

SQL Server Infrastructure Tuning for Availability and Performance

David Klee

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Length:	1 Day
Language:	English
Audience(s):	System Administrators, Developers, Database Administrators
Level:	200-300 (Intermediate)
Technologies:	Storage, Networking, Windows Server, VMware vSphere, Microsoft Hyper-V, SQL Server

Course Description

Microsoft MVP and VMware vExpert David Klee leads this full-day introduction to the infrastructure underneath your SQL Server environment. The focus of the course is to help those new to the enterprise server infrastructure concepts become familiar with function and purpose of each layer of the architecture around their databases, and how this knowledge can benefit them as data professionals. Participants will gain exposure to all layers of infrastructure and virtualization underneath SQL Server, from storage all the way through to the SQL Server instance, and will learn how to review and engineer the entire stack with a strong emphasis on SQL Server performance.

Intended Audience

The intended audience of this course is information workers (both business and IT-centric) involved with architecting an enterprise IT strategy for SQL Server.

Course Topics

The following topics will be addressed during the course:

- Datacenter Fundamentals
- Infrastructure Stack Fundamentals
- Storage and SAN Concepts and Design
- Networking and Interconnect Topologies
- Physical Server Technologies
- The SQL Server Virtual Machine
- High Availability and Disaster Recovery
- Performance Investigation and Tuning of the Entire Stack

Course Objectives

Upon completion of this course, attendees will be able to:

- Understand key infrastructure concepts
- Determine the optimal infrastructure configuration for best performance
- Review their own enterprise infrastructure for performance bottlenecks

- Construct a SQL Server virtual machine template with best practices for agility and performance
- Understand how and what stack metrics to benchmark and baseline to ensure proper objective performance measurement
- Identify and remediate common infrastructure-related SQL Server performance killers
- Understand proper capacity management techniques for long term management

Prerequisites

Attendees with the following experiences will benefit the most from this course:

- Basic familiarity with the core components of a server
- SQL Server installation and configuration
- Exposure to SQL Server performance metric measurement and identification

A working set of the screens and configuration settings referenced in the session, together with the reference slides and documentation, will be provided to attendees, for strategic reference in working with SQL Server and the infrastructure underneath in their own environments.

Please contact David with any questions: dklee@heraflux.com.



David Klee is a Microsoft MVP and VMware vExpert with over seventeen years of IT experience. David spends his days handling performance and HA/DR architecture of mission-critical SQL Servers as the Founder of Heraflux Technologies. His areas of expertise are virtualization and performance, datacenter architecture, and risk mitigation through high availability and disaster recovery. When he is not geeking out on technologies, David is an aspiring amateur photographer. You can read his blog at davidklee.net, and reach him on Twitter at [@kleegeek](https://twitter.com/kleegeek).

David speaks at a number of national and regional technology related events, including the PASS Summit, VMware VMworld, IT/Dev Connections, SQL Saturday events, SQL Cruise, PASS virtual chapter webinars, and many SQL Server User Groups.