

Automating SQLCMD Statements

Recently, I wanted to automate the process of loading monthly csv data files into a SQL table. I spent some time researching the syntax of SQLCMD as well as reading multiple different posts on the subject. After some trial and error, I was able to get the automation functioning properly. Here's a quick summary.

SQL Statement

Here's the syntax for the SQL query I was using to upload the monthly files:



```
csv_input.txt
```

DATABASE NAME, TABLE, & DATA_FILE_LOCATION.csv are query specific. For my instance I used the following:

- DATABASE NAME: HYP_TEST
- TABLE: HYP_STG_AP_DATA
- DATA_FILE_LOCATION.csv: 'G:\Data\AP\AP Aging FY14\ AP Aging Jan FY14.csv'

Open notepad and paste the query into the blank sheet. Next, save this file as a Microsoft SQL Server Query (.sql) file:



SQLCMD Batch File

To automate this process, a batch file will need to be created that calls the L_AP.sql file. Here's the syntax to be used in the batch file:

```
SQLCMD -S server -U login_id -P password -i input_file -o output_file
```

Notes on the syntax:



For more detailed information on the SQLCMD syntax – <https://msdn.microsoft.com/en-us/library/ms162773.aspx>

Once you have tested SQLCMD in the command prompt to verify that it runs, paste it into notepad and save the file as a Windows Batch (.bat) file:



I also created the 'Logs' folder, which is where SQLCMD will write the output file (as specified after `-o` in the SQLCMD command line). The output file will be created as .txt:



At this point, the process should be good to go and you can replicate this setup for other SQL queries using sqlcmd.

As a result of this exercise, a years' worth of data can be loaded all at once rather than having to upload the monthly data files one at a time. This saved a good amount of time that had previously been spent manually uploading monthly files during the incremental process of data validation.