**.

Step 2 of 5: Select source control system

> **Don't have a source control system?**
> If you just want to see what Source Control for Oracle can do without setting it up with a source control system, we recommend the eval uation repository.
>
> Alternatively, these pages explain how to set up a repository with Subversion, a free source control system:
>
> - Setting up a local Subversion (SVN) repository
> - Setting up a Subversion (SVN) server

For Subversion

1. Go to the Subversion tab.
2. Specify the URL of an empty folder in your repository, or an existing script folder. You can use the http, https, svn, svn+ssh and file protocols. The URL for a local repository takes the form: *file:///C:/<RepositoryFilePath>*
   If you're the first person on your team to link the database to source control, specify an empty folder in your repository. If someone on your team has already linked this database to source control, specify the URL of the folder they used.
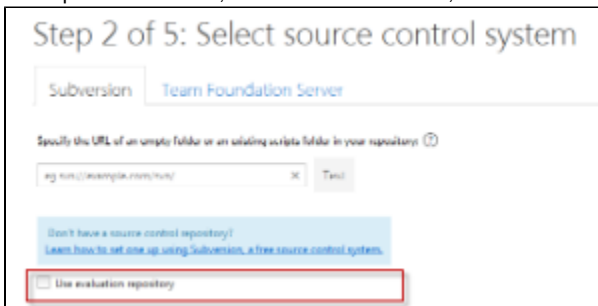
   > If you just want to experiment with Source Control for Oracle without setting it up with a source control system, check the **Use evaluation repository** checkbox. This creates a temporary source control repository on your computer using Subversion, a free source control system. For more information, see Using the evaluation repository.

3. Click **Next.**

For Team Foundation Server

1. Go to the Team Foundation Server tab.
2. Specify the URL and folder for your TFS repository.
3. Specify the URL of an empty folder in your repository, or an existing script folder.

   > If you're the first person on your team to link the database to source control, specify an empty folder in your repository. If someone on your team has already linked this database to source control, specify the URL of the folder they used.

   > All folder paths are case-sensitive.

4. Click **Next**.

Step 3 of 5: Select schema

Select the schema you want to link to source control and click **Next**.

You can add more schemas to the project in step 5.

> If you're not the owner of the schema, you need additional privileges to link it.

Step 4 of 5: Select folder

This folder contains a set of object creation scripts representing a database's schemas. A creation script file is created for each object in each schema. Objects are organized by schema, then object type; for example, *SchemaName\Tables*.

1. If the repository already contains a script folder representing a schema, you can select it in the **Existing folder** tab.
   If you don't have a script folder, select the **New folder** tab. A new folder will be created in the repository.
2. Type a name for the folder.

   > In most cases, you should give the folder the same name as the schema. This makes it easy to identify.
   >
   > However, if your team members have their own dedicated copies of the schema (eg *<SchemaName_Alice>* and *<SchemaName_Michael>*) we recommend you name the folder *<SchemaName>* without any differentiators.

3. Click **Next.**

Step 5 of 5: Summary

1. Review the schemas and source control repositories to link.

   > Schemas that depend on each other should be added to the same project.

   To add another schema to the project, click **Add another schema**. This returns you to step 3.
2. Click **Create project**.

A new source control project is created, connecting the schema(s) to the source control system.

> **You still need to check your schema objects into source control**
> At this stage, you haven't added anything to source control yet. To check your schema(s) into source control for the first time, open the new source control project and go to the **Check in** tab.

Using the evaluation repository

If you just want to experiment with Source Control for Oracle without setting it up with a source control system, you can use the **evaluation repository**. This option creates a temporary source control repository on your computer using Subversion, a free source control system.

The evaluation repository is designed to be used by a single person on a single computer, and doesn't work well for keeping backups or sharing changes with others. To get the full advantages of Source Control for Oracle, we recommend you set up a source control system when you're ready. For example, these pages explain how to set up a repository with Subversion, a free source control system:

- Setting up a local Subversion (SVN) repository
- Setting up a Subversion (SVN) server

Linking to the evaluation repository

1. Create a new source control project.
2. On step 2 of the wizard, on the **Subversion** tab, select the **Use evaluation repository** checkbox and click **Next**:

3. On step 4 of the wizard, make sure the **New folder** tab is selected and click **Next**.
4. Follow the steps to finish the wizard.

The schema is linked to an evaluation repository.

Copy of Creating a new source control project

A source control project connects your schemas to your source control repository. This allows Source Control for Oracle to monitor changes.

To create a new source control project, on the entry page or the source control projects page, click **Create a new source control project**, then follow the steps in the wizard:

- Step 1 of 5: Connect to development database
- Step 2 of 5: Select source control system
- Step 3 of 5: Select schema
- Step 4 of 5: Select folder
- Step 5 of 5: Summary

Step 1 of 5: Connect to development database

1. Specify connection details for the database you want to link to source control.
   Use the **TNS connection** tab if you have an Oracle client installed, or connect manually in the **Manual connection** tab.
2. Click **Next**.

Step 2 of 5: Select source control system

Source Control for Oracle currently supports three source control systems: **Subversion**, **Team Foundation Server,** and **Git.** It also supports the **Working folder** option, which you should use if your source control system is not supported, or if you don't want Source Control for Oracle to automate any source control operations.

> **Don't have a source control system?**
> If you just want to see what Source Control for Oracle can do without setting it up with a source control system, we recommend the eval uation repository.
>
> Alternatively, these pages explain how to set up a repository with Subversion, a free source control system:
>
> - Setting up a local Subversion (SVN) repository
> - Setting up a Subversion (SVN) server

For Subversion

1. Go to the Subversion tab.
2. Specify the URL of an empty folder in your repository, or an existing script folder.
   You can use the http, https, svn, svn+ssh and file protocols. The URL for a local repository takes the form: *file:///C:/<RepositoryFilePath>*

> If you're the first person on your team to link the database to source control, specify an empty folder in your repository. If someone on your team has already linked this database to source control, specify the URL of the folder they used.

> If you just want to experiment with Source Control for Oracle without setting it up with a source control system, check the **Use evaluation repository** checkbox. This creates a temporary source control repository on your computer using Subversion, a free source control system. For more information, see Using the evaluation repository.

3. Click **Next.**

For Team Foundation Server

1. Go to the Team Foundation Server tab.
2. Specify the URL and folder for your TFS repository.
3. Specify the URL of an empty folder in your repository, or an existing script folder.

> If you're the first person on your team to link the database to source control, specify an empty folder in your repository. If someone on your team has already linked this database to source control, specify the URL of the folder they used.

> All folder paths are case-sensitive.

4. Click **Next**.

For Git

If you're cloning from GitHub and you have two-factor authentication turned on, you'll need to enter a personal access token (instead of your username and password) to connect to GitHub.

The token must have *repo* and/or *public_repo* scopes, depending on the types of repository you'll be connecting to. More information on personal access tokens and scopes

1. Go to the Git tab.
2. Specify the location of the Git repository to clone from.
   If you're cloning from a remote repository, you can only clone with http or https.
3. Specify a folder in the Git repository.
4. Click **Next**.

For Working folder

This option scripts out database changes and saves them to a working folder of your choice. You can get and commit changes from this folder using your source control client.

1. Go to the Working folder tab.
2. Specify a folder to use as the working folder.
3. Click **Next**.

Step 3 of 5: Select schema

Select the schema you want to link to source control and click **Next**.

You can add more schemas to the project in step 5.

If you're not the owner of the schema, you need additional privileges to link it.

Step 4 of 5: Select folder

This folder contains a set of object creation scripts representing a database's schemas. A creation script file is created for each object in each schema. Objects are organized by schema, then object type; for example, *SchemaName\Tables*.

1. If the repository already contains a script folder representing a schema, you can select it in the **Existing folder** tab.
   If you don't have a script folder, select the **New folder** tab. A new folder will be created in the repository.
2. Type a name for the folder.

   In most cases, you should give the folder the same name as the schema. This makes it easy to identify.

   However, if your team members have their own dedicated copies of the schema (eg *<SchemaName_Alice>* and *<SchemaName_Michael>*) we recommend you name the folder *<SchemaName>* without any differentiators.

3. Click **Next.**

Step 5 of 5: Summary

1. Review the schemas and source control repositories to link.

   Schemas that depend on each other should be added to the same project.

To add another schema to the project, click **Add another schema**. This returns you to step 3.

2. Click **Create project**.

A new source control project is created, connecting the schema(s) to the source control system.

> **You still need to check your schema objects into source control**
> At this stage, you haven't added anything to source control yet. To check your schema(s) into source control for the first time, open the new source control project and go to the **Check in** tab.

Using Source Control for Oracle

Viewing source control projects

The **Source control projects** page lists the projects you've created:

- To see all the schemas linked in a project, click

  >

- Changes waiting to be retrieved or checked in are shown in the **Status** column.
- To remove a project, right-click and select **Remove project**. No files will be deleted from source control, and you can link the schema again in a new project later.
- To rename a project, right-click and select **Rename project**. This won't affect any other files.
- To get changes, check in changes, and view history for the schemas in a project, double-click the project or click

Getting changes

> If your team works on a single shared schema, you don't need to get use the Get latest tab. You're always up to date with the latest schema changes.

When other people check in changes to schemas in your project, their changes are sent to source control.

On the **Get latest** tab, you can get the changes from source control and apply them to your copy of the schema to keep up to date with the latest schema version. Changes waiting to be retrieved from source control are shown in the center pane:
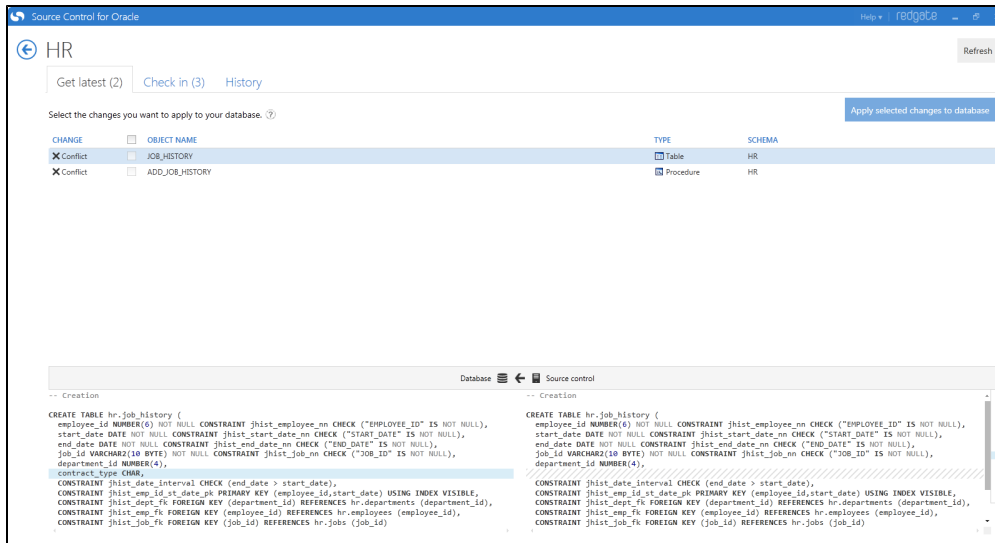
The Get latest tab shows:

- the type of **change** (eg create or edit)
- the **name** of the object changed
- the **type** of schema object changed (eg table or procedure)
- the **schema** the object was changed in
- the SQL differences for each object

> The Get latest tab is automatically refreshed when Source Control for Oracle refreshes the database. To refresh manually, click **Refresh**.
>
> You can change the polling interval by editing a config file .
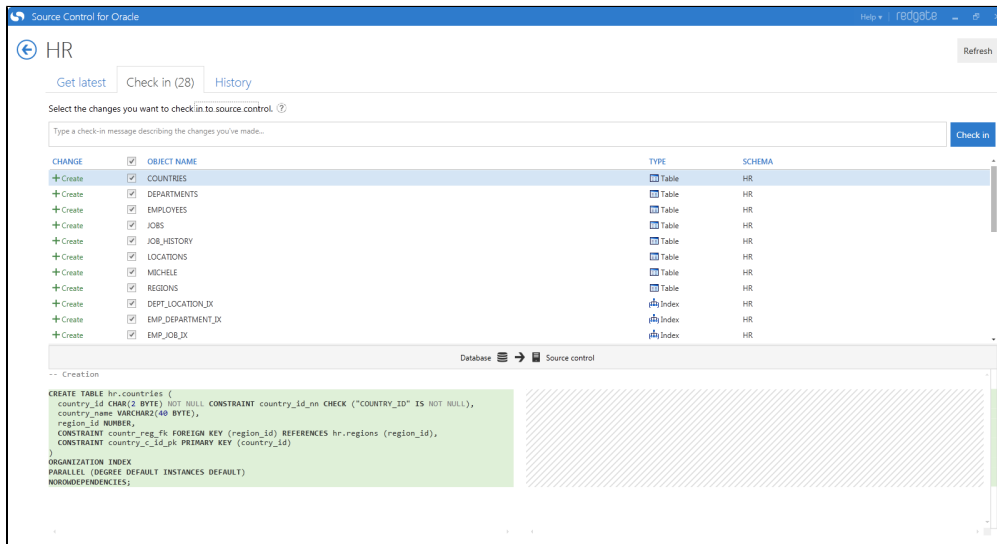
Getting changes

To get the latest version of a schema object:

1. Select the objects you want to get.
2. Click **Apply selected changes to database**.

Your database is updated to the latest version from source control.

