Inquire – Knowledge Base Article

Product Group: SOFTWARE
Product: @ptitude Analyst
Version: @ptitude Analyst 4.0 or higher

Abstract

When entering double byte characters (such as Asian or Cyrillic characters) into @ptitude Analyst running with a MS SQL database, the characters might not get stored properly. This document outlines how to set up a SQL database to accept these extended characters.

Overview

International languages may have/use collation that is not compatible with local collation used in the US 'SQL_Latin1_General_CP1_CI_AS'. This document outlines the steps required to convert an existing database collation to a desired one.

Collation Conversion Process

The following steps are to be followed for a successful conversion of the database:

A. Perform a full back up of your database.
B. Obtain the database' current collation settings
C. Select the desired collation
D. Run the "ChangeCollation.exe" utility to create a script
E. Run the script
F. Verification

NOTE 1: all scripts need to run under the "sa" user credentials! The default password for this is 'skf' (lower case) but may be different in your specific scenario.

NOTE 2: This procedure requires proficiency with Microsoft SQL Studio Manager.

General information about Collation

Information about the collation process can be found at these URLs:
SQL Server 2005: http://msdn.microsoft.com/en-us/library/ms143508(SQL.90).aspx
For SQL Server 2008: http://msdn.microsoft.com/en-us/library/ms144250.aspx

A. Backup Your Database.

Perform a full back up of your database following standard procedures documented in <asdf> or your company's directions. Make sure to attach the database again after the backup is completed.

B. Obtain Current Collation Settings

Collation setting strings are very similar. You may want to verify the current setting first before making any changes. This step is not necessary if you know you need to make changes. To obtain the current collection settings do the following:

1. Start the SQL Server Management Studio, login with the "sa" account.
2. Open a new query window
3. Enter the following SQL statement:

```
SELECT CONVERT(char, SERVERPROPERTY('collation'))
```

The result should be a single column with one row holding a string. An example output is:

```
SQL_Latin1_General_CP1_CI_AS
```

C. Select the desired database collation

You will need to select the desired collation from the list of available collations. To obtain this list do the following:

1. Start the SQL Server Management Studio, login with the “sa” account.
2. Open a new query window
3. Enter the following SQL statement:

```
SELECT * FROM ::fn_helpcollations()
```

Figure 1 below shows an example output of all available collation selections. As many collation setting strings are very similar, please verify the desired collation setting by carefully reading the description. In the following steps you will need the collation name string.

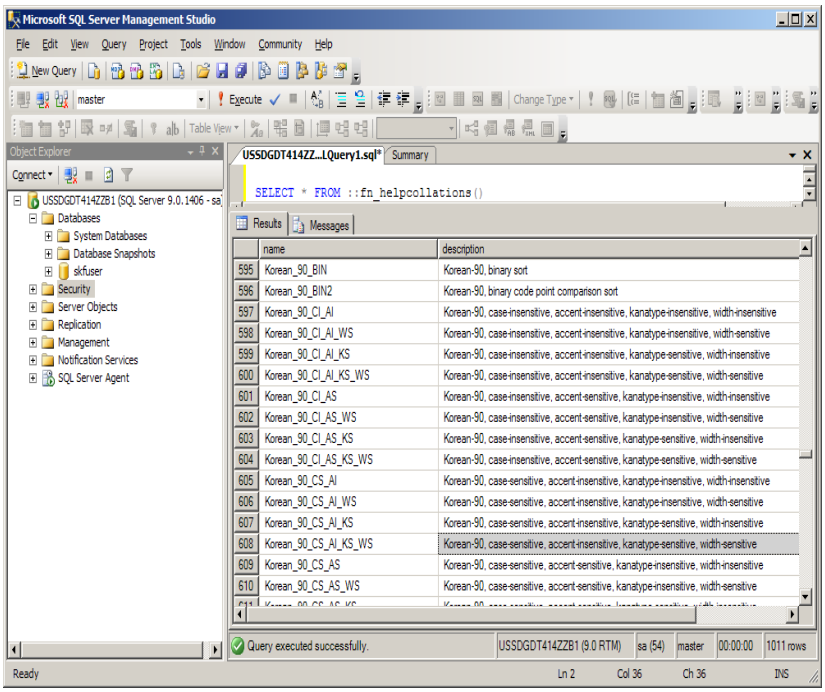

Figure 1: Example list of available collations

D. Creating the Conversion Script with AlterCollation.exe

The AlterCollation.exe utility can be found on the @ptitude Analyst DVD in the Tools directory. Copy this utility to your hard disk.

