

Microsoft®

SQL Server® 2012

Database Administration

COURSE 171

BY **SCOTT WHIGHAM**



LearnItFirst

Chapter Listing:

1. Course Introduction
2. Editions, Licensing, and What's New in SQL Server 2012
3. Installing and Upgrading to SQL Server 2012
4. Using the Tools and Configuring SQL Server 2012
5. Creating & Managing Databases
6. Security in SQL Server 2012
7. SQL Server 2012 Backup and Recovery
9. Database Maintenance
10. Performance Monitoring
11. Virtualizing Your SQL Server 2012 Instance
12. VLDBs, SANs, SSDs, and Partitioning Strategies
13. Managing SQL Server with PowerShell
14. A Guide to Moving and Copying Databases
15. SQL Server Replication
16. Miscellaneous Administration Topics



Chapter 10

1

Chapter Outline

- Tools and Techniques
- Perfmon Counters
- Using PAL 2.0

2

- SSMS monitoring tools
- sp_configure
- Ad-Hoc and Parameterization
- Locking and blocking

3

- Wait Stats
- SQL Profiler
- Extended Events



LearnItFirst

Chapter 10: Video 01

Performance Monitoring Tools and Concepts DBAs Need to Be Familiar With



Chapter: Performance Monitoring
Course: SQL Server 2012 Database Administration
Course ID: 171
Instructor: Scott Whigham



















There are many built-in tools to monitor health and performance:

- SSMS: Activity Monitor, built-in reports
- Transact-SQL: `sp_who`, `sp_who2`, more
- SQL Server Profiler
- Dynamic Management Views and Functions
 - DMVs and DMFs
- Performance counters and objects
- Data Collector
- Extended Events



“But, Mr. Scott, how do I know when to use each one?”

	Profiler	DMVs	Perf Mon	Data Coll.	Ext. Events
Provides “live”, real-time reporting					
Can do trend analysis and historical reporting?	Requires manual load	Requires manual load	Requires manual load		Requires manual load
Can view SQL issued?					
Provides detail-level view or summary?	Detail	Depends...	Summary	Summary	Detail
Can be used to diagnose performance problems?					
Level of impact on server	Low	None	Negligible	Low-Hi	None
Difficulty level	100-300	200-400	200-300	300-500	300-500

Many sites collect and compare performance metrics

- You can “roll your own”
- You can use built-in Microsoft products
- You can buy third-party products



This chapter will give you a good head start

- There is a lot more to “performance tuning”
- Understanding “where to start” is key



In the next video...

– Performance Monitor Counters for SQL Server

“If you find it hard to laugh at yourself then I would be happy to do it for you.”

- Groucho Marx

