

# Truncate Table vs. Delete From

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In the books on-line, I found the following excerpt on this subject:

If you want to delete all the rows in a table, TRUNCATE TABLE is faster than DELETE. DELETE physically removes rows one at a time and records each deleted row in the transaction log. TRUNCATE TABLE deallocates all pages associated with the table. For this reason, TRUNCATE TABLE is faster and requires less transaction log space than DELETE. TRUNCATE TABLE is functionally equivalent to DELETE with no WHERE clause, but TRUNCATE TABLE cannot be used with tables referenced by foreign keys. Both DELETE and TRUNCATE TABLE make the space occupied by the deleted rows available for the storage of new data.

Permissions:

Delete permissions default to members of the sysadmin fixed server role, the db\_owner and db\_datawriter fixed database roles, and the table owner. Members of the sysadmin, db\_owner, and the db\_securityadmin roles, and the table owner can transfer permissions to other users. SELECT permissions are also required if the statement contains a WHERE clause.

With a recent experience, there is more to this than meets the eye. Using the premise that having execute permissions on a Stored Procedure overrides any permissions set on a table used within a SP, I did some more security modeling/testing.

Here's what I did. I used TestAcct as the guinea pig account. I setup a user-defined role. TestAcct was assigned to that role. The role had execute permissions on a Stored Procedure.

TestAcct executed the Stored Procedure which issued a

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Truncate Table command. The procedure failed because of lack of permissions to perform the command on the table.

I changed the Truncate Table command to Delete From and it worked. The table involved does not have any foreign keys.

I was wondering if anyone knows the explanation for this apparent difference between Truncate Table and Delete From.  
Thanks,  
Don