Checking in changes

On the **Check in** tab, you can see the objects you've changed or added that haven't been checked into source control yet:

The Check in tab shows:

- the type of **change** (eg create or edit)
- the **name** of the object changed
- the **type** of schema object changed (eg table or procedure)
- the **schema** the object was changed in
- the SQL differences for each object

> Source Control for Oracle polls the database every 60 seconds to check for changes. To refresh manually, click **Refresh**.
>
> You can change the polling interval by editing a config file.

Checking in changes

To check a change in to source control:

1. Select the objects you want to check in.
2. Type a comment describing the change.

> Comments are useful when getting changes or reviewing history, so your team can quickly understand what's in each change.

3. Click **Check in.**

Source control is updated with your changes.

Associating check-ins with SVN bug IDs

To associate a commit with a bug or issue, include the issue number in the commit comment with a **#** symbol. For example: *This commit addresses issue #100*

For more information about setting up SVN bug IDs, see Integration with Bug Tracking Systems / Issue Trackers on the Tortoise SVN site.

Associating check-ins with TFS work items

To associate a check-in with a TFS work item, include #A*[work item number]* in the check-in comment. For example: *#A106.*

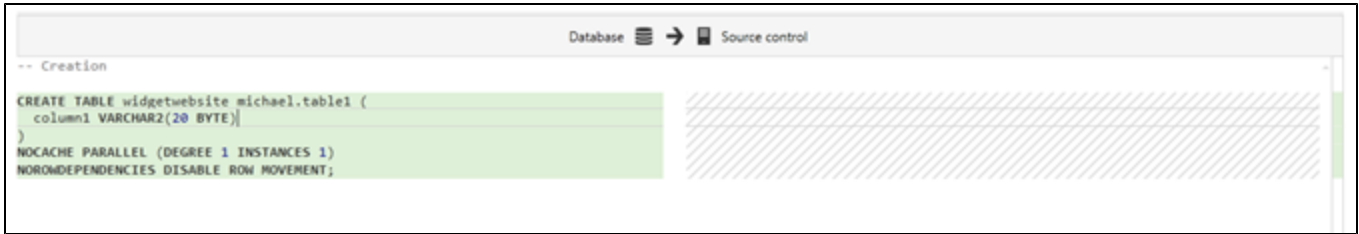To resolve a TFS work item, include *#R[work item number]* in the check-in comment. For example: *#R106.*

> The work item number doesn't appear in the check-in comment recorded on the TFS server.

For more information about setting up TFS work items, see Team Foundation Work Item Tracking Walkthroughs on the TFS site.

Viewing the SQL differences

In the Check in, Get latest and History tabs, the lower pane shows side-by-side differences in the SQL script for each object you highlight.
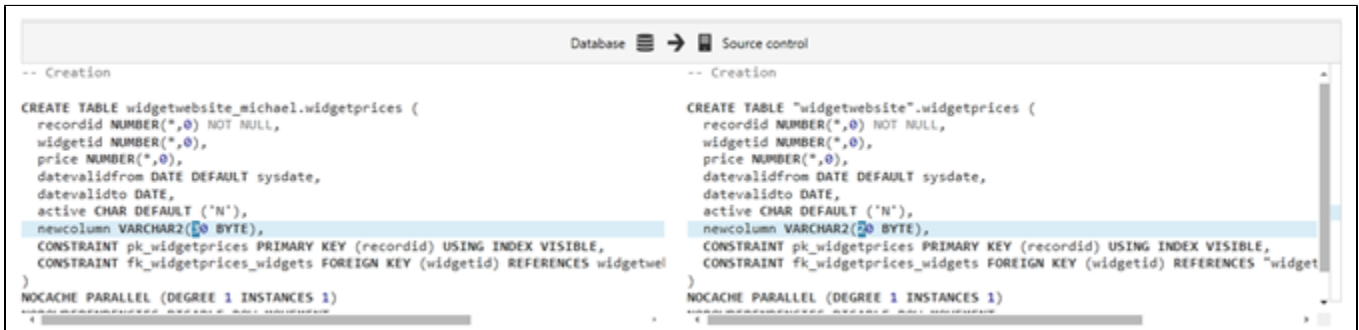
New lines are highlighted in **green**:

Edited lines are highlighted in **blue**:

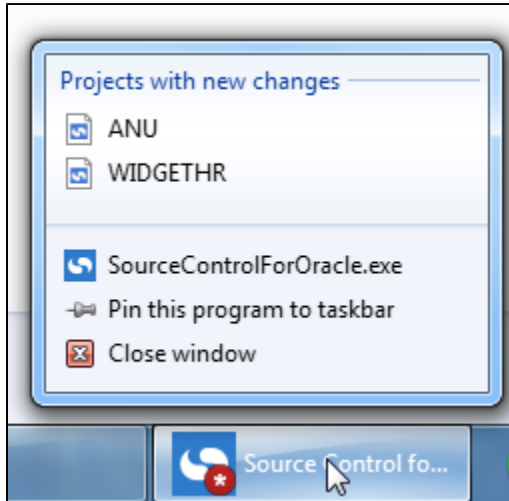Deleted lines are highlighted in **red**:

Notifications

When you have new changes to get or check in, a

 notification appears on the Source Control for Oracle logo in the taskbar.

To see the projects with new changes, right-click Source Control for Oracle in the taskbar:

After you open the project, the notification is removed.

Viewing history

You can see a history of all changes checked into source control on the **History** tab:

The History tab shows:

- each version (SVN revision or TFS changeset)
- the author, date, and comment associated with each check-in
- which objects changed in each check-in
- the SQL differences for each object (before and after)

Locking objects

You can only lock objects in Source Control for Oracle 2.

If your team works on a shared database, you can lock objects so other people can't edit the objects while you're working on them. This means teams don't accidentally overwrite work.

After you lock an object, you can work on it and check it in as usual. When you try to edit an object locked by someone else, the server returns an error. You can still unlock other people's objects if you need to.

Object locking isn't necessary for teams where each developer has their own copy of the database.

Setting up

To use object locking, a SQL script needs to be run on the database. You can do this from the **Lock objects** tab, or you can run the script manually.

For more information, and to view the script, see Setting up object locking.

Using the Lock objects tab

After locking is set up, the top pane lists objects that are currently locked in the database. The bottom pane lists objects that are currently unlocked.

The tab shows:

- the **name** of the object
- the **type** of object
- who the object was **locked by**
- the **date** the object was locked
- when the object was **last edited**
- the **comment** left by the person locking it (if one was provided)

You can move the mouse over the Date and Last edited columns to see exact time stamps.

To lock an object

1. In the **Unlocked objects** pane, select the object you want to lock.
2. Type a comment explaining why you're locking the object (optional).

   > Comments help your team know if it's OK to unlock the object or check it in.

3. Click **Lock selected objects**.

The object is locked and appears in the **Locked objects** pane. The rest of your team can see you've locked the object and won't be able to edit it until it's unlocked.

> You can also lock an object by right-clicking it.

> You can check in locked objects, but other people may still be working on them, and they might not be ready to check in to source control.

To unlock objects

- Select the objects in the **Locked objects** pane and click **Unlock selected objects**. You can unlock objects even if you're not the person who locked them.

- To unlock objects you locked yourself, click **Unlock all my objects**. You can also unlock an object by right-clicking it.

For an example of how a team might use object locking, see Example - locking objects.

Setting up object locking

> Object locking is only available in Source Control for Oracle 2.
>
> This feature isn't necessary for teams where each developer has their own database.
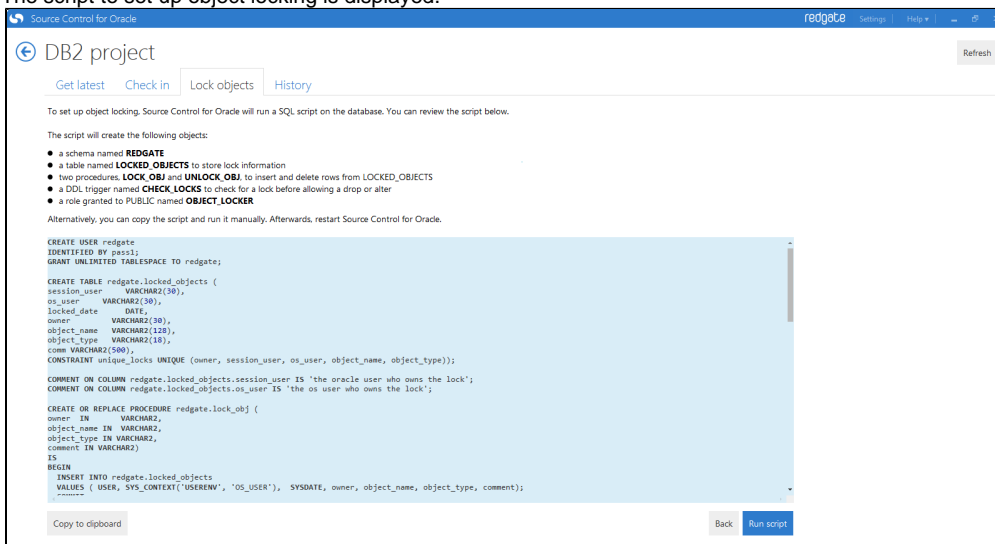
Object locking is set up per database, not per project. You'll be able to lock objects in all schemas linked to the project.

To set up object locking, you need these database privileges:

- CREATE USER
- CREATE ROLE
- GRANT ANY PRIVILEGE
- CREATE ANY TABLE
- CREATE ANY PROCEDURE

To set up object locking

1. In the **Lock objects** tab, click **Set up object locking**.
   The script to set up object locking is displayed.

2. Review the script and click **Run script**.
3. Click **OK**.

Object locking is now set up for the database.

Alternatively, run the setup script manually

If you prefer, you can run the setup script on your database manually.

