

Truck Tracker Database Backup and Restore

The standard Truck Tracker backup operation creates a full database backup file - this includes all data and objects within the database. This operation in Truck Tracker 6 can be performed using the Backup function under the File menu of the main program. Backups created with the main program will be logged in the Truck Tracker backup table. In Truck Tracker 7 and 8 you can schedule automatic backups in your TT Service Settings.

Here are some other ways to create an SQL Server Database Backup file without using Truck Tracker software:

- connect via SSMS using read-only/backup login account provided and perform manual backup.
- connect via SQLCMD using read-only/backup login account provided and perform manual backup.
- stop the SQL Server Engine service, make a copy of the SQL data files and restart the service.
- if using SQL Standard or higher, use a SQL Agent Job or 3rd party tools with SA access.
- if using SQL Express, use Windows Task Scheduler to execute an SQL Script through the command-line tools.

Backups can be performed a number of ways, but the **restore operation must be done through the main program**. This is imperative if the backup file was created with another instance of the Truck Tracker SQL Server (i.e. moving software to a new server). To perform a restore from the main program you need to have the software installed and licensed first. You also need to login with restore permission.

There is an SQL Server login account created with the software that allows permission to backup the Truck Tracker database. The default username is TruckTrackerRead and the default password is TruckTr@ck3rR3@d. Using this login you can manually create a backup of the database without using the main program. If you have SQL Server Management Studio you can login to the Truck Tracker SQL Server and create a backup using the SSMS interface. If you have SQL Server Workstation Components installed on your machine you can login to the Truck Tracker SQL Server and create a backup using the command prompt (sqlcmd.exe).

Here is the T-SQL code for manually creating a full Truck Tracker backup file in the correct backup directory:

```
DECLARE @DBBackupPath VARCHAR(255)
SELECT @DBBackupPath =
LEFT(physical_name,patindex('%\MSSQL\DATA\%',physical_name)+6)+'BACKUP\TruckT
racker_'+REPLACE(REPLACE(CONVERT(CHAR(19),GETDATE(),120),'
','_'),' ':'','.')+'_Full.bak' FROM sys.database_files where type = 0
BACKUP DATABASE TruckTracker TO DISK = @DBBackupPath WITH NOFORMAT,INIT
,SKIP, STATS = 10, CHECKSUM, NAME = 'TruckTracker-Full Database Backup'
```

If you have SQL Server Standard version or Enterprise version you can use the SQL Agent to schedule backup jobs. The easiest way to schedule an SQL Agent Job is with the SSMS interface. You will probably need elevated permissions and advanced SQL Server knowledge to schedule jobs with the Agent.

If you have SQL Server Express version, there is no way to automate this script with SQL Server Agent because it is not installed with the Express version. However you can use Windows Task Scheduler to schedule a batch file to run a SQL script through the SQLCMD.EXE command-line tool. To do this you need to first create a "ttsqlbackup.sql" file with the sql code above and store it in any directory. Next create a batch file called "ttsqlbackup.bat" with the following batch file code:

```
@ECHO OFF
START sqlcmd -S.\TRUCKTRACKER -UTruckTrackerRead -
PTruckTr@ck3rR3@d -i"c:\ttsqlbackup.sql"
```

The parameter to the SQLCMD utility are -S for server name, -U for username, -P for password and -i for input sql script file. Now every time you run this batch file, a full database backup will be created. Now all you need to do is automate (schedule) the execution of the batch file using Windows Task Scheduler. For more information about scheduling tasks in Windows XP, see

<http://support.microsoft.com/default.aspx?scid=kb;en-us;308569&sd=tech>.

Restoring TruckTracker database requires more permissions than backing up the database. We recommend using a login account that is part of the *sysadmin* server role, but are free to create your own custom user with the correct permissions. The process of restoring the database is similar to a backup. You can use TruckTracker software, SQL Management Studio, or a 3rd party tool.

Here is the TSQL code used to restore the TruckTracker database and link the default login accounts back to the restored database:

```
USE [Master];
ALTER DATABASE TruckTracker SET SINGLE_USER WITH ROLLBACK IMMEDIATE;
RESTORE DATABASE TruckTracker FROM DISK = N'C:\Program Files\Microsoft SQL
Server\MSSQL10_50.TRUCKTRACKER\MSSQL\Backup\TruckTracker_2013-07-
02_09.21.51_Full.bak' WITH CHECKSUM, RECOVERY, REPLACE, NOUNLOAD;
ALTER DATABASE TruckTracker SET MULTI_USER;
USE [TruckTracker];
sp_change_users_login 'AUTO_FIX', 'TruckTrackerUser';
sp_change_users_login 'AUTO_FIX', 'TruckTrackerService';
sp_change_users_login 'AUTO_FIX', 'TruckTrackerRead';
```