**Avoid Transaction Logs volume from filling**

**By** [**Daniel Marques**](http://www.sqlservercentral.com/Authors/Scripts/Daniel_Marques/1758072/)**, 2016/01/27**

**FROM:** [**http://www.sqlservercentral.com/scripts/Transaction+Logs/110612/**](http://www.sqlservercentral.com/scripts/Transaction+Logs/110612/)

When you have the recovey model's of your databases in Full you always have to make backups of your transaction logs in order to truncate them and release space inside the logs.

When you have a lot of databases with many transactions and a not so big volume for logs it's common to have a full drive. So you have to make that annoying log backup and shrink to release some space in the drive and have your databases back on track.

Since i have this problem in a regular basis, i decided to make a simple script to minimize this problem.

How to use:

- Create the folder defined on the script

- Set the limit of free space you want on the script in MB

- Just run or put the script on a job

Important note:

To have a successful backup of your ts log you first need a full backup of your database. The script doesn’t make a full backup of the db, assuming that you have a job for that.

Use and abuse, report bugs, make some tweaks...Enjoy!

USE MASTER

GO

CREATE TABLE #TMPFIXEDDRIVES (

DRIVE CHAR(1),

MBFREE INT)

INSERT INTO #TMPFIXEDDRIVES

EXEC xp\_FIXEDDRIVES

CREATE TABLE #TMPSPACEUSED (

DBNAME VARCHAR(1000),

FILENME VARCHAR(1000)

)

INSERT INTO #TMPSPACEUSED

select sys.databases.name as DBNAME, sys.master\_files.name AS FLNAME from sys.databases

JOIN sys.master\_files

on sys.databases.database\_id = sys.master\_files.database\_id

where sys.databases.database\_id > 4 and sys.master\_files.type = 1

declare @drive varchar(10)

declare @diskfree numeric

declare @databasename varchar(256)

declare @filename varchar(1000)

declare @filetype varchar(10)

declare @filesize numeric

declare @pname varchar(256)

declare @alter nvarchar(256)

DECLARE @path VARCHAR(256)

DECLARE @fileName2 VARCHAR(256)

DECLARE @fileDate VARCHAR(20)

declare @sqlcmd nvarchar(256)

declare @Querymodel as nvarchar(256)

SET @path = 'C:\BackupLogs\' -- Path for transaction log backups

SELECT @fileDate = CONVERT(VARCHAR(20),GETDATE(),112)

declare xQuery cursor FOR

SELECT C.DRIVE,

C.MBFREE AS DISKSPACEFREE,

A.NAME AS DATABASENAME,

B.NAME AS FILENAME,

B.TYPE AS FILETYPE,

B.size AS FILESIZE,

B.PHYSICAL\_NAME

FROM SYS.DATABASES A

JOIN SYS.MASTER\_FILES B

ON A.DATABASE\_ID = B.DATABASE\_ID

JOIN #TMPFIXEDDRIVES C

ON LEFT(B.PHYSICAL\_NAME,1) = C.DRIVE

JOIN #TMPSPACEUSED D

ON A.NAME = D.DBNAME

AND B.NAME = D.FILENME

ORDER BY DISKSPACEFREE

OPEN xQuery

Fetch next from xQuery Into @drive, @diskfree, @databasename, @filename, @filetype, @filesize, @pname

While @@FETCH\_STATUS = 0

BEGIN

set @Querymodel = (select recovery\_model\_desc from sys.databases where name= @databasename and database\_id > 4)

if @Querymodel = 'FULL'

BEGIN

Print 'Database ' + @databasename + ' in FULL mode'

IF @diskfree < 3000 -- Transaction Logs volume free space check, 3GB in the case

BEGIN

Print 'Transaction Log Volume free space below 3GB , starting Backup for ' + @databasename

SET @fileName2 = @path + @databasename + '\_' + @fileDate + '\_log.BAK'

BACKUP LOG @databasename TO DISK = @fileName2

if @@error <> 3013

BEGIN

Print 'Backup terminated successfully, starting log shrink for ' + @databasename

set @alter ='Alter database ' + @databasename + ' SET recovery SIMPLE'

exec sp\_executesql @alter

set @sqlcmd = ('USE [' + @databasename + ']; ')

set @sqlcmd = @sqlcmd + 'DBCC SHRINKFILE (' + @filename + ',1)'

exec (@sqlcmd)

set @alter ='Alter database ' + @databasename + ' SET recovery FULL'

exec sp\_executesql @alter

END

ELSE

Print 'Transaction Log Backup failed, please make a full backup for ' + @databasename

END

ELSE

Print 'Transaction Log Volume with enough free space'

END

Fetch next from xQuery Into @drive, @diskfree, @databasename, @filename, @filetype, @filesize, @pname

END

Close xQuery

Deallocate xQuery

DROP TABLE #TMPFIXEDDRIVES

DROP TABLE #TMPSPACEUSED