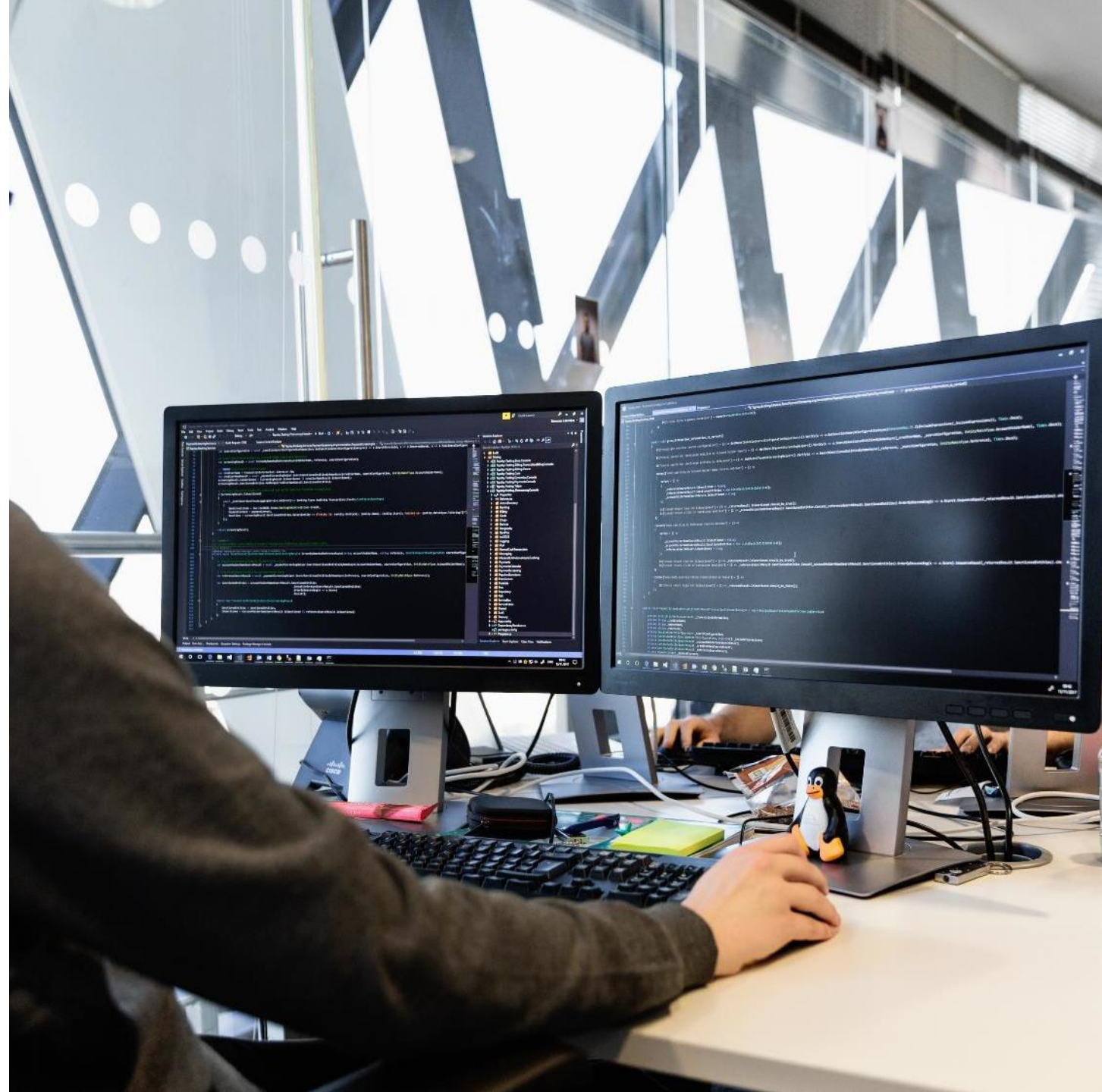




WorkshopPLUS: SharePoint Server Administration

Administration: Monitoring



Agenda - Chapter 1

1

Monitoring

Why Monitoring?



Proactive vs. Reactive work



Analyzing logs and events



Capacity planning



Security and audit



Maintain SLA - avoid outage

Available monitoring tools



SharePoint Health Analyzer



Logging database



Built-in reports



PowerShell



Developer tools










System Center Operations Manager

SharePoint Health Analyzer

Review problems and solutions ⓘ

[+ new item](#)

[All Reports](#) [HealthReport](#) ...

