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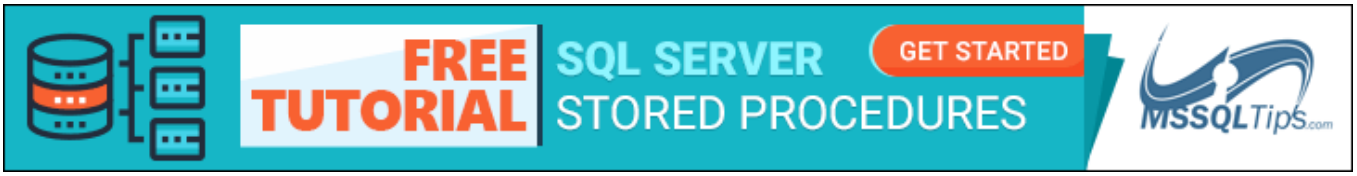
Getting exclusive access to a SQL Server database for restore



By: Greg Robidoux

Overview

When restoring a database, one of the things you need to do is ensure that you have exclusive access to the database. If any other users are in the database the restore will fail.

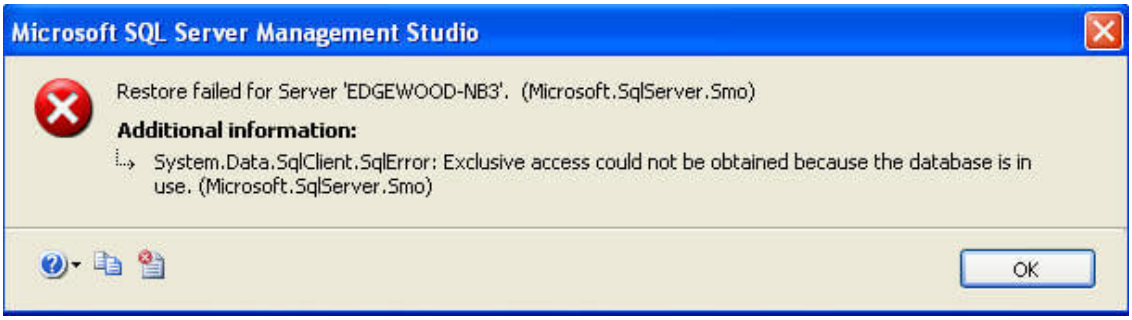
Explanation

When trying to do a restore, if any other user is in the database you will see these types of error messages:

T-SQL

```
Msg 3101, Level 16, State 1, Line 1
Exclusive access could not be obtained because the database is in use.
Msg 3013, Level 16, State 1, Line 1
RESTORE DATABASE is terminating abnormally.
```

SSMS



Getting Exclusive Access

To get exclusive access, all other connections need to be dropped or the database that they are in needs to be changed so they are not using the database you are trying to restore. You can use **sp_who2** or **SSMS** to see what connections are using the database you are trying to restore.

Using KILL

One option to get exclusive access is to use the KILL command to kill each connection that is using the database., but be aware of what connections you are killing and the rollback issues that may need to occur. See this tip for more information on how to do this.

Using ALTER DATABASE

Another option is to put the database in single user mode and then do the restore. This also does a rollback depending on the option you use, but will do all connections at once. See this tip for more information on how to do this.

```
ALTER DATABASE AdventureWorks SET SINGLE_USER WITH ROLLBACK IMMEDIATE
GO
RESTORE DATABASE AdventureWorks FROM DISK = 'C:\AdventureWorks.BAK'
GO
```

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*** NOTE *** - If you want to include code from SQL Server Management Studio (SSMS) in your post, please copy the code from SSMS and paste the code into a text editor like NotePad before copying the code below to remove the SSMS formatting.

p

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May need to start with

USE MASTER

GO

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Thank you for the tips.

Thursday, June 29, 2017 - 1:12:17 AM - David Austin Back To Top

Thanks, that was helpful :)

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To avoid this error in SSMS, check "Close existing connections to destination database" in the Restore Database Options page.

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Hi Charlie,

You would need to put the database back into multi-user mode again.

ALTER DATABASE AdventureWorks SET MULTI_USER

Friday, July 08, 2016 - 10:52:55 AM - Charlie Back To Top

The ALTER DATABASE command worked perfectly. Does anything need to be flipped back once the restore is complete? ie SET SINGLE_USER OFF or something similar?

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Thank you so much, its very helpful

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