1. View the SQL script:

Object locking setup script	> Expand
``CREATE USER redgate
IDENTIFIED BY pass1;
GRANT UNLIMITED TABLESPACE TO redgate;
CREATE TABLE redgate.locked_objects (
session_user   VARCHAR2(30),
os_user   VARCHAR2(30),
locked_date   DATE,
owner   VARCHAR2(30),
object_name   VARCHAR2(128),
object_type   VARCHAR2(18),
comm VARCHAR2(500),```	source

```
CONSTRAINT unique_locks UNIQUE (owner, session_user, os_user, object_name,
object_type));
COMMENT ON COLUMN redgate.locked_objects.session_user IS 'the oracle user who
owns the lock';
COMMENT ON COLUMN redgate.locked_objects.os_user IS 'the os user who owns the
lock';
CREATE OR REPLACE PROCEDURE redgate.lock_obj (
owner   IN        VARCHAR2,
object_name IN  VARCHAR2,
object_type IN VARCHAR2,
comment IN VARCHAR2)
IS
BEGIN
  INSERT INTO redgate.locked_objects
  VALUES ( USER, SYS_CONTEXT('USERENV', 'OS_USER'),  SYSDATE, owner, object_name,
object_type, comment);
  COMMIT;
END lock_obj;
/
CREATE OR REPLACE PROCEDURE redgate.unlock_obj (
obj_owner   IN        VARCHAR2,
obj_name IN  VARCHAR2,
obj_type IN VARCHAR2)
IS
BEGIN
  DELETE FROM redgate.locked_objects
  WHERE  redgate.locked_objects.owner = obj_owner
  AND redgate.locked_objects.object_name = obj_name
  AND redgate.locked_objects.object_type = obj_type;
COMMIT;
END unlock_obj;
/
CREATE OR REPLACE TRIGGER redgate.check_locks
BEFORE DDL
ON DATABASE
DECLARE
cnt NUMBER;
reason varchar2(80);
session_locker varchar2(30);
os_locker varchar2(30);
current_os_user varchar2(30);
locked_at date;
BEGIN
  SELECT SYS_CONTEXT('USERENV', 'OS_USER') INTO current_os_user FROM dual;

  SELECT count(*) into cnt
  FROM redgate.locked_objects
  WHERE redgate.locked_objects.owner  = ora_dict_obj_owner
  AND redgate.locked_objects.object_name = ora_dict_obj_name
  AND redgate.locked_objects.object_type = ora_dict_obj_type
  AND  (redgate.locked_objects.session_user != USER OR
redgate.locked_objects.os_user != current_os_user ) --allow alters by the user
who owns the lock
  AND ROWNUM=1;
   IF (cnt>0) THEN

      SELECT comm, session_user, os_user, locked_date  into reason,
session_locker, os_locker, locked_at
      FROM redgate.locked_objects
```

```
        WHERE redgate.locked_objects.owner  = ora_dict_obj_owner
        AND redgate.locked_objects.object_name = ora_dict_obj_name
        AND redgate.locked_objects.object_type = ora_dict_obj_type
        AND  (redgate.locked_objects.session_user != USER OR
redgate.locked_objects.os_user != current_os_user );

        RAISE_APPLICATION_ERROR(-20078,'You can''t ' || ora_sysevent || ' ' ||
ora_dict_obj_owner || '.' || ora_dict_obj_name || ', it was locked by ' ||
                        session_locker || '/' || os_locker || ' on ' ||
locked_at || ' with the comment ''' || reason || '''');
  END IF;
END check_locks;
/
CREATE ROLE object_locker;
GRANT SELECT ON redgate.locked_objects TO object_locker;
```

```
GRANT EXECUTE ON redgate.lock_obj TO object_locker;
GRANT EXECUTE ON redgate.unlock_obj TO object_locker;
GRANT object_locker to PUBLIC;
```

The script will create:
- a schema named REDGATE
- a table named LOCKED_OBJECTS to store lock information
- two procedures, LOCK_OBJ and UNLOCK_OBJ, to insert and delete rows from LOCKED_OBJECTS
- a DDL trigger named CHECK_LOCKS to check for a lock before allowing a drop or alter
- a role granted to PUBLIC named OBJECT_LOCKER

2. Run the script on the database.
3. Restart Source Control for Oracle.

Object locking is now set up for the database.

Removing object locking

To remove the object locking functionality, run this script on the database:

```
DROP USER redgate CASCADE;
DROP ROLE object_locker;
```

Example - locking objects

> Object locking is only available in Source Control for Oracle 2.

In this example, James and Michael work at Widget Development Ltd.

James is fixing a bug in the Widget Development website. To do this, he needs to work on three database objects:

- a trigger, WidgetTrigger
- a package, WidgetPackage
- a package body, also named WidgetPackage

James doesn't want anyone to edit these objects while he's working on them, so he decides to lock them.

To do this, in Source Control for Oracle 2, he goes to the **Locking** tab. In the **Unlocked objects** pane, he selects the objects and types a comment explaining why he's locking them:
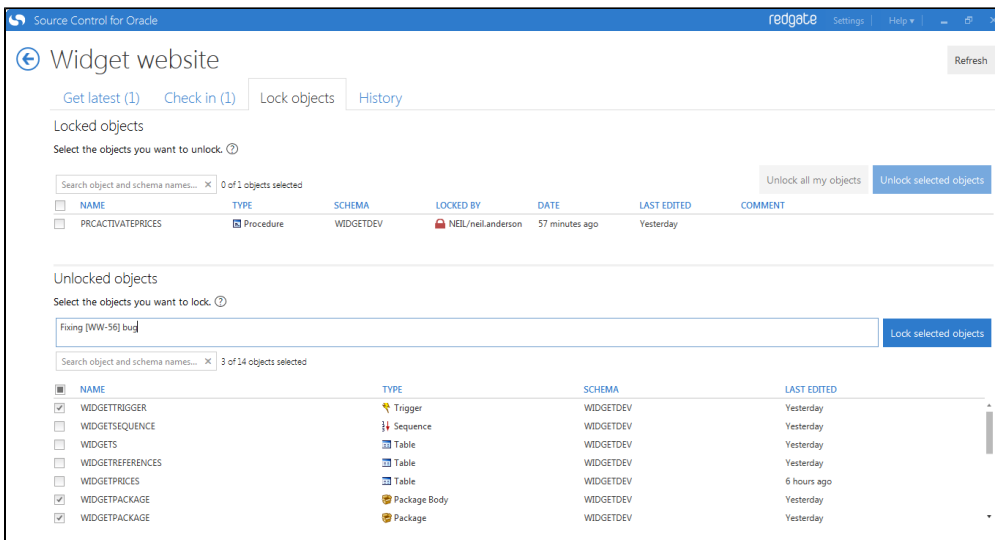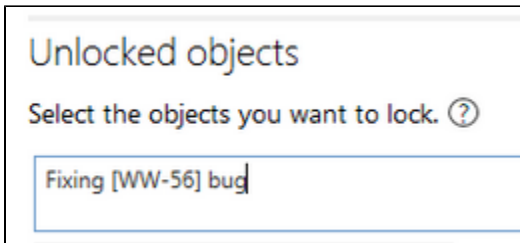
He clicks **Lock selected objects**.

The objects are moved to the **Locked objects** pane:
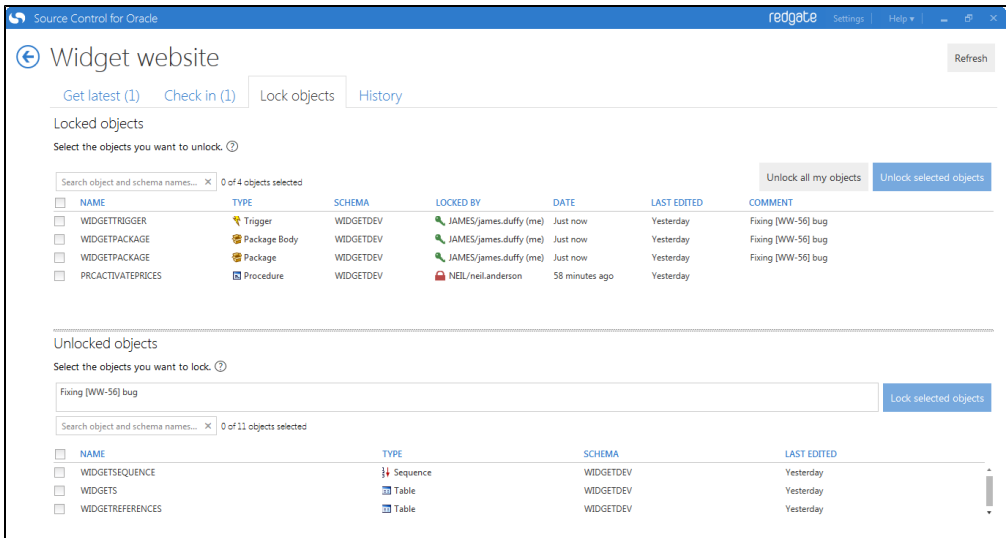
The objects are now locked and can't be edited by others.

Meanwhile, Michael decides to drop the locked object WidgetPackage in Oracle SQL Developer. He doesn't realize James is working on it. When he tries to drop the object, the server returns an error message:
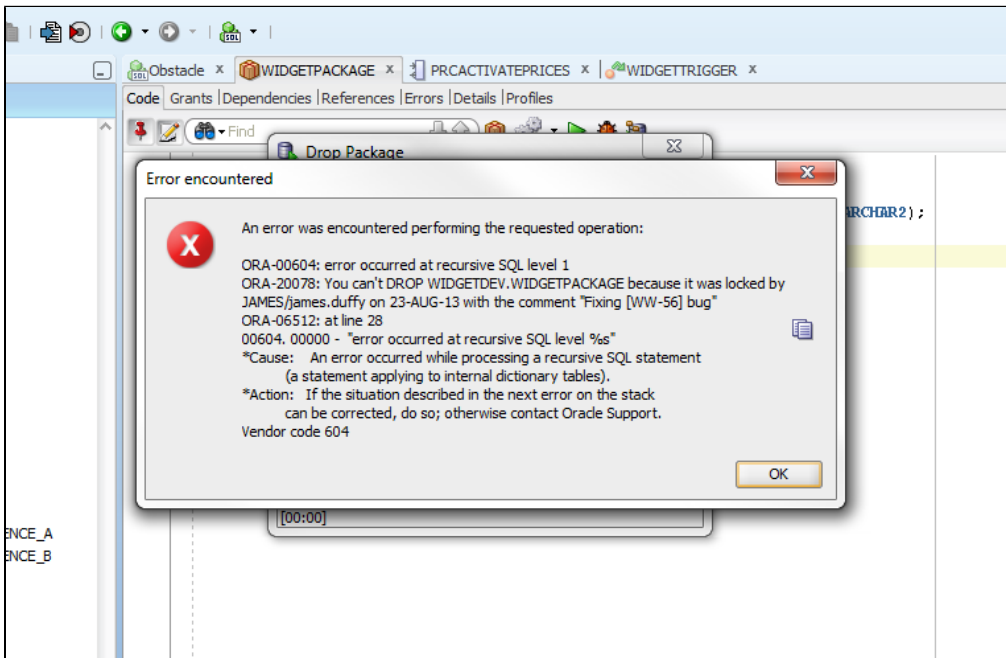
The error contains the comment James wrote when he locked the object: *Fixing [WW-56] bug*.

Filtering objects

> You can only filter objects in Source Control for Oracle 2.0.5 and later.

If you have objects you never want to add to source control, you can filter them out based on their type or name.