Use the following procedure to create the conversion script:

1. Close all connections to the SKFUSER database i.e., make sure that no @ptitude Analyst user remains logged in. <steps to verify this?>
2. Double click to start AlterCollation.exe application.

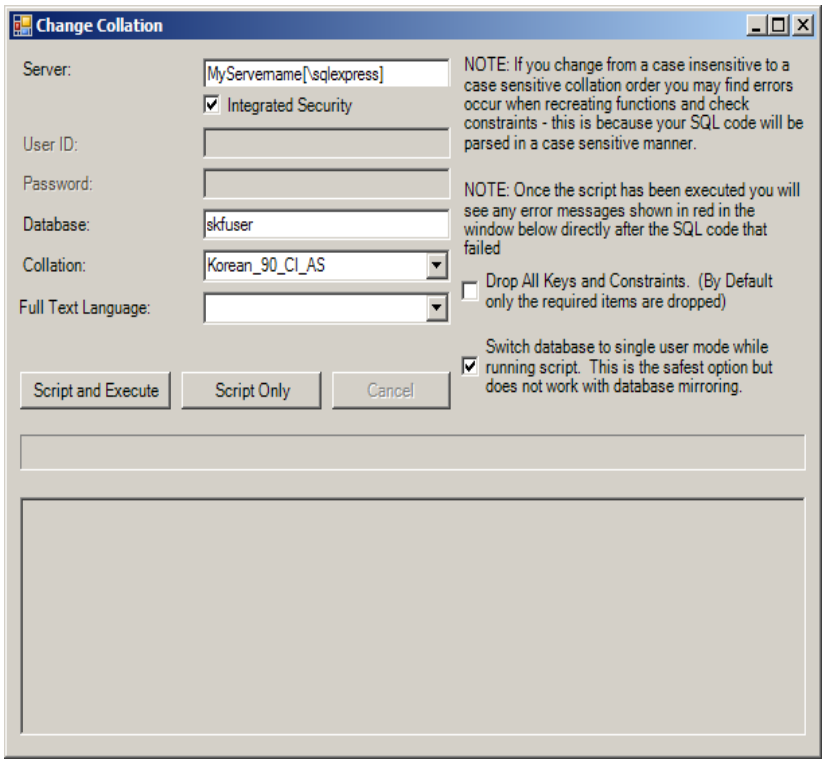

Figure 2: Default AlterCollation.exe setup screen

3. Enter the server name for the server field (e.g. SKF-TESTER-TWO\sqlexpress). You can obtain the proper server name by starting the SQL Server Management Studio tool. The start up dialog will show the correct server name. Note that the SQL Server commercial version does not require "\sqlexpress"
4. Enter "skfuser" under Database field.
5. Select the desired collation. Figure 2 above shows Korean_90_CI_AS is selected. Enter or select the name string you have identified in step C.
6. Leave Full Text Language field empty.
7. Click on Script Only to generate database scripts. The utility will now create the script needed to change the collation. Figure 3 shows the output of this step.

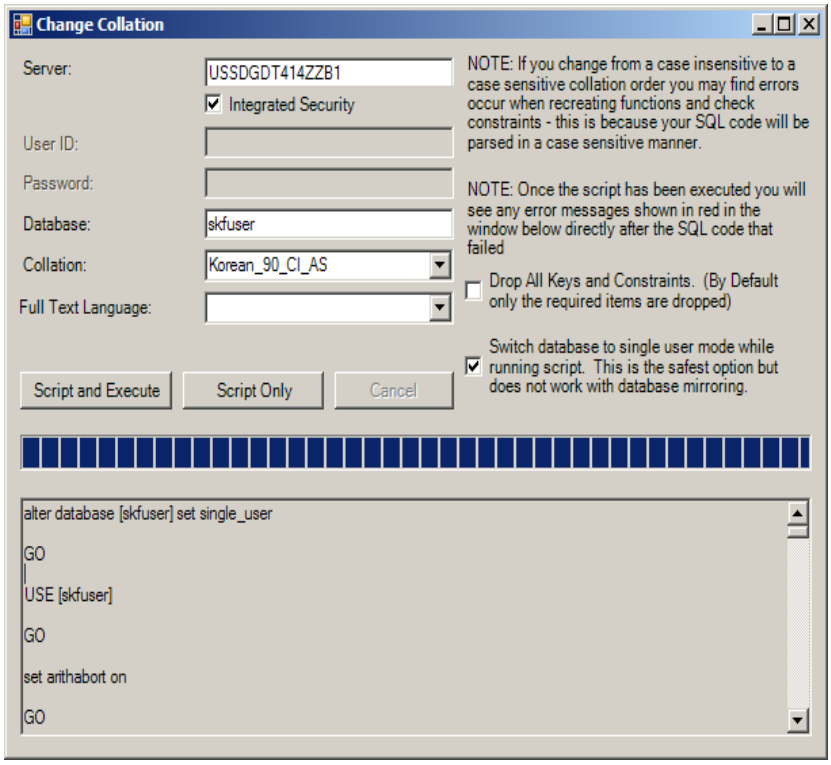

Figure 3: AlterCollation showing the created script (bottom textbox).

