## 参考サイト

Tips for Using SQL Server Performance Monitor Counters / sql-server-performance.com

• http://www.sql-server-performance.com/2005/sql-server-performance-monitor-coutners/

• http://www.sqr-server-performance.com/2005/sq 説明	項目名
large number of page splits	\SQLServer:Access Methods\Page Splits/sec
physical RAM is devoted to SQL Server 's data cache	\SQLServer:Buffer Manager\Total pages
how busy SQL Server	\SQLServer:SQL Statistics\Batch Requests/sec
To find out how many compilations SQL Server is doing	\SQLServer:SQL Statistics\SQL Compilations/sec
the number of log flushes per second	\SQLServer:Databases(_Total)\Log Flushes/sec
the number of users using SQL Server affects	\SQLServer:General Statistics\User Connections
deadlocks	\SQLServer:Locks(_Total)\Number of Deadlocks/sec
have to wait for their transactions to complete	\SQLServer:Locks(_Total)\Average Wait Time (ms)
better to have fewer table scans	\SQLServer:Access Methods\Full Scans/sec
backup or restore operations are running at sub-optimal speeds	\SQLServer:Backup Device(*)\Device Throughput Bytes/sec + \PhysicalDisk(_Total)\Avg. Disk Queue Length
using transactional replication	\SQLServer:Replication Logreader(*)\Logreader:Delivery Latency + \SQLServer:Replication Dist.(*)\Dist:Delivery Latency
key counter to watch is the SQL Server Buffer Manager	\SQLServer:Buffer Manager\Buffer cache hit ratio
enough memory to run efficiently	\SQLServer:Memory Manager\Target Server Memory (KB) + \SQLServer:Memory Manager\Total Server Memory (KB)
your SQL Server could use more memory in order to boost performance	\SQLServer:Buffer Manager\Page life expectancy
moving dirty pages from the buffer to disk in order to free up buffer space	\SQLServer:Buffer Manager\Lazy writes/sec
When a checkpoint occurs all dirty pages are written to disk	\SQLServer:Buffer Manager\Checkpoint pages/sec
latch requests that have to wait	\SQLServer:Latches\Average Latch Wait Time (ms)
latch requests that could not be granted immediately	\SQLServer:Latches\Latch Waits/sec

total latch wait time (in milliseconds) for latch
requests

\SQLServer:Latches\Total Latch Wait Time (ms)

- ・「SQLServer: Databases: Transaction/Sec: \_Total」より「Batch Requests /sec」 の方がいい。 transaction 内の処理はごく一部。
- ・Compilation が 100 / 秒 を超えていたら対応
- ・Buffer cache hit ratio は 90-95% が目標
- ・Page life expectancy が 300 秒以下ならもっとメモリ効率を高められる
- ・Lazy Write は毎秒20以下が目標。高いならメモリ追加が必要

## **Understanding SQL Performance Counters**

- <a href="http://www.extremeexperts.com/sql/articles/sqlcounters.aspx">http://www.extremeexperts.com/sql/articles/sqlcounters.aspx</a>
- · 28 項目