To filter objects, on the **Projects** page, right-click the project you want to edit filters for, and select **Edit object filters**:
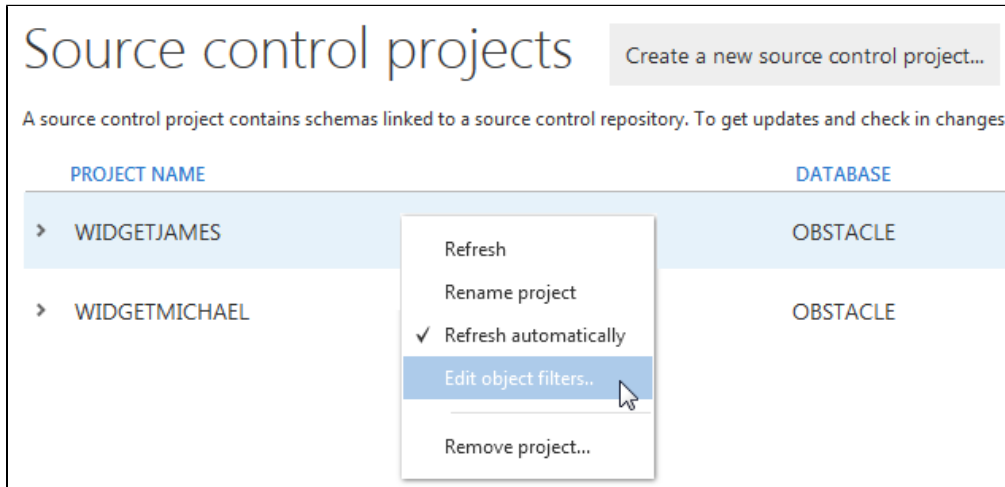
The **Filters** page opens:
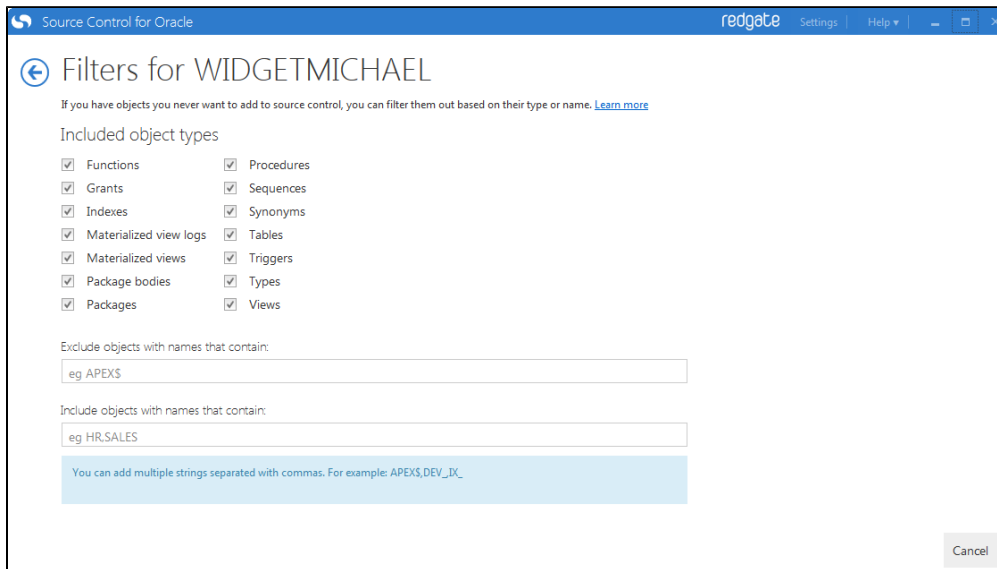
Filtering by object type

Select the object types you want to include.

Object types you don't select will never be listed in the Check in or Get latest tabs, even if you include them by name in the **Include objects with names that contain** field below.

Filtering by object name

To exclude an object by name, specify text in the **Exclude objects with names that contain** field. Objects whose names contain the text you specify are excluded from the Check in and Get latest tabs. For example, if you specify *CUSTOMER,* the object *CUSTOMERSALES* is excluded.

To add an exception, specify text in the **Include objects with names that contain** field. For example, if you exclude objects with names that include *CUSTOMER* in the top field, but include objects with names that include *CUSTOMERS* in the bottom field, the object *CUSTOMERSALES*

is included.

Sharing filter options

When you create or edit a filter, it's listed as a change on the **Check in** tab:
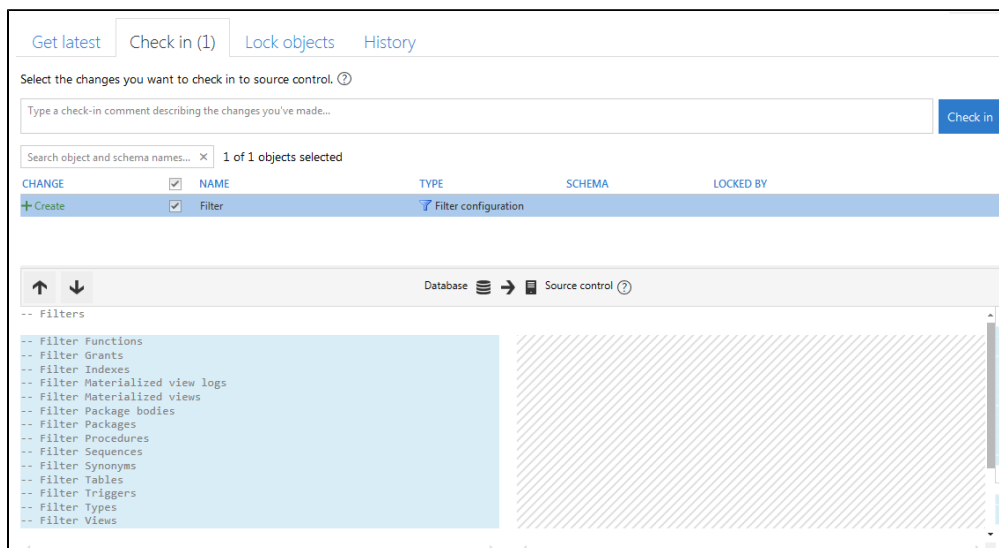
You can see the differences between your current filter and the version in source control.

To share your filter options, check the filter option into source control. Your team can get the filter option change in the Get latest tab.

Resolving conflicts

Conflicts happen when two people modify the same object. When a conflict occurs, the change is listed as **Conflict**:

CHANGE		NAME	OBJECT	SCHEMA
⇄ Conflict	☐	EMPLOYEES	▦ Table	HR

Conflicted objects can't be checked in or retrieved until the conflict is resolved.

To resolve a conflict:

1. Click on the conflicted object.
   The conflict resolution bar is shown:

⚠ The database version of this object conflicts with the source control version.	Resolve... ▾	?
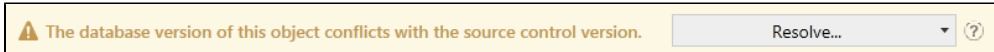
2. In the drop-down menu, select either **Use database version** or **Use source control version**.

> You can also press D on the keyboard to choose the database version, or S to choose the source control version.
>
> You can right-click conflicted objects to resolve them.

The change is listed as Resolved.

Merging

Source Control for Oracle has no merge functionality. To manually merge changes from two conflicting versions of an object, resolve the conflict, then edit the object to include the changes from the other version.

> You can copy either version of an object's creation script from the object difference pane and paste it into a new query window.

> For more information about merging, see Branching and merging.

Selecting referenced objects

If you select an object in the Get latest or Check in tabs without also selecting the objects it references, the referenced object warning appears:

⚠ Some selected objects reference objects you haven't selected. <u>Select referenced objects</u> ?

> You can check in an object without the objects it references, but other people may not be able to get your changes.
>
> If you get an object without also getting the objects it references, getting changes may fail or create an inconsistent database.

To quickly select all the objects referenced by the selected objects, click **Select referenced objects**.

Keyboard navigation

You can use your keyboard to control Source Control for Oracle.

Keyboard	Function
Arrow keys	Select project
	Select object
Enter	Selected/default action
Ctrl + Enter	Check in changes (on Check in tab)
Ctrl + Tab	Switch between tabs in the project
Tab	Select control
F5	Refresh
F1	Open documentation (opens in default browser)
D (on conflicted object)	Use database version of conflicted object
S (on conflicted object)	Use source control version of conflicted object
Space	Select or deselect object

Setting the database polling interval

By default, Source Control for Oracle polls the database for changes every 60 seconds. You can change this by editing a config file.

> We don't recommend you change the polling interval unless the default interval is causing problems.

1. Go to the Source Control for Oracle config files folder. By default, this is located at: *%localappdata%\Red Gate\Source Control for Oracle 1*
2. Open *ConnectionStore.xml* in a text editor.
3. Change the value in the `<PollingInterval>` tags to the interval you want. The interval time is set in milliseconds (1000 milliseconds = 1 second).
   To disable polling, set the value to 0.

   > Don't edit anything else in the file unless advised by Redgate support. Editing other settings may cause errors.

4. Save and close the file.

Source Control for Oracle polls the database at the interval you specified.

> If you change the automatic refresh setting on the source control projects page, the `<PollingInterval>` value in the config file will also change.

Copy of Checking in changes

On the **Check in** tab, you can see the objects you've changed or added that haven't been checked into source control yet:

The Check in tab shows:

- the type of **change** (eg create or edit)
- the **name** of the object changed
- the **type** of schema object changed (eg table or procedure)
- the **schema** the object was changed in
- the SQL differences for each object

> Source Control for Oracle polls the database every 60 seconds to check for changes. To refresh manually, click **Refresh**.
>
> You can change the polling interval by editing a config file.

Checking in changes

To check a change in to source control:

1. Select the objects you want to check in.
2. Type a comment describing the change.

    > Comments are useful when getting changes or reviewing history, so your team can quickly understand what's in each change.

3. Click **Check in.**

Source control is updated with your changes.

Associating check-ins with SVN bug IDs

To associate a commit with a bug or issue, include the issue number in the commit comment with a **#** symbol. For example: *This commit addresses issue #100*

For more information about setting up SVN bug IDs, see Integration with Bug Tracking Systems / Issue Trackers on the Tortoise SVN site.

Associating check-ins with TFS work items

To associate a check-in with a TFS work item, include #A*[work item number]* in the check-in comment. For example: *#A106*.

To resolve a TFS work item, include *#R[work item number]* in the check-in comment. For example: *#R106*.

> The work item number doesn't appear in the check-in comment recorded on the TFS server.

For more information about setting up TFS work items, see Team Foundation Work Item Tracking Walkthroughs on the TFS site.

Searching for objects

By default, searching is confined to the **Name** and **Schema** columns.

Searching in a particular column

To search in a particular column, use the column name followed by a colon and your search term, for example **change:edit** or **lockedby:phil**.

type:trigger	×	⑦ 3 of 36 objects selected (33 filtered out)		
CHANGE	■	**NAME**	**TYPE**	**SCHEMA**	**LOCKED BY**
╋ Create	✓	SECURE_EMPLOYEES	⚡ Trigger	HR	
╋ Create	✓	TRG_CHG_LOG_GET_SQL	⚡ Trigger	HR	
╋ Create	✓	UPDATE_JOB_HISTORY	⚡ Trigger	HR	

Searching for locked objects

To search for objects you've locked, use **lockedby:(me)**. To search for all locked objects, use **lockedby:** with no search term.

Excluding a term

To exclude a term, use **-**. For example, to exclude objects with **job** in the object or schema name, use **-job**, or to exclude all tables, use **-type:table**.

Combining search terms

You can combine the above methods to make your search more specific. For example:

> **lockedby: type:view -type:log department schema:hr**

This displays locked views and locked materialized views - but **not** materialized view logs - containing **department** in the name or schema and **hr** in the schema.

> To exclude a search term made up of more than one word, you need to use **-** in front of each word you want to exclude. If you only use **-** in front of the first word, only this word will be excluded and the others will be included.
>
> For example, if you want to search for views but exclude view logs, you need to use both **type:view** and **-type:log**. If you use **-type:view log**, this will exclude views but search for logs.

Copy of Locking objects

> You can only lock objects in Source Control for Oracle 2.

If your team works on a shared database, you can lock objects so other people can't edit the objects while you're working on them. This means teams don't accidentally overwrite work.

After you lock an object, you can work on it and check it in as usual. When you try to edit an object locked by someone else, the server returns an error. You can still unlock other people's objects if you need to.

> Object locking isn't necessary for teams where each developer has their own copy of the database.

Setting up

To use object locking, a SQL script needs to be run on the database. You can do this from the **Lock objects** tab, or you can run the script manually.

For more information, and to view the script, see Setting up object locking.

Using the Lock objects tab

After locking is set up, the top pane lists objects that are currently locked in the database. The bottom pane lists objects that are currently unlocked.