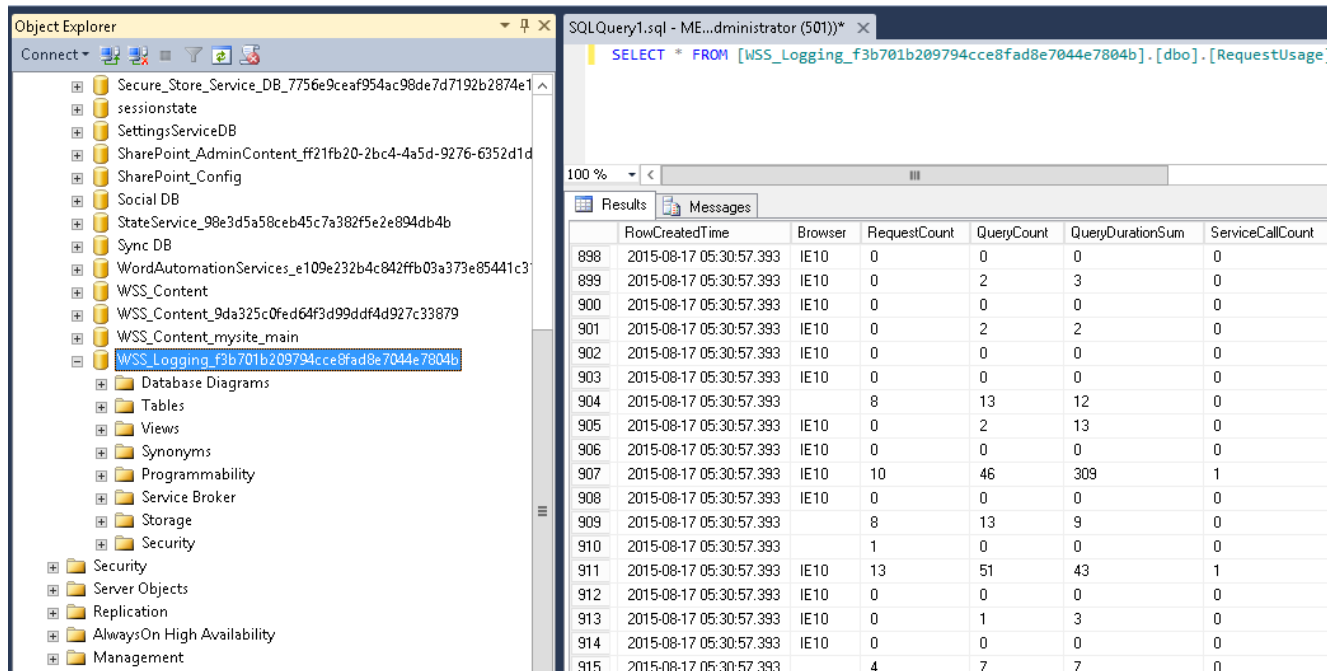
✓	Severity	Title	Failing Servers	Failing Services	Modified
Category : Security (2)					
		The server farm account should not be used for other services.		SPTimerService (SPTimerV4)	November 12
		Accounts used by application pools or service identities are in the local machine Administrators group.		SPTimerService (SPTimerV4)	Yesterday at 9:00 PM
Category : Performance (1)					
		Databases exist on servers running SharePoint Foundation.		SPTimerService (SPTimerV4)	November 12
Category : Configuration (3)					
		Missing server side dependencies.		SPTimerService (SPTimerV4)	November 12
		People search relevance is not optimized when the Active Directory has errors in the manager reporting structure.		UserProfileService	Wednesday at 9:00 PM
		Built-in accounts are used as application pool or service identities.		SPTimerService (SPTimerV4)	November 12
Category : Availability (1)					
		Drives are running out of free space.		SPTimerService (SPTimerV4)	49 minutes ago

SharePoint Health Analyzer

Built-in feature in Central Administration to analyze and resolve problems in the following areas:

- Security, performance, configuration and availability

Logging database

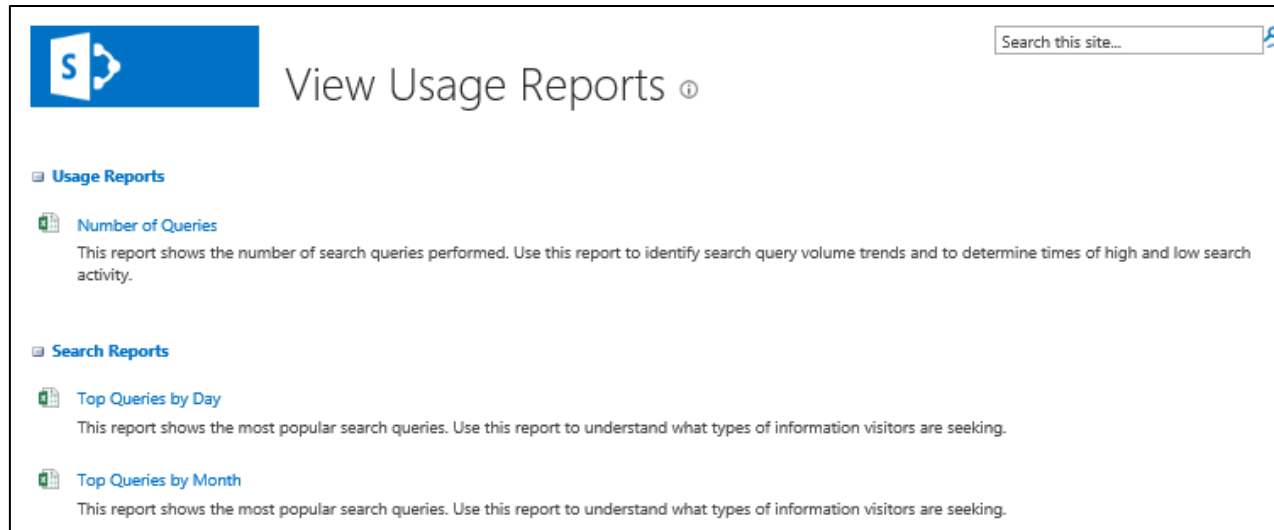
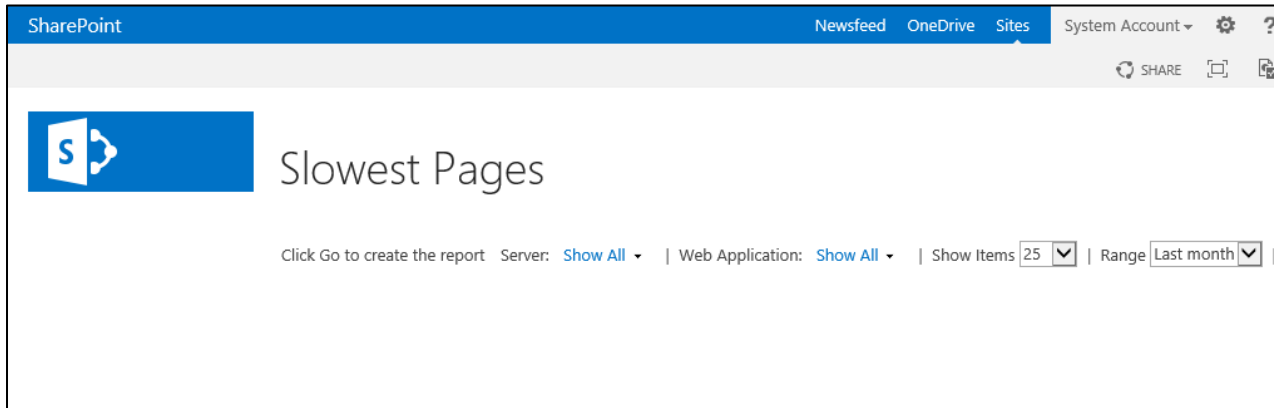


	RowCreatedTime	Browser	RequestCount	QueryCount	QueryDurationSum	ServiceCallCount
898	2015-08-17 05:30:57.393	IE10	0	0	0	0
899	2015-08-17 05:30:57.393	IE10	0	2	3	0
900	2015-08-17 05:30:57.393	IE10	0	0	0	0
901	2015-08-17 05:30:57.393	IE10	0	2	2	0
902	2015-08-17 05:30:57.393	IE10	0	0	0	0
903	2015-08-17 05:30:57.393	IE10	0	0	0	0
904	2015-08-17 05:30:57.393		8	13	12	0
905	2015-08-17 05:30:57.393	IE10	0	2	13	0
906	2015-08-17 05:30:57.393	IE10	0	0	0	0
907	2015-08-17 05:30:57.393	IE10	10	46	309	1
908	2015-08-17 05:30:57.393	IE10	0	0	0	0
909	2015-08-17 05:30:57.393		8	13	9	0
910	2015-08-17 05:30:57.393		1	0	0	0
911	2015-08-17 05:30:57.393	IE10	13	51	43	1
912	2015-08-17 05:30:57.393	IE10	0	0	0	0
913	2015-08-17 05:30:57.393	IE10	0	1	3	0
914	2015-08-17 05:30:57.393	IE10	0	0	0	0
915	2015-08-17 05:30:57.393		4	7	7	0

