



Getting The Most From Your SQL Server Deployments

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About Me

- SQLHA – Mission Critical Applications
- Focus on Performance Tuning, HA\DR, Consolidations, Private Clouds
- SQLPass Program Committee member
- SC Barbeque Judge, photographer

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- Twitter – BBQSQL

Challenges

- Capacity Planning
- Health Checks
- Troubleshooting
 - 50,000 to Detailed Analysis
- Monitoring\Alerting
- Performance
- Stress Tests
- Load Tests

Native Solution

- Performance Monitor
 - Native tool
 - Powerful
 - SQL Server, Windows, 3rd Party Applications
- Types of Counters
 - Resource queues
 - Snapshot counters
 - Averages per Second



It's Time For A Demo!

Perfmon



Core Areas

CPU

Memory

Disk

Network

SQL Server

Prep Work

- Application Knowledge
- Server Configuration
- Typical Workload
- Frequency of Captures
 - Depends
- Technologies used
 - What is installed and being used?
- What counters need to be logged?
 - Understand Problem

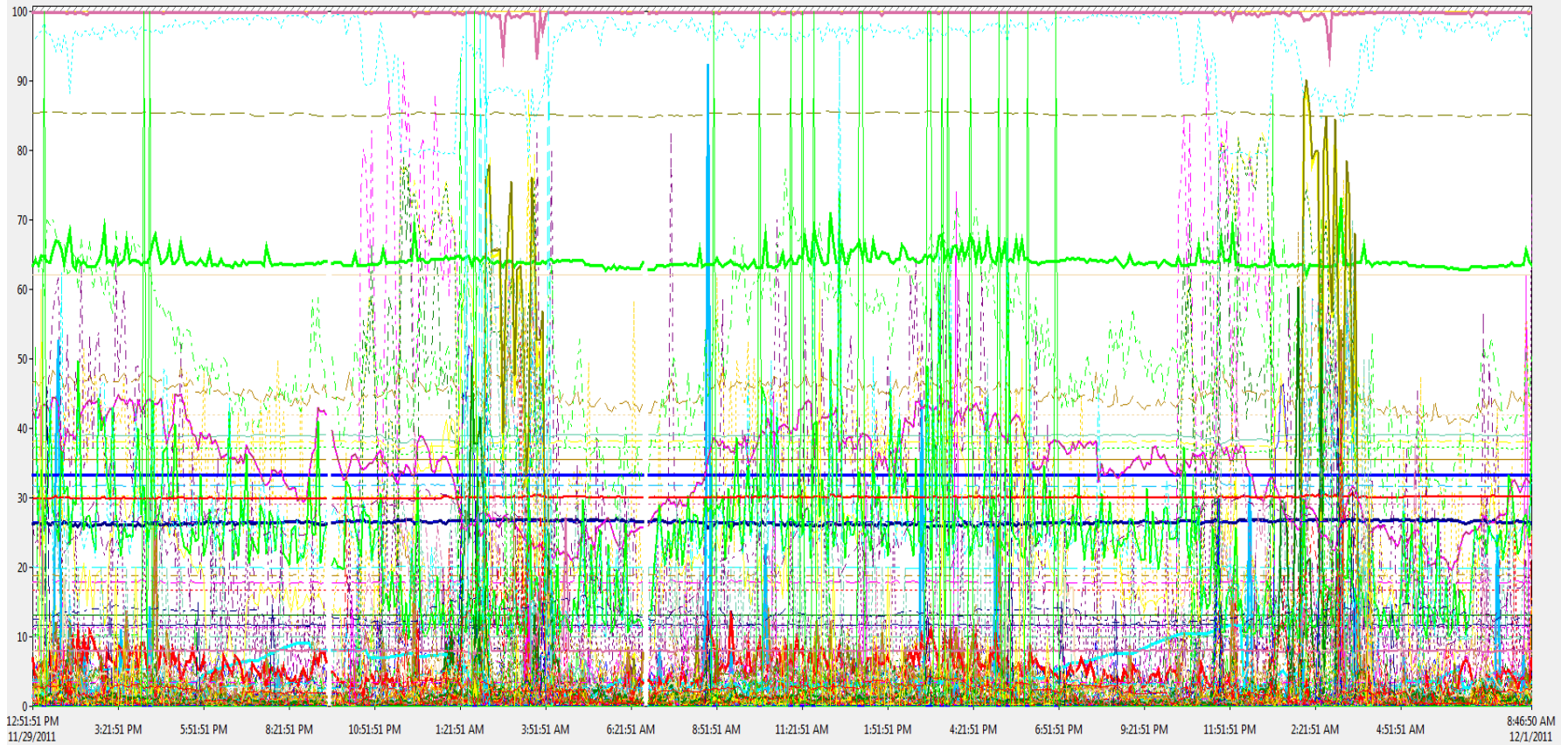
The Capture

- Manual versus Automatic
 - Real time
 - Data Collector
 - Logman – Automate capture
- Format – BLG or CSV
 - Convert later - `relog logfile.blg -f CSV -o newfile.csv`
 - Do not log to database
- SQL Server – `sys.dm_os_performance_counters`