The tab shows:

- the **name** of the object
- the **type** of object
- who the object was **locked by**
- the **date** the object was locked
- when the object was **last edited**
- the **comment** left by the person locking it (if one was provided)

> You can move the mouse over the Date and Last edited columns to see exact time stamps.

To lock an object

1. In the **Unlocked objects** pane, select the object you want to lock.
2. Type a comment explaining why you're locking the object (optional).

> Comments help your team know if it's OK to unlock the object or check it in.

3. Click **Lock selected objects**.

The object is locked and appears in the **Locked objects** pane. The rest of your team can see you've locked the object and won't be able to edit it until it's unlocked.

> You can also lock an object by right-clicking it.

> You can check in locked objects, but other people may still be working on them, and they might not be ready to check in to source control.

To unlock objects

- Select the objects in the **Locked objects** pane and click **Unlock selected objects**. You can unlock objects even if you're not the person who locked them.

- To unlock objects you locked yourself, click **Unlock all my objects**. You can also unlock an object by right-clicking it.

For an example of how a team might use object locking, see Example - locking objects.

Searching for objects

By default, searching is confined to the **Name** and **Schema** columns.

Searching in a particular column

To search in a particular column, use the column name followed by a colon and your search term, for example **name:department** or **lockedby:p hil**.

Searching for objects you've locked

To search for objects you've locked, use **lockedby:(me)**.

Excluding a term

To exclude a term, use **-**. For example, to exclude objects with **job** in the object or schema name, use **-job**, or to exclude all tables, use **-type:tabl
e**.

Combining search terms

You can combine the above methods to make your search more specific. For example:

> **type:view -type:log department schema:hr**

This displays views and materialized views - but **not** materialized view logs - containing **department** in the name or schema and **hr** in the
schema.

> To exclude a search term made up of more than one word, you need to use **-** in front of each word you want to exclude. If you only use
> **-** in front of the first word, only this word will be excluded and the others will be included.
>
> For example, if you want to search for views but exclude view logs, you need to use both **type:view** and **-type:log**. If you use **-type:vie
> w log**, this will exclude views but search for logs.

Editing comparison options

> You can only edit the comparison options in Source Control for Oracle 2.0.6 and later.

To edit the comparison options, on the **Projects** page, right-click the project you want to edit comparison options for, and select **Edit comparison options**:
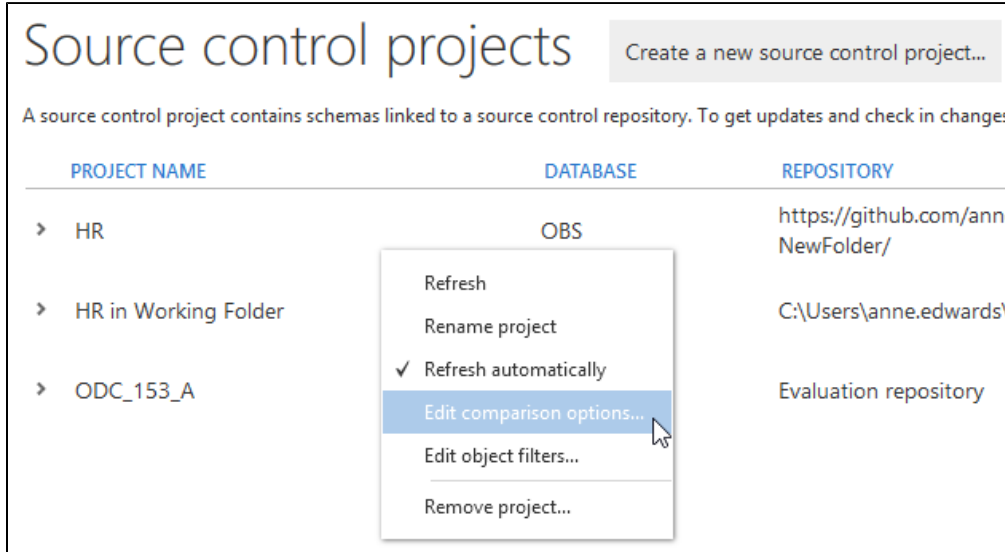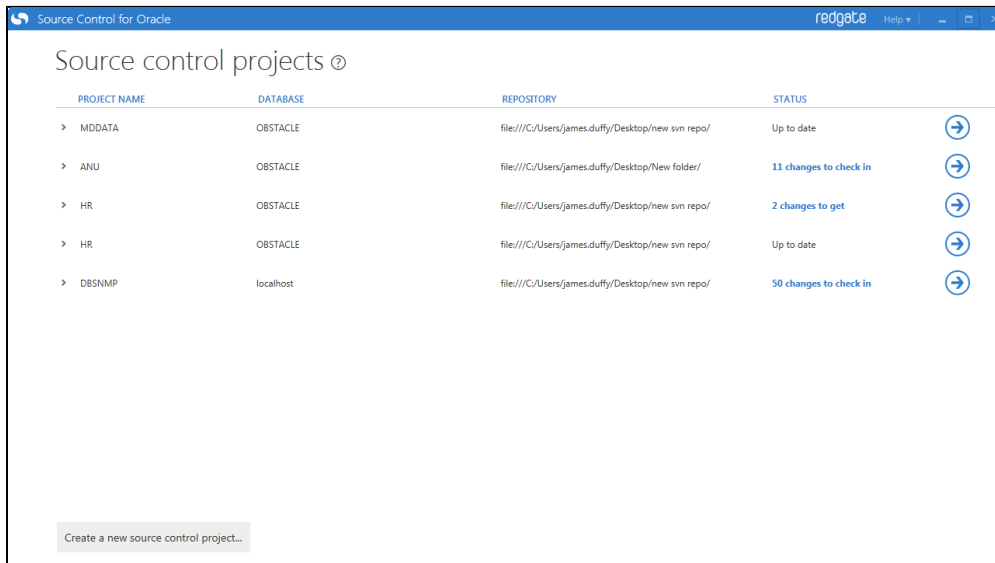
The **Comparison options** page opens:
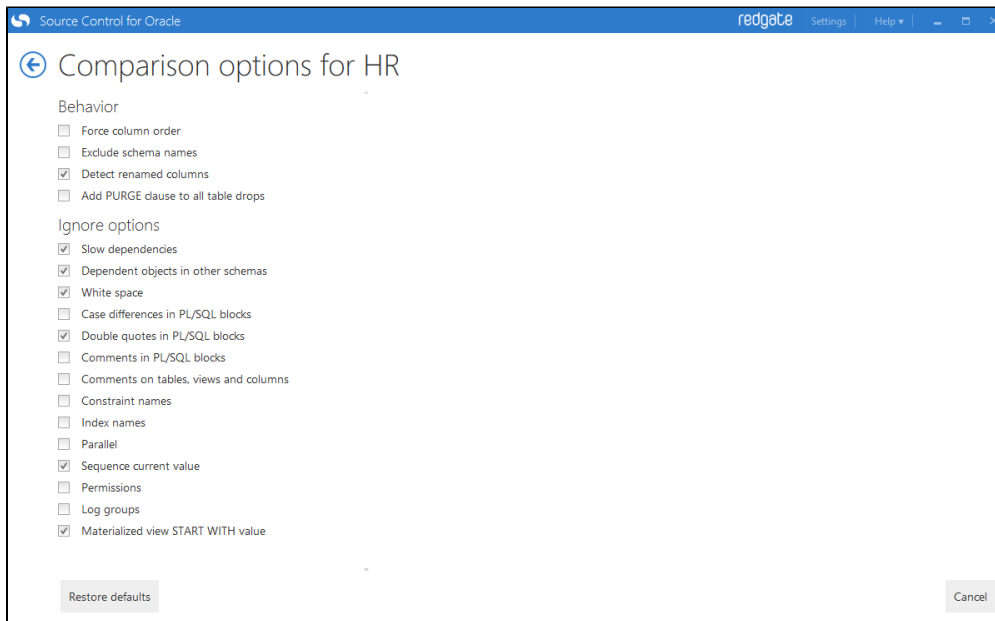
Move the mouse over an option to see an explanation of what the option does.

Copy of Viewing source control projects

The **Source control projects** page lists the projects you've created:

- To see all the schemas linked in a project, click
  >
- Changes waiting to be retrieved or checked in are shown in the **Status** column.
- To get changes, check in changes, and view history for the schemas in a project, double-click the project or click

Right-click on a project to see more options:
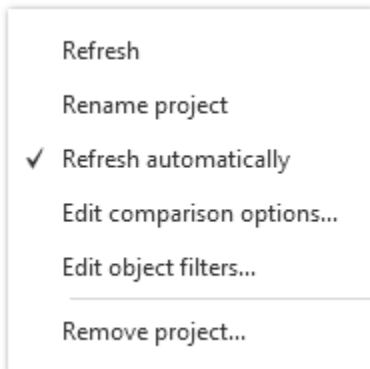
- **Rename project** (this won't affect any other files)
- **Edit comparison options**
- **Edit object filters**
- **Remove project** (no files will be deleted from source control, and you can link the schema again in a new project later)

Working with source control systems

- Setting up a Subversion (SVN) server
- Setting up a local Subversion (SVN) repository
- Branching and merging
- Copy of Branching and merging

Setting up a Subversion (SVN) server

This is page explains how to set up a Subversion (SVN) server using VisualSVN Server, an installation and administration application for SVN on Microsoft Windows servers.

> This page doesn't cover manual installation and configuration of SVN, or installation on non-Windows servers.

> For more detailed information about setting up an SVN server, see:
>
>   - Subversion documentation chapter 6 - Server Configuration
>   - TortoiseSVN documentation chapter 3 - The Repository

Installing with VisualSVN Server

VisualSVN Server automates the setup of a SVN server, and is available both as a free tool (the Standard Edition), and as the paid Enterprise Edition. The Enterprise Edition includes Integrated Windows Authentication, as well as richer logging and administration tools.

This example uses the free version.

To set up SVN, download and run the VisualSVN Server installer on the server you want to use, then follow the wizard to complete the installation.

> You can download the VisualSVN Server installer from visualsvn.com. VisualSVN Server provides an installation getting started guide.

Page 4 of the installation wizard lets you specify the location where the SVN repositories are created, and the type of authentication:
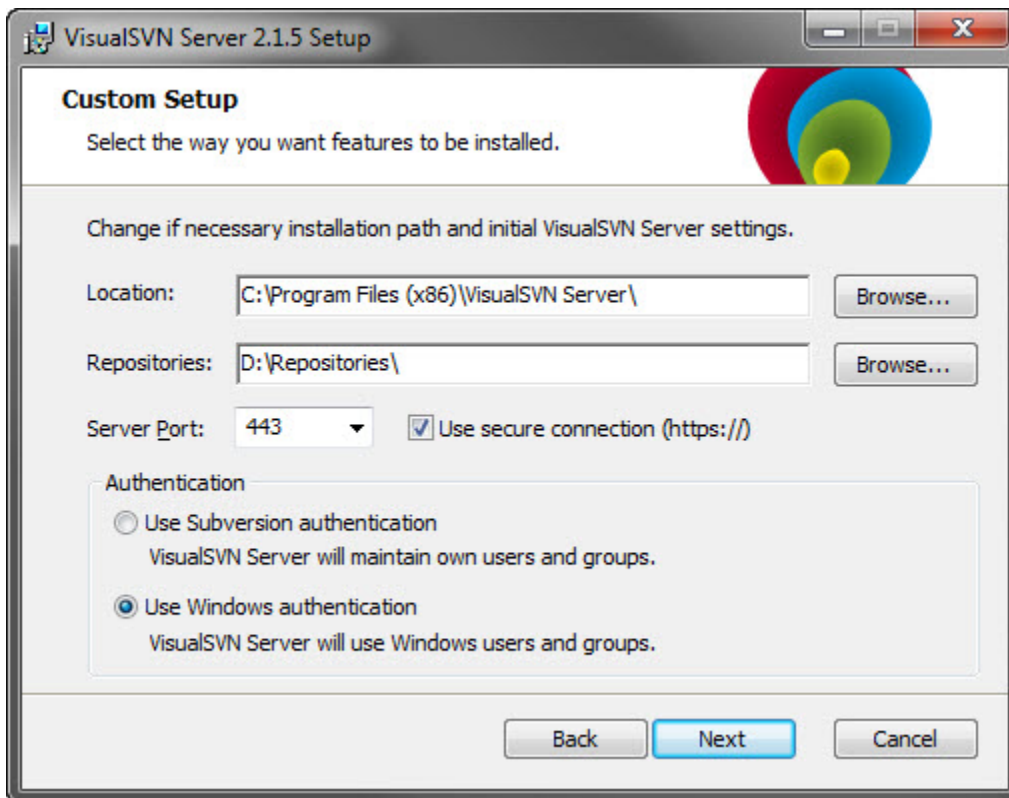
SVN authentication requires you to set up users and credentials on the SVN server.