Logging database

Timer jobs collect health data of the farm.
Data is initially stored in the logging folder before being moved to the logging database.
Logging data is used in reports to display the health status of the farm.
It is allowed to query the database directly (only logging database).

Built-in reports



Built-in reporting

This feature lets you configure diagnostic logging, **data** collection, view administrative, and health reports.

It informs you about:

- Slowest Pages
- Search Usage Reports
- Search Health Reports

PowerShell

```
Administrator: SharePoint 2013 Management Shell
PS C:\Users\Administrator> Get-SPLogEvent
```

Timestamp	Area	Category	EventID	Level
15:03:24.49	SharePoint Server	Unified Logging Service	b8fx	High
15:03:24.49	SharePoint Server	Unified Logging Service	b8fx	High
15:03:24.53	SharePoint Foundation	Unified Logging Service	b8fx	High
15:03:25.09	SharePoint Foundation	Database	3760	Cri...
15:03:25.12	SharePoint Foundation	Upgrade	ajxme	Une...
15:03:25.12	SharePoint Foundation	Upgrade	ajxme	Une...
15:03:25.13	SharePoint Foundation	Upgrade	ajxme	Une...
15:03:25.13	SharePoint Foundation	Upgrade	ajxmj	Une...
15:03:25.13	SharePoint Foundation	Upgrade	ajxmj	Une...
15:03:25.13	SharePoint Foundation	Upgrade	ajxmj	Une...
15:03:25.13	SharePoint Foundation	Topology	887w	Une...
15:03:25.13	SharePoint Foundation	DistributedCache	ad4jz	Une...
15:03:25.15	SharePoint Foundation	Unified Logging Service	8wsu	High
15:03:25.18	SharePoint Foundation	Database	3760	Cri...
15:03:25.18	SharePoint Foundation	Upgrade	ajxme	Une...
15:03:25.18	SharePoint Foundation	Upgrade	ajxme	Une...
15:03:25.18	SharePoint Foundation	Upgrade	ajxme	Une...
15:03:25.20	SharePoint Foundation	Upgrade	ajxmj	Une...
15:03:25.20	SharePoint Foundation	Upgrade	ajxmj	Une...
15:03:25.20	SharePoint Foundation	Upgrade	ajxmj	Une...
15:03:25.20	SharePoint Foundation	Topology	887w	Une...

PowerShell

Windows PowerShell is a powerful tool for monitoring SharePoint. You can run commands to obtain the exact logs that you want to view.

Example > Get-SPLogEvent

SharePoint Developer Dashboard

Developer Dashboard - Windows Internet Explorer

Requests Scenarios Animation MDS

Request (/_layouts/15/devdash.aspx)

Server Info Scopes SQL SPRequests Asserts Service Calls ULS Cache Calls

Request Summary	
Start Time	Sat, 3 Dec 2016 17:12:47 UTC
Duration	3316.53 ms
CPU Time	3077 ms
Managed Memory	N/A
Username	i:0#.w \administrator
Page Checkout Level	Published
Server Name	
Client Address	fe80::69f7:da7:142b:4052%24
Correlation ID	957dbd9d-dbd1-b0a7-ab9a-e7dd8ad681ab
Aggregate Stats	
Number of SQL Queries	25
Total SQL Duration	255 ms
Number of SDRRequests	100

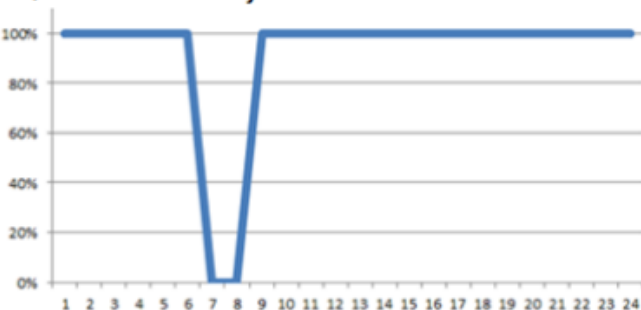
SharePoint Developer Dashboard

Built-in tool provides diagnostic information that can help a developer or system administrator analyze performance of SharePoint webpages.