E. Running the Alter Collation script

The alter collation script will process the following steps automatically:

a. Switch to single user connection.
b. Disable all triggers.
c. Drop constraints.
d. Drop indexes.
e. Switch collation to selected collation.
f. Alter the database column properties to DATABASE_DEFAULT (will cause it to inherit the database collation properties)
g. Re-create the indexes.
h. Re-create the constraints.
i. Re-enable the triggers.
j. Set the database to multi user.

Follow these steps to execute the alter collation script:

1. Select the contents of the text box. Click inside, press ctrl-a to select all text and ctrl-c to copy this to the clipboard.
2. Start the SQL Server Management Studio, login with the “sa” account.
3. Open a new query window
4. Paste the script from the clipboard into the new query window (ctrl-v).

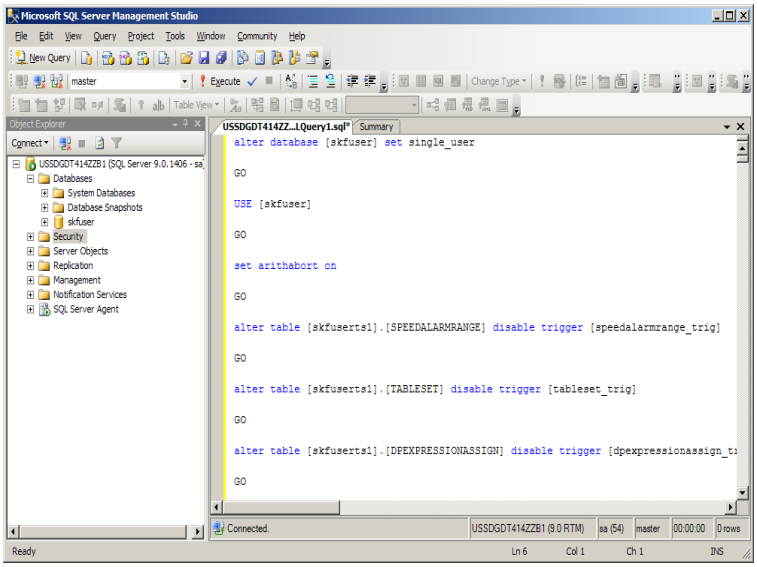

Figure 4: SQL Server Management Studio showing alter collation script

5. Click the "execute" button or press F5 to run the script. This will take several minutes to execute.

DO NOT INTERRUPT PROCESS UNTIL DONE

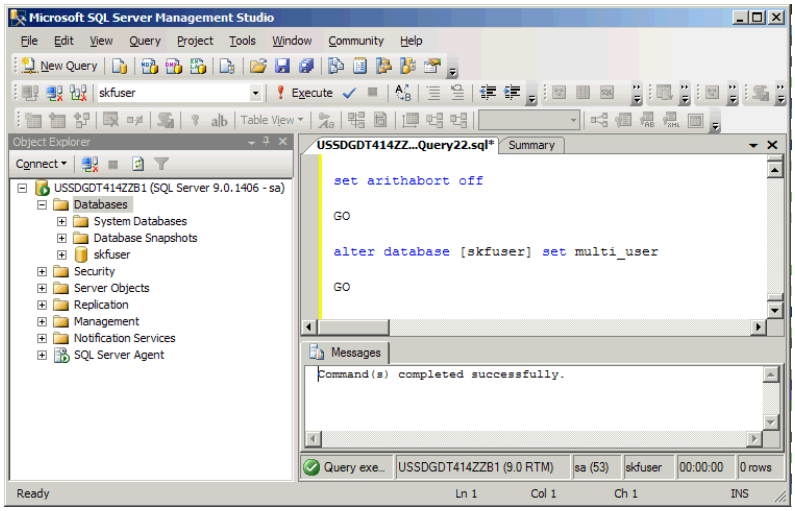

Figure 5: SQL Server Management Studio showing successful script execution.

F. Verification

If the execution of the script concluded successfully, no further verification steps are necessary.