Windows authentication allows you to use your existing Windows user accounts.

> If you're using Windows authentication in VisualSVN Server Standard Edition (the free version), or SVN authentication in either edition, Source Control for Oracle may prompt you to enter your user name and password when linking a schema to source control.

At the end of the installation, run the VisualSVN Server Manager:
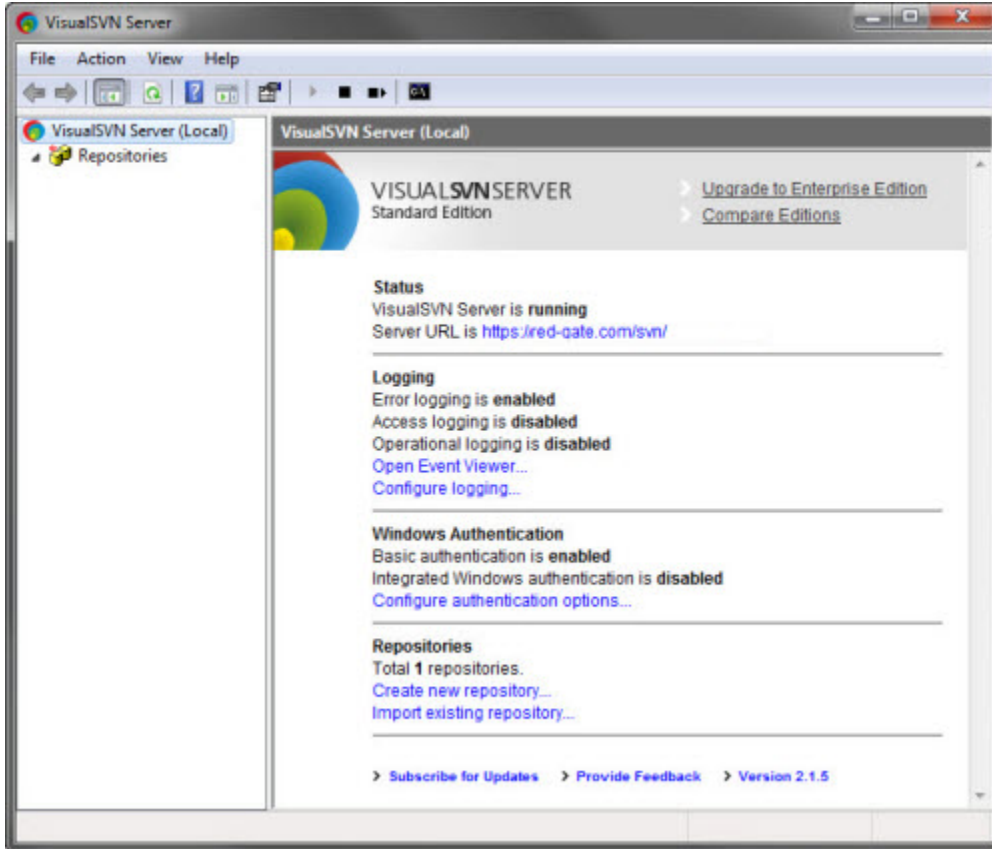
The Server Manager allows you to set up repositories and configure security.

To set up a repository to use with Source Control for Oracle:

1. In the Console Tree pane, to the left, right-click **Repositories**, and click **Create New Repository**.
   The Create New Repository dialog box is displayed.
2. In Repository Name, type a name for the repository.
   Optionally, to create the recommended VisualSVN Server directory structure in your repository, select the Create default structure check box.
3. Click **OK**.
   The repository is created.

Using the repository with Source Control for Oracle

To use the repository with Source Control for Oracle, you need to create a folder for your database.

To create a folder in the repository:

1. Right-click the repository, select **New**, and click **Folder**.
   The **Create Folder** dialog box is displayed.
2. Specify a name for the folder, and click **OK**.

The folder is created.

To link a schema to source control, you need the URL for the repository.

To find the URL of a repository in VisualSVN Server Manager, right-click the repository, and click **Copy URL to Clipboard**.

Setting up a local Subversion (SVN) repository

This page describes how to set up a local Subversion (SVN) repository using TortoiseSVN, a free Subversion client for Windows.

> It's difficult to share changes and keep backups with a local repository, so we don't recommend it as a long-term solution. Instead, set up a Subversion server.

To download the latest version of TortoiseSVN, see the TortoiseSVN download page.

Alternatively, you can use the SVN command line interface.

For more information, see the Subversion documentation.

Creating a repository

To create a local repository:

1. Download and install Tortoise SVN.
   You may need to restart your computer after installation.
2. In Windows Explorer, browse to or create an empty folder where you want to create the repository, for example C:\SVNRepository
3. Right-click the folder, and in the TortoiseSVN menu, select **Create repository here**:
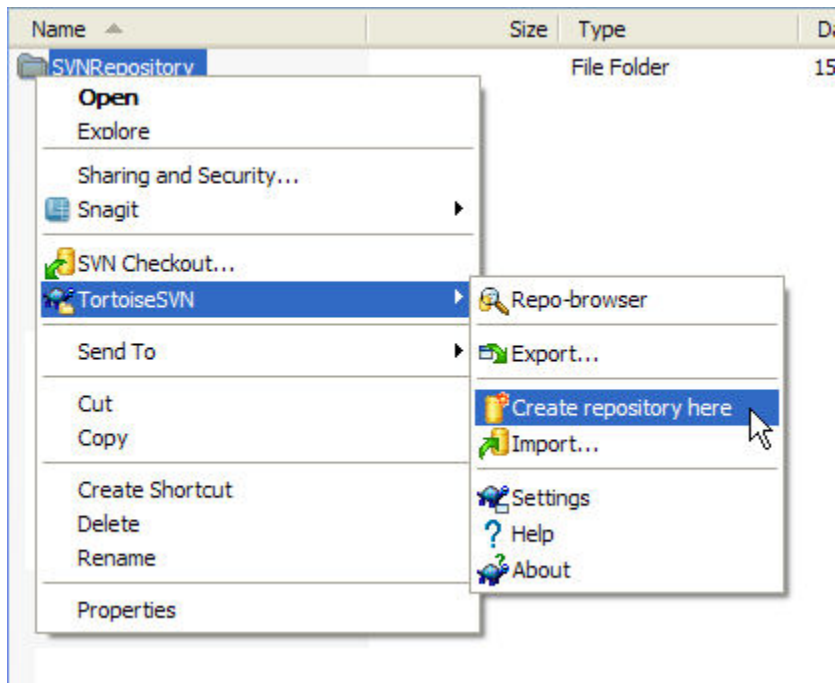
The repository is created.

Using the repository

You can now use the repository with Source Control for Oracle.

The URL for a local repository takes the form: *file:\\\C:\<RepositoryFilePath>*

Use this URL to link your database in a source control project.

> The URL is case sensitive.

Branching and merging

Many development projects involve creating branches (or "forks") for a feature, release, or other development milestone. A branch is essentially a copy of the code base that shares its history. Reincorporating the changes from a branch is known as *merging*.

Development projects typically have:

- a *trunk*, the main code base, and branches which diverge from it
- one or more *branches*, copies that diverge from the trunk

For more information about the concepts behind branching and merging, see:

- Branching and Merging with Team Foundation Server
- Branching and Merging with Subversion

For a general introduction to source control concepts, we recommend Version Control by Example (free PDF) by SourceGear founder Eric Sink.

Working with branches in Source Control for Oracle

You can work with branches in Source Control for Oracle, but you can't create or merge branches.

To branch with Source Control for Oracle, you need to create the branch using your source control system, then link to the appropriate branch in a Source Control for Oracle project.

There are two approaches to working with branches:

Unlink and relink the branch from the source control project

In this approach, you continue working on the same schema, but link it to the branch in your source control system.

Once the branch is created, remove the source control project from Source Control for Oracle, then link the schema again in a new Source Control for Oracle project. In step 2 of the new source control project wizard, specify the location of the branch in source control.

Create a new database for the branch

In this approach, you create the branch in your source control system, then create a new schema to link with it.

Create a new empty schema, and link it to source control in a Source Control for Oracle project. When you link, specify the location of the branch in source control, then on the Get latest tab, update the schema with the latest version from source control.

Merging

Source Control for Oracle doesn't provide automatic or line-by-line merging. You can use Source Control for Oracle or Schema Compare for Oracle to merge at an object level, but not choose line-by-line changes.

When you merge with Source Control for Oracle or Schema Compare for Oracle, you choose a version of each object to keep. For example, you might keep the trunk version of a table and the branch version of a view.

There are three approaches to merging:

Merging using your source control system

You can manually merge the branch changes back into the trunk using your source control system as you would for application code.

We recommend this approach if the merge is complex, or if there are conflicts; for example, if the same object has been modified in both the branch and the trunk.

When merging manually, make sure referential integrity is maintained or the database may be left in an invalid state.

Your source control system may include auto-merging functionality that simplifies manual line-by-line merges.

Merging using Source Control for Oracle

If you don't need to do a line-by-line merge, you can merge with Source Control for Oracle.

To do this:

1. In Source Control for Oracle, make sure you have a schema linked to the branch in your source control repository.
2. Get the latest version and check in any outstanding changes.
3. Remove the source control project on the right-click menu.
4. Create a new source control project linking the schema to the trunk.
5. Go to the **Check in** tab.
   The tab shows the changes to the branch as changes to check in.
   If there are conflicts, choose *Use database version* to override the trunk with the objects from the branch.
6. Check in the changes.
   The trunk is updated with the branch changes.

Merging using Schema Compare for Oracle

If there are no conflicting changes between the branch and the trunk, you can merge automatically using Schema Compare for Oracle.

To merge branch changes into the trunk with Schema Compare for Oracle:

1. In Source Control for Oracle, make sure you have a database linked to the trunk.
2. Use your source control system to create a local copy of the latest branch version (for example, by running an SVN checkout).
3. In Schema Compare for Oracle, create a new project. Set the local copy of the branch as the *source*, and the trunk database as the *target*.

   > For more information, see Setting data sources.

4. Compare the data sources.
   Schema Compare shows the differences between the branch and the trunk.
5. In the **Results** pane, select the objects from the branch that you want to merge into the trunk, and run the deployment wizard to Using the Deployment Wizard
   The trunk is updated with the changes from the branch.
6. In Source Control for Oracle, on the **Check in** tab, check in the trunk changes to source control.

Copy of Branching and merging

Many development projects involve creating branches (or "forks") for a feature, release, or other development milestone. A branch is essentially a copy of the code base that shares its history. Reincorporating the changes from a branch is known as *merging*.

Development projects typically have:

- a *trunk*, the main code base, and branches which diverge from it
- one or more *branches*, copies that diverge from the trunk

> For more information about the concepts behind branching and merging, see:
>
> - Branching and merging with Team Foundation Server
> - Branching and merging with Subversion
> - Branching and merging with Git
>
> For a general introduction to source control concepts, we recommend Version Control by Example (free PDF) by SourceGear founder Eric Sink.