The Analysis

- Time Slices
- Sample intervals
 - Seconds versus minutes – GOAL?
- ****Correlation of object counters**
- Thresholds
 - Every system is different
 - Baseline to define your ranges
- Start high and drill down
- Chart versus report

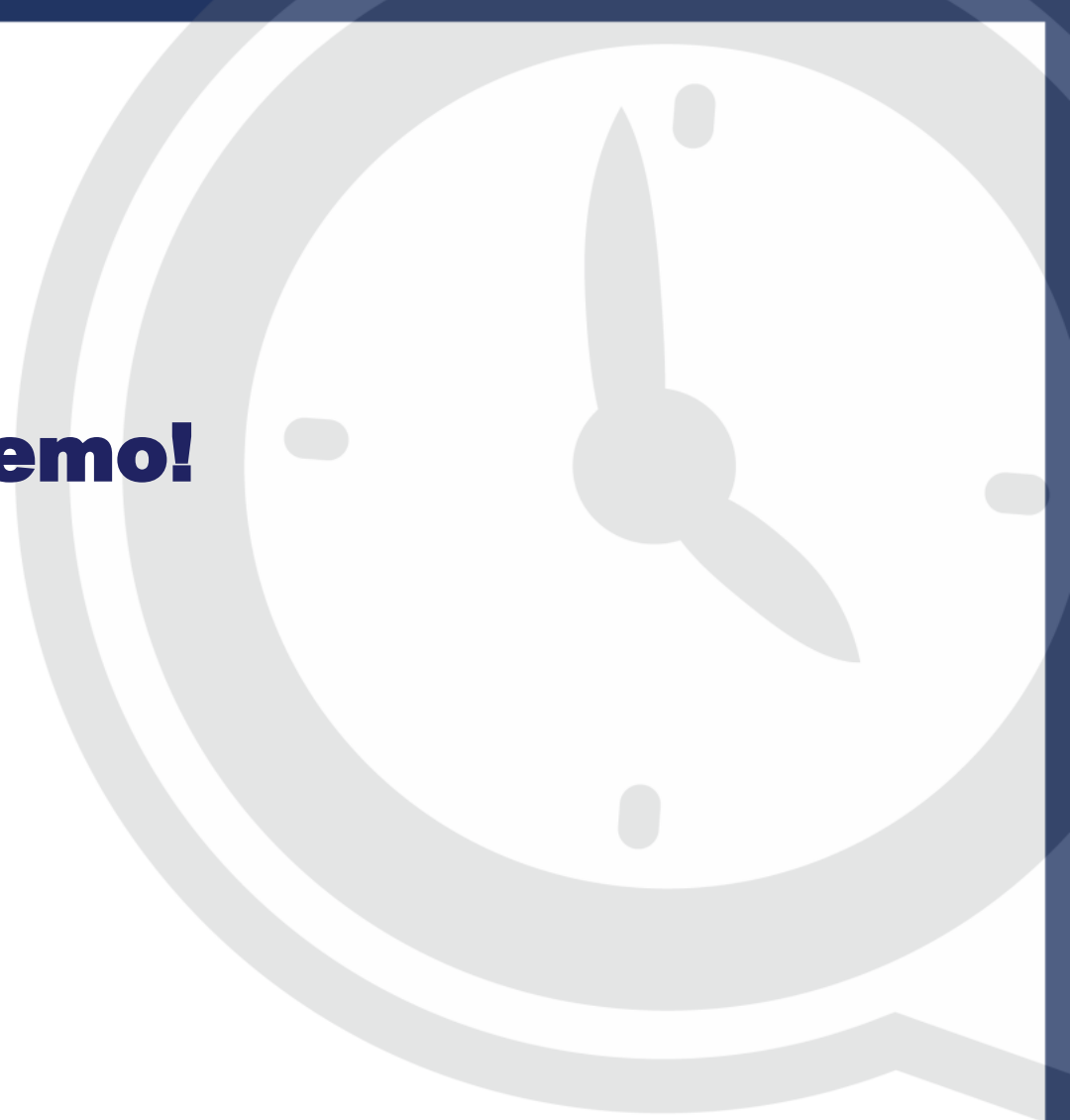
Perfmon Artwork





It's Time For A Demo!

