

Row Versioning – Snapshot Isolation

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Who am I?

- Oracle Consultant
- Miracle A/S Denmark
- Oracle certified – who cares
- 20+ years Oracle
- 1 years SQL Server
- Oaktable

SQL Server 2000

- Locks block
 - Wait
 - Don't use transactions
 - Dirty read

SQL Server 2005

- Now have
 - Read committed isolation using row versioning
 - Snapshot isolation that provides a transaction level snapshot using row versioning
 - Uses the buffer cache or/and the tempdb to store old versions of the row that are updated.
 - Error msg(3958) when running out of tempdb space

Read committed isolation

- ALTER DATABASE <DATABASE> SET READ_COMMITTED_SNAPSHOT ON;
- single user mode command
- require to be run in a transaction to be active

Snapshot isolation

- "ALTER DATABASE <database> SET ALLOW_SNAPSHOT_ISOLATION ON;"
- Single user mode command
- SET TRANSACTION ISOLATION LEVEL SNAPSHOT
- "Require a transaction" to be active
- All DML see data as of the transaction start time.