Working with branches in Source Control for Oracle

You can work with branches in Source Control for Oracle, but you can't create or merge branches. To branch with Source Control for Oracle, you need to create the branch using your source control system.

Subversion and TFS

Link to the appropriate branch in a Source Control for Oracle project. Then choose one of the two approaches below:

Unlink and relink the branch from the source control project

In this approach, you continue working on the same schema, but link it to the branch in your source control system.

Once the branch is created, remove the source control project from Source Control for Oracle, then link the schema again in a new Source Control for Oracle project. In step 2 of the new source control project wizard, specify the location of the branch in source control.

Create a new database for the branch

In this approach, you create the branch in your source control system, then create a new schema to link with it.

Create a new empty schema, and link it to source control in a Source Control for Oracle project. When you link, specify the location of the branch in source control, then on the Get latest tab, update the schema with the latest version from source control.

Git

Switch between branches using the drop-down menu in the top right of the Source Control for Oracle window:

Merging

Source Control for Oracle doesn't provide automatic or line-by-line merging. You can use Source Control for Oracle or Schema Compare for Oracle to merge at an object level, but not choose line-by-line changes.

When you merge with Source Control for Oracle or Schema Compare for Oracle, you choose a version of each object to keep. For example, you might keep the trunk version of a table and the branch version of a view.

There are three approaches to merging:

Merging using your source control system

You can manually merge the branch changes back into the trunk using your source control system as you would for application code.

We recommend this approach if the merge is complex, or if there are conflicts; for example, if the same object has been modified in both the branch and the trunk.

> When merging manually, make sure referential integrity is maintained or the database may be left in an invalid state.
>
> Your source control system may include auto-merging functionality that simplifies manual line-by-line merges.

Merging using Source Control for Oracle

> This method of merging is not yet possible with Git.

If you don't need to do a line-by-line merge, you can merge with Source Control for Oracle.

To do this:

1. In Source Control for Oracle, make sure you have a schema linked to the branch in your source control repository.
2. Get the latest version and check in any outstanding changes.
3. Remove the source control project on the right-click menu.
4. Create a new source control project linking the schema to the trunk.
5. Go to the **Check in** tab.
   The tab shows the changes to the branch as changes to check in.
   If there are conflicts, choose *Use database version* to override the trunk with the objects from the branch.
6. Check in the changes.
   The trunk is updated with the branch changes.

Merging using Schema Compare for Oracle

If there are no conflicting changes between the branch and the trunk, you can merge automatically using Schema Compare for Oracle.

To merge branch changes into the trunk with Schema Compare for Oracle:

1. In Source Control for Oracle, make sure you have a database linked to the trunk.
2. Use your source control system to create a local copy of the latest branch version (for example, by running an SVN checkout).
3. In Schema Compare for Oracle, create a new project. Set the local copy of the branch as the *source*, and the trunk database as the *target*.

   > For more information, see Setting data sources.

4. Compare the data sources.
   Schema Compare shows the differences between the branch and the trunk.
5. In the **Results** pane, select the objects from the branch that you want to merge into the trunk, and run the deployment wizard to Using the Deployment Wizard
   The trunk is updated with the changes from the branch.
6. In Source Control for Oracle, on the **Check in** tab, check in the trunk changes to source control.

Troubleshooting

- Can't use projects after changing the source control repository URL
- Using Team Foundation Server 2008
- Using Team Foundation Server 2012 or Team Foundation Service in Source Control for Oracle 1
- Authentication failed when cloning from GitHub

Can't use projects after changing the source control repository URL

If you change the URL of a source control repository used by a project, Source Control for Oracle can't access the project.

To fix this:

1. Go to the Source Control for Oracle config files folder. By default, this is: *%localappdata%\Red Gate\Source Control for Oracle 2*
2. Open *LinkedDatabases.xml* in a text editor.
   This file contains details of your source control projects. Each `<value>` tag represents a single project.
3. Find the `<RepositoryUrl>` tag that contains the server URL you want to change and replace the value with the new repository URL.

> To quickly change the repository URL of multiple projects, use your text editor's find-and-replace function (usually opened with Ctrl + H).

> Don't edit anything else in the file unless advised by Redgate support. Editing other values may cause errors.

Using Team Foundation Server 2008

To link a database to Team Foundation Server 2008, you need to create a config file.

1. Go to the Source Control for Oracle config files folder. By default, this is located at *%localappdata%\Red Gate\Source Control for Oracle 2*
2. In this folder, if it doesn't already exist, create an XML file named *RedGate_SQLSourceControl_Engine_EngineOptions.xml*
3. Open the file in a text editor and paste this into it:

```
<EngineOptions version="3" type="EngineOptions">
<TeamFoundationServerDllOverride>RedGate.SQLSourceControl.Engine.SrcC.TFS2008</TeamFoundationServerDllOverride>
</EngineOptions>
```

4. Save and close the file.

You can now link schemas to TFS 2008. For more information about linking schemas, see Creating a new source control project.

Using Team Foundation Server 2012 or Team Foundation Service in Source Control for Oracle 1

These instructions only apply to Source Control for Oracle 1. You don't need to follow them in the latest version of Source Control for Oracle 2.

To link a database to Team Foundation Server 2012 or Visual Studio Online (previously known as Team Foundation Service), you need to create a config file.

After you create the config file, you won't be able to link to earlier versions of TFS. You can undo this by deleting the config file.

1. Go to the Source Control for Oracle config files folder. By default, this is located at *%localappdata%\Red Gate\Source Control for Oracle 2*
2. In this folder, create a new XML file named *RedGate_SQLSourceControl_Engine_EngineOptions.xml*
3. Open the file in a text editor and paste this into it:

```
<EngineOptions version="3" type="EngineOptions">
<TeamFoundationServerDllOverride>RedGate.SQLSourceControl.Engine.SrcC.TFS2012</Te
amFoundationServerDllOverride>
</EngineOptions>
```

4. Save and close the file.
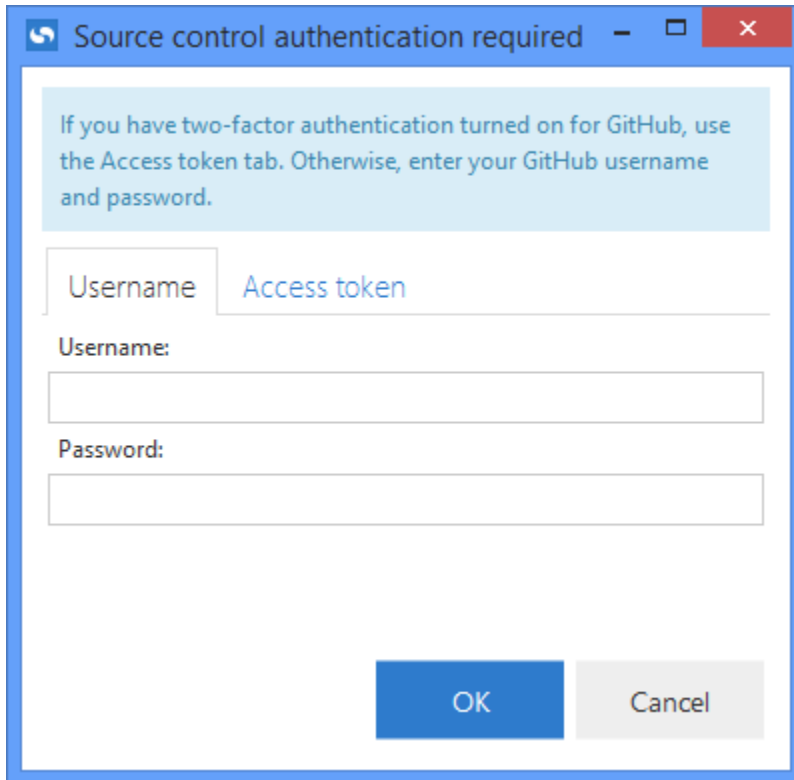
You can now link schemas to TFS 2012 and Visual Studio Online. For more information about linking schemas, see Creating a new source control project.

Authentication failed when cloning from GitHub

If you see the **Authentication failed** error message when cloning a repository from GitHub, check if you have GitHub two-factor authentication turned on.

If you don't have two-factor authentication turned on

On the **Username** tab, enter your GitHub username and password:
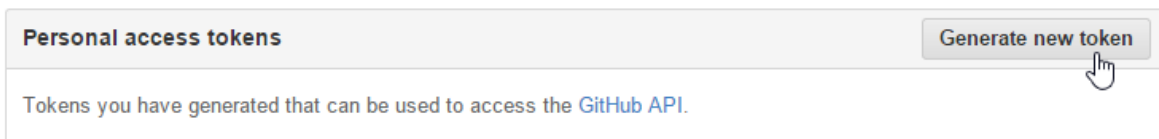
If you do have two-factor authentication turned on

You need to provide a personal access token instead of your username and password.

If you already have a token, go to the **Access token** tab and enter it.

If you don't already have a token, you need to create one:

1. Log in to the GitHub website, go to the Applications page, and click **Generate new token**:

2. Enter a token description and select scopes for the token:

Applications / **New personal access token**

Token description

project1

What's this token for?

Select scopes

Scopes *limit* access for personal tokens. Read more about OAuth scopes.

- ☑ repo ⓘ
- ☐ repo:status ⓘ
- ☐ repo_deployment ⓘ
- ☑ public_repo ⓘ
- ☐ delete_repo ⓘ
- ☑ user ⓘ
- ☐ user:email ⓘ
- ☐ user:follow ⓘ
- ☐ admin:org ⓘ
- ☐ write:org ⓘ
- ☐ read:org ⓘ
- ☐ admin:public_key ⓘ
- ☐ write:public_key ⓘ
- ☐ read:public_key ⓘ
- ☐ admin:repo_hook ⓘ
- ☐ write:repo_hook ⓘ
- ☐ read:repo_hook ⓘ
- ☐ admin:org_hook ⓘ
- ☑ gist ⓘ
- ☐ notifications ⓘ

Generate token

⑦ Personal access tokens function like ordinary OAuth access tokens. They can be used instead of a password for Git over HTTPS, or can be used to authenticate to the API over Basic Authentication.

> If your project uses private repositories, make sure **repo** is selected. If your project uses private repositories, make sure **public_repo** is selected.
> If your project uses both private and public repositories, make sure both **repo** and **public_repo** are selected.
> More about scopes

3. Click **Generate token**.
   This generates a personal access token:

   ✔ 80d9f8a676b1ae67ac109e3db17906285085bd4e ⧉   Edit   Delete

4. Copy this token and return to Source Control for Oracle. On the **Access token** tab, paste the token into the **Personal access token** field :

5. Click **OK**.

Release notes and other versions

Version 3.0 (current)	November 26th, 2015 (latest)	Release notes	Documentation
Version 2.0	February 19th, 2015	Release notes	Documentation
Version 1.0	July 17th, 2013	Release notes	

Source Control for Oracle 2.0 release notes

Version 2.0.10.1242 - February 19th, 2015

> This is the last Source Control for Oracle 2. The next release will be Source Control for Oracle 3. You can get it free if your support and upgrades are up to date.

Features

- Improved performance when dealing with lots of objects

Fixes

- OSC-450: Number of objects selected is now displayed correctly
- OSC-461: Passwords with special characters are now escaped correctly
- ODC-303, OSC-468, OC-725: Instant client 12.1.0.2.0 no longer returns "Input string was not in a correct format" with DBMS_UTILITY.DB_VERSION

Schema Compare engine changes (used by Source Control for Oracle)

Fixes

- OC-615: Fixed grants sometimes being created before objects
- OC-699: Possibly fixed "ObjectDisposedException" error during population
- OC-735: Grants are now scripted with new sequences
- OC-736: Index-organized tables with overflow segments now include basic OVERFLOW in script even when storage options are turned off

Version 2.0.7.1037 - December 18, 2014

Features

- Project listings now include SID/Service name and port information for manual connections
- Project listings now include counts for both get latest and check in

Fixes

- OSC-436: Saving schema comparison options now works with TFS
- Projects using schemas with folders of different names now register correct differences
- Several bugs with conflict resolution fixed

Schema Compare engine changes (used by Source Control for Oracle)
- OC-716: Deploying primary keys and foreign keys together are now ordered correctly in the script

Version 2.0.6.964 - December 4, 2014

> To downgrade to an older version of Source Control for Oracle after installing this version, you first need to delete the *%localappdata%\ Red Gate\Source Control for Oracle 2* folder.