Analyze Logs



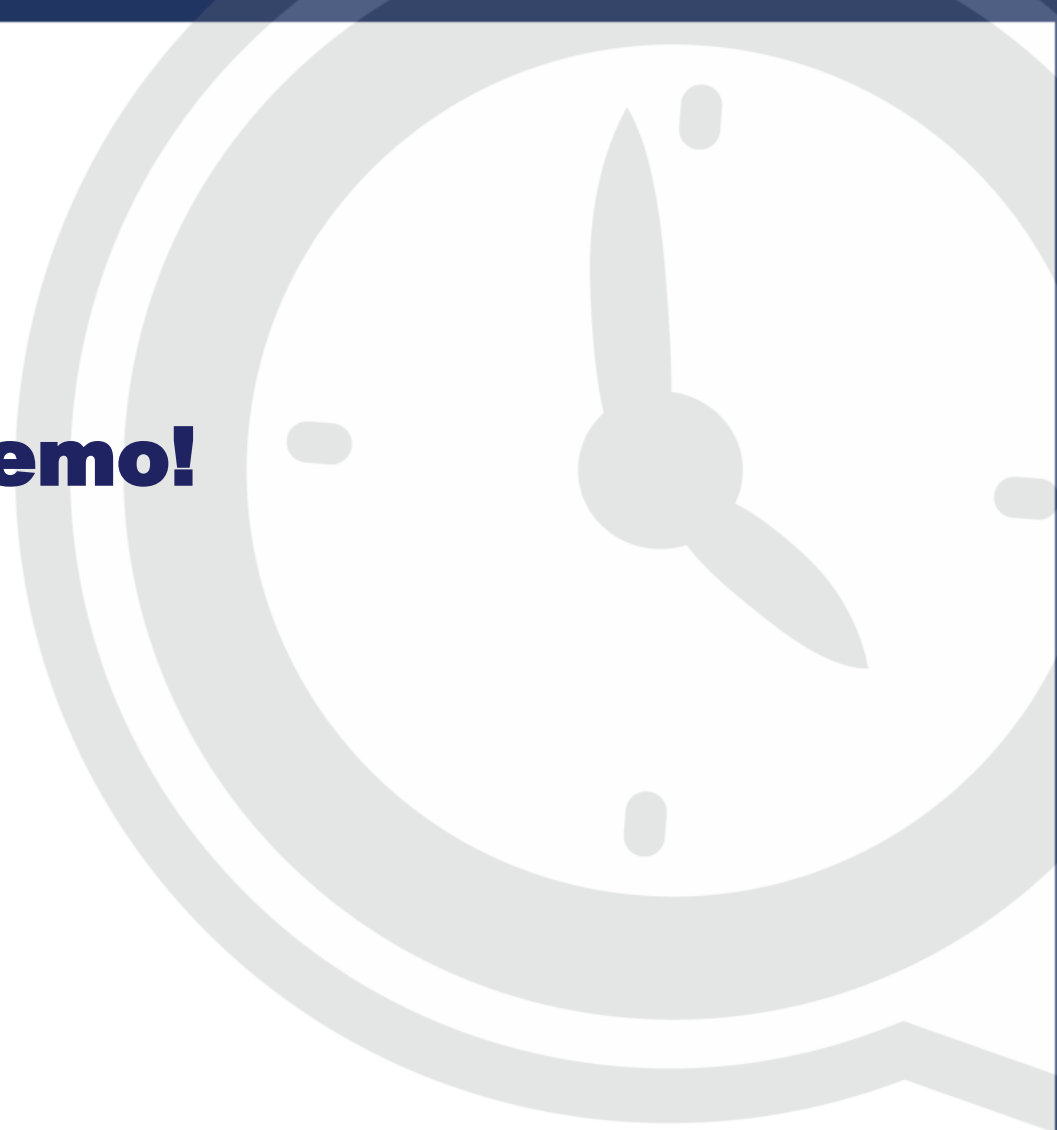
Other Ways to Analyze

- 3rd Party Tools
- Performance Analysis of Logs (PAL)
 - Automated analysis
 - Pre-defined thresholds (*Customizable*)
 - Time Slices
 - Avg, Min, Max
 - HTML Reports
 - Highlights Potential Issues
 - Summarize large amounts of data
- <http://pal.codeplex.com/>



It's Time For A Demo!

PAL



Summary

- Powerful, native tools
 - Can count on the tool being there 😊
- Identify base counters to collect from every host
 - Define a template(s) depending on type of server
 - Data is key – Cannot analyze if it does not exist
- Take your troubleshooting to the next level



Questions and Discussion