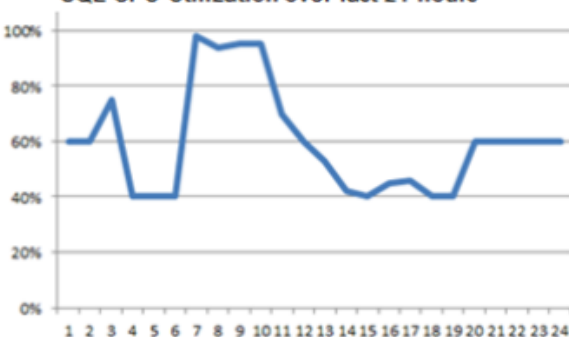
Help troubleshoot when a page is loading slowly, a Web Part is not performing, or if a database query on the page is not performing.

System Center Operations Manager

SQL Server Availability over last 24 hours

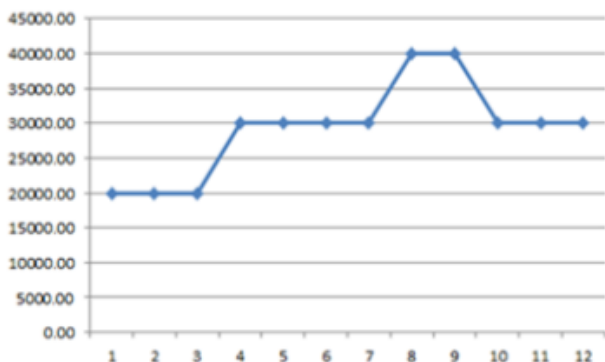


SQL CPU Utilization over last 24 hours

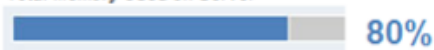


SQL Memory Usage in KB

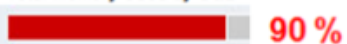
Total Memory: 50,000 KB



Total Memory Used on Server



Total Memory Used by SQL

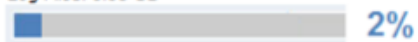


Disk Storage

Data Files: 17.6 GB



Log Files: 6.93 GB



SQL Server Properties

Properties	
Version:	
Edition:	Enterprise Edition
Clustered:	No
Processors:	8
Host:	
HostOS:	Microsoft Windows
Host Memory:	16 GB
Databases:	102
Data Size:	296,68 GB
Log Size:	3,67 GB

System Center Operations Manager (SCOM)

Powerful monitoring platform that lets you monitor services, devices, and operations for many computers in a single console.

By using Operations Manager, you can view status, health, performance information, and alerts generated for availability, performance, configuration, and security situations.

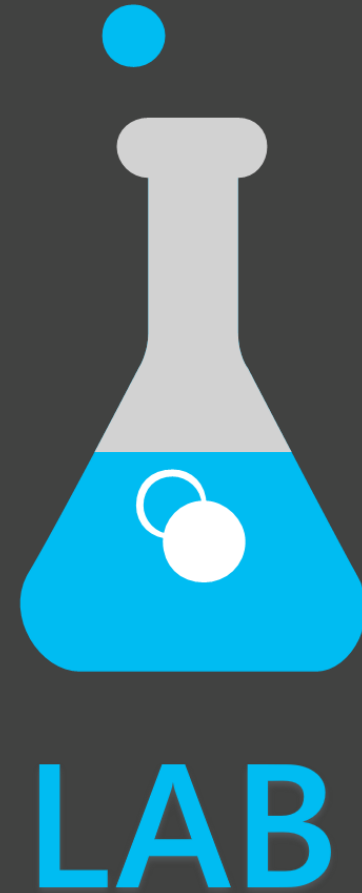
Lab 4:

Using the SharePoint Health Analyzer

Objectives

After completing this lab, you will be able to:

- Work with the SharePoint Health Analyzer to monitor SharePoint



Knowledge Check

Which tool would you use to monitor slow pages?

- Built-in reports, Logging database

For customization slowness, which tool to recommend?

- SharePoint Developer Dashboard

True or False? System Center is a built-in tool in SharePoint.

- False

Questions?



