How To Truncate TRN Log File

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# Overview

Depending upon how often we backup the database Transaction (TRN) log file, its size may increase to become very large. Most of the file is old records, so we can use tools/commands to reduce the file’s size. This document provides instructions for how to reduce the size of the TRN log file.

# Instructions

Ideally, the TRN log file should be backed up regularly. According to documentation (<https://dba.stackexchange.com/questions/18762/sql-server-log-shrinking-issue>), if we do not backup the log file and truncate it regularly, the files size will greatly increase over time.

## Backing-up TRN Log File

The DBA can back up the TRN log file the same way as backing up the database, except to choose the Backup Type of *Transaction Log*, rather than *Full*.

## Truncating the TRN Log File

First, backup the trn log file.

Next, run the following commands.

use [theDbName]

go

--First run this command to get the file fild\_id

select \* from sys.database\_files

-- You can do the next three commands together.

-- Do the truncate.

dbcc shrinkfile([file\_Id from the select, usually it is 2], truncateonly)

-- How big is the file?

SELECT name ,size/128.0 - CAST(FILEPROPERTY(name, 'SpaceUsed') AS int)/128.0 AS AvailableSpaceInMB

FROM sys.database\_files

-- How big is the log file, and how much of that space is it actually using?  
DBCC sqlperf (LOGSPACE)

## Example

use MY\_DATABASE

go

-- You can do the next three commands together.

-- Do the truncate.

dbcc shrinkfile(2, truncateonly)

-- How big is the file?

SELECT name ,size/128.0 - CAST(FILEPROPERTY(name, 'SpaceUsed') AS int)/128.0 AS AvailableSpaceInMB

FROM sys.database\_files

-- How big is the log file, and how much of that space is it actually using?

DBCC sqlperf (LOGSPACE)

## TrLog File Will Not Shrink

Occasionally, the log file will not shrink, when running the above commands. There is another technique that we can use to shrink the log files, though it should be used only when the above commands do not work. The first article below states that the reason this problem occurs, is that we are not taking enough transaction log backups. We may need to include backing up the TR log, when we backup the database…

References:

<https://dba.stackexchange.com/questions/18762/sql-server-log-shrinking-issue>

<https://docs.microsoft.com/en-us/sql/t-sql/database-console-commands/dbcc-shrinkfile-transact-sql?view=sql-server-2017>

The commands…using their database as an example.

USE AdventureWorks2012;

GO

-- Truncate the log by changing the database recovery model to SIMPLE.

ALTER DATABASE AdventureWorks2012

SET RECOVERY SIMPLE;

GO

-- Shrink the truncated log file to 1 MB.

DBCC SHRINKFILE (AdventureWorks2012\_Log, 1);

GO

-- Reset the database recovery model.

ALTER DATABASE AdventureWorks2012

SET RECOVERY FULL;

GO

**Note: Changing the Recovery Model to *simple* breaks the log chain. So once this operation is complete, you need to immediately start a new log chain by running a database backup.**