

## Tech Brief: Making Backups of SQL Server databases

Without a special backup “agent” that either stops and starts SQL Server or backs up open SQL Server databases, you must perform a database bulk copy to back up the database. The following script can be used to perform this action. You can place this into a batch file and then use NT Scheduler to schedule the batch file as needed.

```
bcp xxxHFWdd.dbo.docdef out c:\hfw14sql\database\backup\xxdocdef.txt /c /r \0 /t \t -Usa -Ppassword -Snt1
bcp xxxHFWdd.dbo.folders out c:\hfw14sql\database\backup\xxfolder.txt /c /r \0 /t \t -Usa -Ppassword -Snt1
bcp xxxHFWdd.dbo.multi out c:\hfw14sql\database\backup\xxmulti.txt /c /r \0 /t \t -Usa -Ppassword -Snt1
bcp xxxHFWdd.dbo.primetable out c:\hfw14sql\database\backup\xxprime.txt /c /r \0 /t \t -Usa -Ppassword -Snt1
```

The /r \0 designation indicates that the row terminator for each record is a null character. The /t \t indicates that the field terminator is a tab character.

The -U defines the user id to connect to the SQL server.

The -P defines the password used to connect. If you leave the -P off, the system will prompt for a password.

The -S designation defines the SQL Server to connect to.

### Multi-database Batch files

For multi-database installations, you can use the following batch file and create a calling batch file for each database:

The back up batch file:

```
bcp %1HFW%2.dbo.docdef out c:\hfw14sql\database\backup\%2docdef.txt /c /r \0 /t \t -Usa -Ppassword -Snt1
bcp %1HFW%2.dbo.folders out c:\hfw14sql\database\backup\%2folder.txt /c /r \0 /t \t -Usa -Ppassword -Snt1
bcp %1HFW%2.dbo.multi out c:\hfw14sql\database\backup\%2multi.txt /c /r \0 /t \t -Usa -Ppassword -Snt1
bcp %1HFW%2.dbo.primetable out c:\hfw14sql\database\backup\%2prime.txt /c /r \0 /t \t -Usa -Ppassword -Snt1
```

The caller:

```
Call sqlback.bat XXX CF
Call sqlback.bat XXX TP
Call sqlback.bat XXX GI
```

### Restoring a database from a backup file created with the BCP utility

When restoring a database from these backup files, you use the same parameters that were used when the database was exported. The following is an example of restoring files using the BCP utility.

```
bcp xxxHFWdd.dbo.docdef in c:\backup\xxdocdef.txt /c /r \0 /t \t -m10000 -ec:\backup\xxdocdef.err -Usa -Ppassword -Snt1
bcp xxxHFWdd.dbo.folders in c:\backup\xxfolder.txt /c /r \0 /t \t -m10000 -ec:\backup\xxfolder.err -Usa -Ppassword -Snt1
bcp xxxHFWdd.dbo.multi in c:\backup\xxmulti.txt /c /r \0 /t \t -m10000 -ec:\backup\xxmulti.err -Usa -Ppassword -Snt1
bcp xxxHFWdd.dbo.primetable in c:\backup\xxprime.txt /c /r \0 /t \t -m10000 -ec:\backup\xxprime.err -Usa -Ppassword -Snt1
```

The -m10000 designation indicates that the maximum number of errors allowed is 10,000.

The -ec:\backup\xxprime.err designation indicates that errors are logged to c:\backup\xxprime.err.