

SQL Server: Benchmarking and Baselining

Module 6: Pulling It All Together

Erin Stellato

Erin@SQLskills.com



Introduction

- **To finish up, this module will**
 - Review what you need to do *before* you start baselining and benchmarking
 - List the different sources of data
 - Review what you need to consider as you establish your methodology

Before You Start

- **Define your goal**
 - Understand where the system is today
 - Make troubleshooting is easier
 - Proactively tune the environment
 - Determine usage patterns and trending
 - Create a starting point for growth and capacity planning
 - Measure the effects of changes

Before You Start (2)

- **Determine what data has the most value**
 - SQL Server provides a plethora of information
 - What data is absolutely required in order to reach your goal?

Data Options

- **Performance Monitor**

- SQL Server, resource, and OS counters
- Quickly configure and capture counters with Data Collectors
- Overhead is easily minimized
- Analysis is a manual effort

- **Queries captured with SQL Trace or Extended Events**

- Some effort required to configure and capture queries
- Performance impact can be drastic if improperly configured
- Query analysis is most effective with third-party tools
- Queries can also be captured via DMVs

Data Options (2)

- **DMVs**

- SQL Server and some OS information
- Data capture and review can be done with T-SQL
- Easy to implement
- Extremely valuable information is quickly available

- **Other Information**

- Server configuration
- Database and file sizes
- Maintenance job history

Next Steps

- **Determine**

- When the data will be collected
- How often the data will be sampled
- How long the data will be retained
- Where the data will be stored
- How the data will be analyzed or viewed

- **Document your plan and your methodology**

- List what information you're capturing , why and how often
- Note where the data is stored and how it can be retrieved
- Include retention periods for each set of data
- Include backup locations for the data and supporting scripts, utilities, etc.

Summary

- **Baseline data is valuable**
- **SQL Server collects a wealth of useful information – you can take advantage of it**
- **Data options discussed throughout are not the only ones available**
 - Figure out what information is important to you, then figure out how to capture it
- **Keys to success include:**
 - Mapping out a plan
 - Starting small
 - Being consistent