Simple examples using the command line

This topic provides some simple examples of how to use the command line interface.

For more detailed information on using the command line, see:

- Example selecting single tables for comparison
- Example selecting tables with unrelated names
- Switches used in the command line

Comparing and deploying database schema

To compare the database structure of WidgetStaging with WidgetProduction:

sqlcompare /Database1:WidgetStaging /Database2:WidgetProduction

To compare the database structure of WidgetStaging with WidgetProduction, and deploy the databases by updating WidgetProduction:

sqlcompare /Database1:WidgetStaging /Database2:WidgetProduction /Synchronize

Using an existing SQL Compare project from the command line

This is useful, for example, as you can't choose or create a custom filter from the command line, and specifying complex object selections using a regular expression can be unwieldy.

To use a project you have saved as "widgets.scp" from the command line:

```
sqlcompare /project:"C:\SQLCompare\Projects\Widgets.scp"
```

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• When you use a project, all objects that were selected for comparison when you saved the project are automatically included.

- When you use the command line, your project option selections are ignored and the defaults are used. Use */options* to specify any additional options you want to use with a command line project. For more information, see: Options used in the command line.
- If you want to include or exclude objects from an existing project, you must modify your selection using the graphical user interface. You can't use the /include and /exclude switches with /project.

Scheduling or automating a comparison or deployment

You can use the Microsoft Windows Scheduled Task wizard to schedule a comparison by creating a script to run the comparison.

The following example compares the structure of WidgetStaging and WidgetProduction, and outputs the results as the file/og_file.txt

First create the script:

cd "C:\Program Files\Red Gate\SQL Compare 8" sqlcompare /db1:WidgetStaging /db2:WidgetProduction >> C:\log_file.txt

Next save the script as a .bat file. You specify the .bat file as the program to run from within the Scheduled Task wizard by browsing to it.

To schedule a deployment of the two databases, updating the database WidgetProduction, you would create the script:

cd "C:\Program Files\Red Gate\SQL Compare 8" SQLCompare /db1:WidgetStaging /db2:WidgetProduction /Synchronize

In these examples MS-DOS batch scripting is used, a basic scripting language that is supported on all versions of Windows. If preferred, you could use VBScript, JScript, PHP, Perl, Python or any other scripting language of your choice.

Creating a scripts folder

You can create a folder of object creation scripts representing the schema of a data source. To export WidgetProduction to a scripts folder:

sqlcompare /Databasel:WidgetProduction /Makescripts:"C:\WidgetProductionScripts"

If the folder does not already exist, it is created. All the subfolders containing different object types in the schema are automatically created beneath the specified folder. If the folder does exist, it must be empty or the export will fail.

For more information on scripts folders, see Working with scripts folders.

Creating a snapshot

You can create a SQL Compare snapshot representing the schema of a data source. To export WidgetProduction to a snapshot:

sqlcompare /Databasel:WidgetProduction /Makesnapshot:"C:\Snapshots\WP_1.snp"

For more information on SQL Compare schema snapshots, see: Working with snapshots.

Using a scripts folder or snapshot as a data source

To compare the WidgetProduction scripts folder with the WidgetStaging database:

sqlcompare /Scripts1:"C:\WidgetProductionScripts" /Database2:WidgetStaging

To compare the WidgetStaging database with the WidgetProduction scripts folder and deploy the scripts

sqlcompare /Databasel:WidgetStaging /Scripts2:"C:\WidgetProductionScripts" /Synchronize /Force

The /force switch specifies that any read-only files in the scripts folder that need to be edited during deployment will be made writable. If you do not include the /force switch and read-only files need to be modified, the deployment will fail and an error message will be displayed.

To compare two snapshots of WidgetStaging:

sqlcompare /Snapshot1:"C:\Snapshots\WidgetProd_1.snp" /Snapshot2:"C:\Snapshots\WidgetProd_2.snp"

To output the deployment SQL script, for example for auditing purposes, and overwrite the file if it already exists:

sqlcompare /database1:WidgetStaging /database2:WidgetProduction /scriptfile:"C:\SQLScripts\Widgets.sql" /force

Using a backup as a data source

To compare a backup of WidgetDev with WidgetLive:

sqlcompare /Backup1:"D:\MSSQL\BACKUP\WidgetDev_20080807_143235.sqb" /db2:WidgetLive

If you are comparing a backup set that contains multiple files, use the */backupset1* switch to specify the files which make up the first backup set, and use the */backupset2* switches to specify the files which make up the second:

sqlcompare /Backup1:"D:\MSSQL\BACKUP\WidgetDev.bak" /Backupset1:"2008-09-23 Full Backup" /db2:WidgetLive

If the backup set switches are not specified, SQL Compare uses the latest backup set.

To specify more than one backup file, separate the file names using semicolons.

sqlcompare /Backup1:"D:\WidgetDev_Full.bak";"D:\WidgetDev_Diff.bak" /db2:WidgetDevelopment

For encrypted backups that have been created using SQL Backup, use the */BackupPasswords1* and */BackupPasswords2* switches to specify the passwords; when there is more than one backup password, separate the passwords using semicolons.

sqlcompare /Backup1:"D:\MSSQL\BACKUP\WidgetDev.sqb" /BackupPasswords1:Pa\$\$w0rd /db2:WidgetLive

If you are comparing a differential backup, you must also specify the associated full backup.

For more information, see: Working with backups.