

Potentially Unsafe FILESTREAM Database Backup in Microsoft SQL 2008 and 2008 R2

<https://campus.barracuda.com/doc/76284395/>

This article refers to Barracuda Backup users using the FILESTREAM feature in Microsoft 2008 and 2008 R2 databases.

Issue

Microsoft has reported an issue with Microsoft SQL databases using the FILESTREAM feature. Starting with SQL Server 2008 and the introduction of FILESTREAM, the VDC_Flush command can be sent multiple times during a backup. This operation causes the VDI client to complete the backup process multiple times during the backup operation which is not possible for some VDI clients. Additionally, if the VDI client responds to a VDC_Flush command without ensuring the backup is hardened when more data is coming after the VDC_Flush, SQL Server may truncate the transaction log. However, if the backup eventually fails on the VDI client, and the transaction log is also truncated, data loss can occur.

For more information, see the Microsoft Support article [Improvement: Enhance VDI Protocol with VDC_Complete command in SQL Server](#).

Symptoms

Starting in Barracuda Backup 6.4.06, when running a backup on Microsoft SQL 2008 and 2008 R2 FILESTREAM databases, a warning appears in the backup report: **Potentially unsafe backup of FILESTREAM database on SQL Server 2008.**

Impact/Risks

Data loss can occur if errors or power failures occur at the end of a database backup.

Resolution

Microsoft has not released an update for SQL Server 2008 and 2008 R2 to resolve this issue. For SQL Server 2008 and 2008 R2, Barracuda Networks recommends updating SQL Server to one of the versions listed below that contains this improvement. All SQL Server 2008 and 2008 R2 FILESTREAM database backups are potentially unsafe and risk data loss.

Microsoft has resolved the issue in the following updates for SQL Server 2012 and higher:

- Cumulative Update 2 for SQL Server 2016 SP1
- Cumulative Update 4 for SQL Server 2016
- Cumulative Update 3 for SQL Server 2014 SP2
- Cumulative Update 10 for SQL Server 2014 SP1
- Cumulative Update 5 for SQL Server 2012 SP3

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