Detach a database

Article • 02/01/2022 • 3 minutes to read

Applies to: ✓ SQL Server (all supported versions)

This article describes how to detach a database in SQL Server with SQL Server Management Studio or Transact-SQL. The detached files are not deleted and remain in the file system. The files can be reattached by using CREATE DATABASE ... FOR ATTACH OR FOR ATTACH_REBUILD_LOG option. The files can also be moved to another server and attached to an instance with the same or newer version.

Limitations and restrictions

For a list of limitations and restrictions, see Database Detach and Attach (SQL Server).

Permissions

Requires membership in the db_owner fixed database role.

Use SQL Server Management Studio

Before moving a database

If you are moving a database, before you detach it from its existing SQL Server instance, use the **Database properties** page to review the files associated with the database and their current locations.

- In SQL Server Management Studio Object Explorer, connect to the instance of the SQL Server Database Engine and then expand the instance.
- 2. Expand **Databases**, and select the name of the user database you want to detach.
- 3. Right-click the database name, select **Properties**. Select the **Files** page and review the entries in the **Database files**: table.

Be sure to account for all files associated with the database before you detach, move, and attach. Then, proceed with the detach steps in the next section. For more information on

attaching the database in its new location, see Attach a Database.

Detach a database

- 1. In SQL Server Management Studio Object Explorer, connect to the instance of the SQL Server Database Engine and then expand the instance.
- 2. Expand **Databases**, and select the name of the user database you want to detach.
- 3. Right-click the database name, point to **Tasks**, and then select **Detach**. The **Detach Database** dialog box appears.

Databases to detach

Lists the databases to detach.

Database Name

Displays the name of the database to be detached.

Drop Connections

Disconnect connections to the specified database.

(!) Note

You cannot detach a database with active connections.

Update Statistics

By default, the detach operation retains any out-of-date optimization statistics when detaching the database; to update the existing optimization statistics, select this check box.

Keep Full-Text Catalogs

By default, the detach operation keeps any full-text catalogs that are associated with the database. To remove them, clear the **Keep Full-Text Catalogs** check box. This option appears only when you are upgrading a database from SQL Server 2005 (9.x).

Status

Displays one of the following states: Ready or Not ready.

Message

The **Message** column might display information about the database, as follows:

- When a database is involved with replication, the Status is Not ready and the Message column displays Database replicated.
- When a database has one or more active connections, the Status is Not ready and the Message column displays < number_of_active_connections > Active connection(s). For example: 1 Active connection(s). Before you can detach the database, you must disconnect any active connections by selecting Drop Connections.

To obtain more information about a message, select the hyperlinked text to open Activity Monitor.

4. When you are ready to detach the database, select **OK**.

① Note

The newly detached database will remain visible in the **Databases** node of Object Explorer until the view is refreshed. You can refresh the view at any time: Click in the Object Explorer pane, and from the menu bar select **View** and then **Refresh**.

Use Transact-SQL

Before moving a database

If you are moving a database, before detaching it from its existing SQL Server instance, use the sys.database_files system catalog view to review the files associated with the database and their current locations. For more information, see sys.database_files (Transact-SQL).

- 1. In SQL Server Management Studio, select New Query to open the Query Editor.
- 2. Copy the following Transact-SQL script into the Query Editor, and then select **Execute**. This script displays the location of the physical database files. Be sure to account for all files when moving the database via detach/attach.

```
SQL

USE [database_name]
GO
```

```
SELECT type_desc, name, physical_name from sys.database_files;
```

Be sure to account for all files associated with the database before you detach, move, and attach. Then, proceed with the detach steps in the next section. For more information on attaching the database in its new location, see Attach a Database.

Detach a database

- 1. Connect to the Database Engine.
- 2. From the Standard bar, select New Query.
- 3. Copy and paste the following example into the query window and select **Execute**. This example detaches the AdventureWorks2012 database with the skipchecks option set to true. For more information, see sp_detach_db.

```
SQL

EXEC sp_detach_db 'AdventureWorks2012', 'true';
```

See also

- Database Detach and Attach (SQL Server)
- sp_detach_db (Transact-SQL)

Next steps

Attach a Database