



How to attach and detach a database (Enterprise Manager)

To attach a database

1. Expand a server group, and then expand a server.
2. Right-click **Databases**, and select **All Tasks/Attach Database**.
3. Enter the name of the MDF (**master** data file) of the database to attach. If you are not sure where the file is located, click browse (...) to search. There can only be up to 16 file names specified. For more information, see [sp_attach_db](#).
4. To ensure that the specified MDF file is correct, click **Verify**. The Original File Name(s) column lists all the files in the database (data files and log files). The Current File(s) Location column lists the file names and paths. If Microsoft® SQL Server™ cannot find the files in the specified locations, the attach operation fails. The Current File(s) Location column can be edited, and the current location of the file must be in this column for the attach operation to work. For example, if you have changed the default location of the file before you detached it, you must specify the current location for the attach operation to be successful.
5. In the **Attach as** box, enter the name of the database. The database name must not match any existing database names.
6. Specify the database owner.
7. Click **OK**. A database node for the newly attached database is created in the Database folder.

To detach a database

1. Expand a server group, and then expand a server.
2. Expand **Databases**.
3. Right-click the database, and then select **All Tasks/Detach Database**. This menu is visible only if you are a member of the **sysadmin** fixed server role and the server to which you are connected is SQL Server 2000. The **master**, **model**, and **tempdb** databases cannot be detached.
4. In the **Detach Database** dialog box, check the status of the database. To successfully detach a database, STATUS should be: **The database is ready to be detached**. Optionally, you can select to update statistics prior to the detach operation.
5. To terminate any existing connections from the database, click **Clear**.
6. Click **OK**. The database node for the detached database is removed from the Database folder.

How to attach and detach a database (T-SQL Commands)

sp_attach_db

Attaches a database to a server.

Syntax

```
sp_attach_db [ @dbname = ] 'dbname'  
    , [ @filename1 = ] 'filename_n' [ ,...16 ]
```

Arguments

[@dbname =] 'dbname'

Is the name of the database to be attached to the server. The name must be unique. *dbname* is **sysname**, with a default of NULL.

[@filename1 =] 'filename_n'

Is the physical name, including path, of a database file. *filename_n* is **nvarchar(260)**, with a default of NULL. There can be up to 16 file names specified. The parameter names start at **@filename1** and increment to **@filename16**. The file name list must include at least the primary file, which contains the system tables that point to other files in the database. The list must also include any files that were moved after the database was detached.

Return Code Values

0 (success) or 1 (failure)

Result Sets

None

Remarks

sp_attach_db should only be executed on databases that were previously detached from the database server using an explicit **sp_detach_db** operation. If more than 16 files must be specified, use CREATE DATABASE with the FOR ATTACH clause.

If you attach a database to a server other than the server from which the database was detached, and the detached database was enabled for replication, you should run **sp_removedbreplication** to remove replication from the database.

Permissions

Only members of the **sysadmin** and **dbcreator** fixed server roles can execute this procedure.

Examples

This example attaches two files from **pubs** to the current server.

```
EXEC sp_attach_db @dbname = N'pubs',  
    @filename1 = N'c:\Program Files\Microsoft SQL  
Server\MSSQL\Data\pubs.mdf',  
    @filename2 = N'c:\Program Files\Microsoft SQL  
Server\MSSQL\Data\pubs_log.ldf'
```

sp_detach_db

Detaches a database from a server and, optionally, runs UPDATE STATISTICS on all tables before detaching.

Syntax

```
sp_detach_db [ @dbname = ] 'dbname'  
            [ , [ @skipchecks = ] 'skipchecks' ]
```

Arguments

[@dbname =] 'dbname'

Is the name of the database to be detached. *dbname* is **sysname**, with a default value of NULL.

[@skipchecks =] 'skipchecks'

skipchecks is **nvarchar(10)**, with a default value of NULL. If **true**, UPDATE STATISTICS is skipped. If **false**, UPDATE STATISTICS is run. This option is useful for databases that are to be moved to read-only media.

Return Code Values

0 (success) or 1 (failure)

Result Sets

None

Remarks

The detached files remain and can be reattached using **sp_attach_db** or **sp_attach_single_file_db**. The files can also be moved to another server and attached.

Permissions

Only members of the **sysadmin** fixed server role can execute **sp_detach_db**.

Examples

This example detaches the **pubs** database with *skipchecks* set to **true**.

```
EXEC sp_detach_db 'pubs', 'true'
```

sp_attach_single_file_db

Attaches a database having only one data file to the current server.

Syntax

```
sp_attach_single_file_db [ @dbname = ] 'dbname'  
    , [ @physname = ] 'physical_name'
```

Arguments

[@dbname =] 'dbname'

Is the name of the database to be attached to the server. *dbname* is **sysname**, with a default of NULL.

[@physname =] 'physical_name'

Is the physical name, including path, of the database file. *physical_name* is **nvarchar(260)**, with a default of NULL.

Return Code Values

0 (success) or 1 (failure)

Result Sets

None

Remarks

When **sp_attach_single_file_db** attaches the database to the server, it builds a new log file and performs additional cleanup work to remove replication from the newly attached database.

Used **sp_attach_single_file_db** only on databases that were previously detached from the server using an explicit **sp_detach_db** operation.

Permissions

Only members of the **sysadmin** and **dbcreator** fixed server roles can execute this procedure.

Examples

This example detaches **pubs** and then attaches one file from **pubs** to the current server.

```
EXEC sp_detach_db @dbname = 'pubs'  
EXEC sp_attach_single_file_db @dbname = 'pubs',  
    @physname = 'c:\Program Files\Microsoft SQL  
Server\MSSQL\Data\pubs.mdf'
```