Features

- Refresh projects twice as quickly
- TFS2013 client and server support
- Updated source control engine

- Schema Compare for Oracle options now available in Source Control (except "Ignore storage")
- Evaluation repository for easy evaluation
- See the refresh progress on the Check in and Get latest tabs

Fixes

- Sort order now remembered when refreshing commit and get latest tabs

Schema Compare engine

This version also contains updates to the Schema Compare engine, which Source Control for Oracle uses:

Features

- Public synonyms now supported (can be excluded with filters)
- "Ignore storage" option support much improved, especially comparing to scripts

Fixes

- OSC-337: Keywords as part of columns names in check constraints now correctly escaped
- OSC-415: Materialized views no longer script hidden fields
- OSC-415: Materialized views on indexes now depend on materialized view
- OSC-415: Materialized view logs now depend on the materialized view
- OC-681 and OC-693: Using the *Ignore external table location* option in combination with a table rebuild no longer fails to generate sync script
- OC-713: NOVALIDATE clause moved after DEFERRABLE clause for constraints
- Failure to populate PL/SQL object text now fails population instead of causing subsequent null value errors
- Compression clause for different Oracle versions now scripts correctly
- Semicolons on the ends of synonym statements in script files are now allowed
- No longer attempts to drop SYS schema objects
- No longer attempts to RECOMPILE nested tables or varrays
- Column rename detection in combination with indexes now scripted correctly
- Column rename detection no longer incorrectly prioritizes fuzzy matching over exact column names
- Column rename detection in combination with a table rebuild fixed
- Materialized views now support CACHE clause

Version 2.0.5.742 - October 13, 2014

Features

- Create object filters to exclude objects from source control
- Credential failure against database or source control can now be fixed via "edit credentials"
- Write an initial commit check-in comment when creating a project

Fixes

- Refreshing when search box has text in it no longer causes crashes
- Search box no longer momentarily disappears when refreshing the Lock objects tab

Schema Compare engine

This version also contains updates to the Schema Compare engine, which Source Control for Oracle uses:

Features

- Use semicolons on CREATE SEQUENCE statement endings
- More parsing of 12c object privileges (USE, FLASHBACK ARCHIVE, KEEP SEQUENCE, INHERIT PRIVILEGES, TRANSLATE SQL)
- Ignore tables and sequences created for spatial indexes
- Support for materialized view PARALLEL keyword

Fixes

- Command line: *abortonwarnings* switch now works properly
- Materialized views ending with a single line comment (ie "--") no longer produce invalid SQL when scripted

- Grant user object privilege with the "exclude schema names" option no longer causes crashes
- Views no longer erroneously marked as different when "WITH READ ONLY" or "WITH CHECK OPTION" is in lowercase

Version 2.0.3.489 - August 6th, 2014

Features

- Connect using LDAP lookup (beta). Enter the host name in the Network alias field using a TNS connection

- Connect using OS authentication when connecting via TNS connection

Schema Compare engine

- CREATE OR REPLACE used for all objects in scripts (not marked as a difference)

Bug fixes

- Rendering on startup when restoring position

- OSC-81: No longer crashes when running on .NET4.0 and viewing comparison on a modified line ending with white space

Schema Compare engine

- Column rename detection supports ordinal and primary keys

- Column rename detection exact match takes precedence

- Views no longer marked as different when system-named index or constraints are deployed

- OSC-358: Population no longer fails when encountering multiple references to a dependency

- Parsing of views no longer dependent on white space following ") AS"

- Parsing no longer fails when using EXTERNAL ORACLE_DATAPUMP without ACCESS PARAMETERS

- Population of default Oracle schema (eg HR) now complete if included in schemas to populate

- Warnings now appear when trying to deploy clusters, because they're unsupported

- Fixed SQL for indexes on existing clusters

Version 2.0.2.404 - July 16th, 2014

Features

- Projects are now listed in alphabetical order
- When typing in the filter box, filtering is delayed until typing stops
- Tooltips are displayed on hover for project names
- Partitions and lobs can no longer be locked in the Lock objects tab

Schema Compare engine updates

- Rename column detection
- Scripts folder population is approximately 25% faster
- Improved nested table support
- Materialized view definitions are no longer always in brackets
- Materialized view comment support - default comment excluded
- Skip GRDMLTR_* (auto-generated) triggers for SDO_GeoRaster columns
- Copy NOVALIDATE for constraints if specified
- Removal of some unused schema population
- Improved logging of population speed
- Joined indexes depend on all joined tables
- Script parsing errors:
    - Interval literal support for materialized views e.g. "NEXT trunc(sysdate,'HH') + interval'1'"
    - Fixed view parsing to cope with "cast(trunc(systimestamp, 'DD') as timestamp)"
    - Parsing of materialized view starting with newline would fail
    - Allow U'' style string literals

- Tables with external data failed if column names ended in "location"

Version 2.0.1.173 - May 22nd, 2014

Features

- Improved materialized view support (grants, complex queries, column aliases)
- Out-of-line constraints in Table SQL now supported
- Service name connections supported if Oracle Instant Client is installed

Version 2.0.0.129 - December 18th, 2013

Bug fix

- Exception no longer occurs when refreshing after changing password

Version 2.0.0.125 - November 19th, 2013

Bug fix

- SYS_NT tables are ignored

Version 2.0.0.121 - November 1st, 2013

Features

- Previous/Next difference buttons
- Dialog to warn user that locked objects will be unlocked on check-in

Bug fixes

- Increased time-out when connecting to Oracle
- Matching Indexes to constraints where columns are not in same order
- Parsing of materialized views with new lines before opening bracket
- Parsing of triggers with inline comments

Version 2.0.0.104 - September 23rd, 2013

Feature

- Support for nested tables

Bug fixes

- RELY DISABLE in scripts folders now backwards compatible

Version 2.0.0.101 - September 17th, 2013

Bug fixes

- PL/SQL objects with quoted string literals always appearing as different
- MVIEWS with subqueries

Version 2.0.0.99 - August 22nd, 2013

Bug fixes

- White space-only comments causing tables to have invisible differences
- Primary keys using a custom index with more columns than the constraint appearing different
- Parsing of PARALLEL clauses with just the DEGREE included
- Parsing of RELY DISABLE
- Allow control characters in table/view/column comments
- Parsing of PL/SQL comments between the OBJECT TYPE and OBJECT NAME
- Number of objects selected text can be wrong after check-in
- Locked objects not appearing after being dropped
- Materialized views reappearing as different after every refresh

Version 2.0.0.87 - August 12, 2013

New features

- Lock objects in shared databases
- Filter objects in Check in, Get latest and Lock objects tabs
- Set global settings on Settings page

Source Control for Oracle 1.0 release notes

Version 1.0.0.755 - July 17th, 2013

Features

- added materialized views
- added materialized view logs

Version 1.0.0.750 - July 8th, 2013

Features

- added re-compilation of dependents to re-validate objects

Fixes

- fixed context indexes appearing different
- fixed external tables with unlimited external reject limit
- fixed grants when schema names are different
- fixed triggers which share their name with a SQL keyword
- fixed DR$ objects appearing in the comparison
- fixed ordering of dependencies involving PLSQL objects

Version 1.0.0.739 - July 1st, 2013

Fixes

- Fixed bug with external tables reject limit

Version 1.0.0.737 - June 26th, 2013

Fixes

- Reduce memory usage when populating PL/SQL objects

Version 1.0.0.722 - June 7th, 2013

Features

- Updated comparison engine

Version 1.0.0.721 - June 4th, 2013

Fixes

- Package Bodies whitespace issue fix
- AS SYSOPER/SYSDBA fix

Version 1.0.0.716 - May 28th, 2013

Features

- External tables support

- View parsing issue fix (semi-colons in string literals)

Version 1.0.0.707 - May 14th, 2013

Features

- Improved view parsing

Fixes

- Performance fix for bug introduced in 1.0.0.688
- Fix for comments that end in a single quote
- Fix for disabled triggers always appearing to be different

Version 1.0.0.688 - April 29, 2013

Features

- Added support for comments on tables, views and columns

Version 1.0.0.686 - April 23rd, 2013

Fixes

- Stop defaulting NOT NULL column to NULL on Get Latest
- Fixed check constraint matching where expression differed only by whitespace leading to invisible difference

Script parsing fixes

- SQL with function arguments taking long time to read
- Index-organized tables with custom index names
- Function calls with 5+ part names
- Function based indexes
- Deeply nested left joins
- PL/SQL Objects with comments before the object name
- Order by clause in COLLECT
- CONNECT_BY_ROOT

Version 1.0.0676 - April 8th, 2013

Features

- Include information about connecting to Team Foundation Service

Bug fixes

- Fixed parsing of LISTAGG
- Fixed parsing of DECODE in IN conditions
- Fixed SYS_PLSQL types appearing in comparisons on 10g

Version 1.0.0.662 - March 25th, 2013

Bug fixes

- Optimizer hints and GRANTs on QUEUEs fix

- Scrollbar on schema list fix
- Report link fixed on exception report

Version 1.0.0.656 - March 19th, 2013

Bug fixes

- Split package heads and bodies. This will appear as an EDIT of the package head and CREATE of package body
- Fix to support "overlaps" and sub-queries in conditions
- Fix missing schema name and create project hang bug
- Fix crash when database unavailable

Version 1.0.0.648 - March 7th, 2013

Features

- Set up a source control project to link an Oracle schema to a Subversion or Team Foundation Server source control system
- Check in database changes to source control
- Get latest databases changes from source control
- View history
- Select which version of an object to use when resolving conflicts
- Add multiple schemas to source control projects
- Notifications of new changes on the task bar
- Quick access to changes through taskbar jump list

draft release notes (hidden)

Data Compare for Oracle

Fixes

- ODC-258, ODC-292, ODC-301: fixed "I/O race condition" errors
- OSC-461: Passwords with special characters are now escaped correctly
- ODC-303, OSC-468, OC-725: Instant client 12.1.0.2.0 no longer returns "Input string was not in a correct format" with DBMS_UTILITY.DB_VERSION

Schema Compare for Oracle

Features

- Upgrade no longer required for older schema folder directories

Fixes

- OSC-461: Special characters in passwords now work in the command line
- OSC-461: Passwords with special characters are now escaped correctly
- ODC-303, OSC-468, OC-725: Instant client 12.1.0.2.0 no longer returns "Input string was not in a correct format" with DBMS_UTILITY.DB_VERSION

Source Control for Oracle

> This is the last Source Control for Oracle 2. The next release will be Source Control for Oracle 3. You can get it free if your support and upgrades are up to date.

Features

- Improved performance when dealing with lots of objects

Fixes

- OSC-450: Number of objects selected is now displayed correctly
- OSC-461: Passwords with special characters are now escaped correctly
- ODC-303, OSC-468, OC-725: Instant client 12.1.0.2.0 no longer returns "Input string was not in a correct format" with DBMS_UTILITY.DB_VERSION

Schema Compare engine

Fixes

- ODC-303, OSC-468, OC-725: Instant client 12.1.0.2.0 no longer returns "Input string was not in a correct format" with DBMS_UTILITY.DB_VERSION
- OSC-461: Passwords with special characters are now escaped correctly
- OC-699: Fixed "ObjectDisposedException" error during population
- OC-615: Fixed grants sometimes being created before objects
- OC-735: Grants are now scripted with new sequences
- OC-736: Index-organized tables with overflow segments now include basic OVERFLOW in script even when storage options turned off