OUTPUT Clause (Transact-SQL)

Returns information from, or expressions based on, each row affected by an INSERT, UPDATE, DELETE, or MERGE statement. These results can be returned to the processing application for use in such things as confirmation messages, archiving, and other such application requirements. The results can also be inserted into a table or table variable. Additionally, one can capture the results of an OUTPUT clause in a nested INSERT, UPDATE, DELETE, or MERGE statement, and insert those results into a target table or view.

Used in: DELETE; INSERT; UPDATE; MERGE

The OUTPUT clause – helps to get the identity values from a large amount of data that have been inserted in to the database. The OUTPUT clause is a part of the query that will return data from before or after the operations is completed. For example, one has inserted data in to a table and want the ID column values (which are auto-numbers). The OUTPUT clause gives this information!

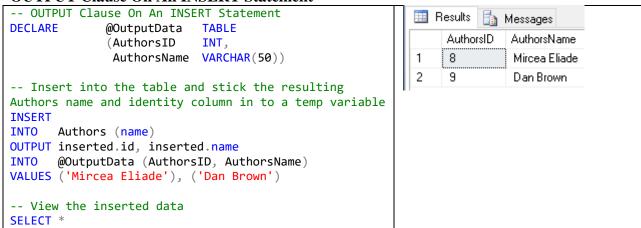
To access the data that is being altered in the sql statement, one need to use special column prefixes that SQL Server provide. The two special prefixes are "inserted" and "deleted". During an insert statement, the inserted prefix is available to use. During a delete statement, the deleted prefix is available to use. During the update and merge statements, both the deleted and inserted prefixes are available to use. In these cases, the deleted represents the data before it was changed and the inserted represents the data after it was changed.

One thing to note is that the data being outputted must go into a table or table variable.

We consider the Authors table

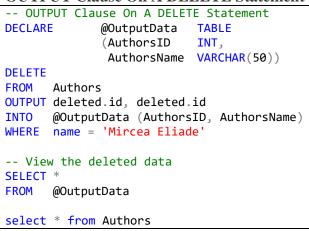
id	name
4	J.K. Rowling
5	transaction 2
6	Petre Ispirescu t
7	test
NULL	NULL

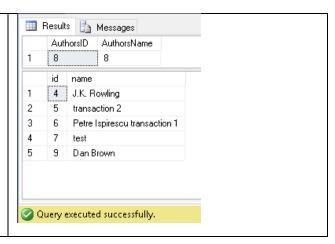
OUTPUT Clause On An INSERT Statement



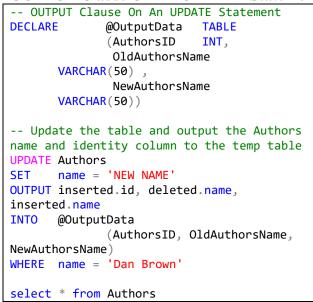


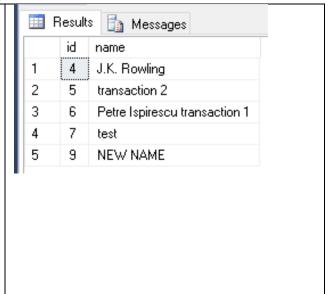
OUTPUT Clause On A DELETE Statement



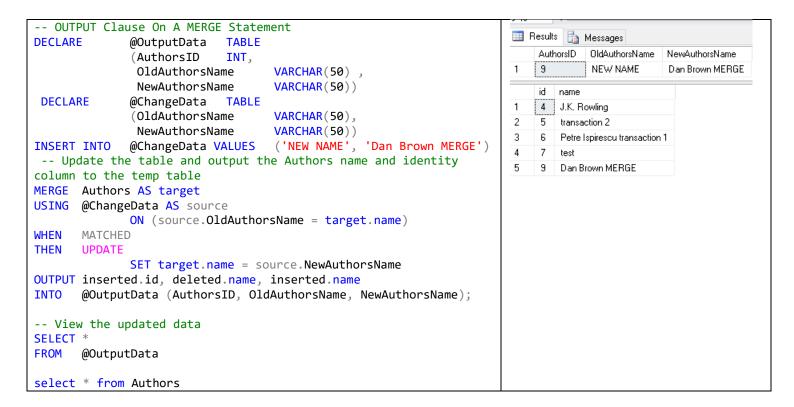


OUTPUT Clause On An UPDATE Statement





OUTPUT Clause On A MERGE Statement



References:

http://www.tech-recipes.com/rx/47032/a-beginners-guide-to-the-output-clause-in-sql-server/http://www.made2mentor.com/2013/06/using-the-output-clause-with-t-sql-merge/http://www.sqlservercentral.com/articles/T-SQL/156901/

https://stackoverflow.com/questions/23240274/how-to-retrieve-old-values-in-output-clause-with-sql-merge-statement