Time to be a Master.



Microsoft Certified Master: SQL Server 2008 Recommended Pre-Reading List for Attendees

Last Updated: November 1st, 2009

The Microsoft Certified Master: SQL Server 2008 program covers the comprehensive SQL Server platform. It is a very demanding course and will challenge the limits of most candidates. In order to ensure that candidates are best prepared we provide this list of pre-reading material. It is not a conclusive set of reference material but rather it is intended as a list of pre-readings which provide a baseline for the topics covered during the training rotation. For many, items contained here within will be review. However, each applicant is encouraged to inspect the entire list to ensure they are up to date with the information represented, as it will be needed as a starting basis and referenced throughout the training.

Topic / Resource	Completed? (Y/N)	
Planning and Design		
Infrastructure Planning and Design (SQL Server 2008)		
On-disk structures / New on-disk structures in SQL Server 2008		
On-disk structures		
<u>FILESTREAM</u>		
Spatial Indexes		
Sparse Columns		
<u>Data Compression</u>		
<u>Data Compression: Strategy, Capacity Planning and Best Practices</u>		
Data file maintenance, database snapshots, tempdb		
<u>Shrink</u>		
<u>Database Snapshots</u>		
<u>Database Maintenance</u>		
Working with Tempdb in SQL Server 2005		
Physical Database Storage Design		
Logging, Recovery, log file maintenance		
Transaction Logging		
Index internals and fragmentation		
<u>Fragmentation</u>		
Indexes from every angle		
Online Indexing Operations in SQL Server 2005		
Performance Tuning and Optimization (PTO)		
Query Tuning through effective indexing strategies		



Topic / Resource	Completed? (Y/N)	
Statistics Used by the Query Optimizer in Microsoft SQL Server 2005		
Batch Compilation, Recompilation, and Plan Caching Issues in SQL Server 2005		
Database Engine Tuning Advisor (DTA) in SQL Server 2005		
SQL Server 2005 Row Versioning-Based Transaction Isolation		
Partitioned Tables and Indexes in SQL Server 2005		
Troubleshooting Performance Problems in SQL Server 2008		
Backup and Restore		
Restore internals and procedures		
CHECKDB from every angle		
Corruption		
<u>IO Subsystems</u>		
Backing Up and Restoring Databases in SQL Server		
Benchmarking and Baselining – Prerequisites		
SQL Server Profiler		
Pre-deployment IO Best Practices		
Waits and Queues – Prerequisites		
SQL Server 2005 Waits and Queues		
Troubleshooting performance problems in SQL Server 2005		
SQL 10		
Overview of FAT, HPFS, and NTFS File Systems		
SQL Server 7.0, SQL Server 2000, and SQL Server 2005 logging and data storage algorithms extend data reliability		
Description of using disk drive caches with SQL Server that every database administrator should know		
Files and Filegroups Architecture		
Flash Disk Opportunities for Server Applications		
RAID Levels and SQL Server		
Microsoft Support for iSCSI		
Disk Partition Alignment Best Practices for SQL Server		
XML		
XML Support in Microsoft SQL Server 2005		





	Topic / Resource	Completed? (Y/N)	
	XML Options in Microsoft SQL Server 2005		
	XML Best Practices for Microsoft SQL Server 2005		
	SQL Client		
	<u>C# Tutorial</u>		
	ADO.net Tutorial (Lessons 1-7)		
SQL CLR			
	<u>Using CLR Integration in SQL Server 2005</u>		
	<u>Database Administrator's Guide to SQL Server Database Engine .NET CLR Environment</u>		
Spatial			
	Introduction to New T-SQL Programmability Features in SQL Server 2008		
	<u>Introduction to Spatial Coordinate Systems: Flat Maps for a Round Planet</u>		
	Resource Governor / Policy Based Management		
	Introducing Resource Governor		
	Managing SQL Server Workloads with Resource Governor		
	Resource Governor Concepts		
	Replication		
	Replication: SQL Server Replication		
	Replication: Replication Publishing Model Overview		
	Replication: Types of Replication Overview		
	Replication: Replication Agents Overview		
	Service Broker		
	SQL Server Service Broker		
	Overview (Service Broker)		
	What Does Service Broker Do?		
	<u>Typical Uses of Service Broker</u>		
	Service Broker: Performance and Scalability Techniques		
Security			
	Securing SQL Server		
	Setting Up Windows Service Accounts		
	Security Considerations for a SQL Server Installation		





Topic / Resource	Completed? (Y/N)	
Reaching Compliance: SQL Server 2008 Compliance Guide		
SQL Server 2005 Security Best Practices - Operational and Administrative Tasks		
High Availability		
High Availability Solutions Overview		
Selecting a High Availability Solution		
<u>Database Mirroring Overview</u>		
Log Shipping Overview		
Using Replication for High Availability and Disaster Recovery		
High Availability and Disaster Recovery at ServiceU: A SQL Server 2008 Technical Case Study		
SQL Server 2008 Failover Clustering		
SQL Server Replication: Providing High Availability using Database Mirroring		
<u>Database Mirroring Best Practices and Performance Considerations</u>		
TempDB		
Optimizing tempdb Performance		
Capacity Planning for tempdb		
SSIS		
SQL Server Integration Services		
Security Overview (Integration Services)		
Integration Services Packages		
Creating Package Configurations		
CDC, Change Tracking		
Tuning the Performance of Change Data Capture in SQL Server 2008		
Change Tracking		
Virtualization		
Running SQL Server 2008 in a Hyper-V Environment - Best Practices and Performance Recommendations		