



Do You Know? What's In Your Server Inventory

Allen White, Owner, DataPerf Professionals
Moderated By: Javier Villegas

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Upcoming Events



PASS' flagship event takes place in Seattle, Washington
November 5-8, 2019
PASSsummit.com



PASS Marathon: Career Development
October 8, 2019

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Allen White
Owner, DataPerf Professionals

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45 years in IT

Career covered multiple disciplines – operations, development, telecommunications, network design/administration and database design and administration

SQL Server for 27 years

Microsoft Certified IT Professional: Database Administrator and Database Developer, Microsoft Certified Trainer (MCT), Awarded Microsoft MVP Award for SQL Server for last 13 years

Owner, Consultant, DataPerf Professionals

PASS Director 2016 - 2018

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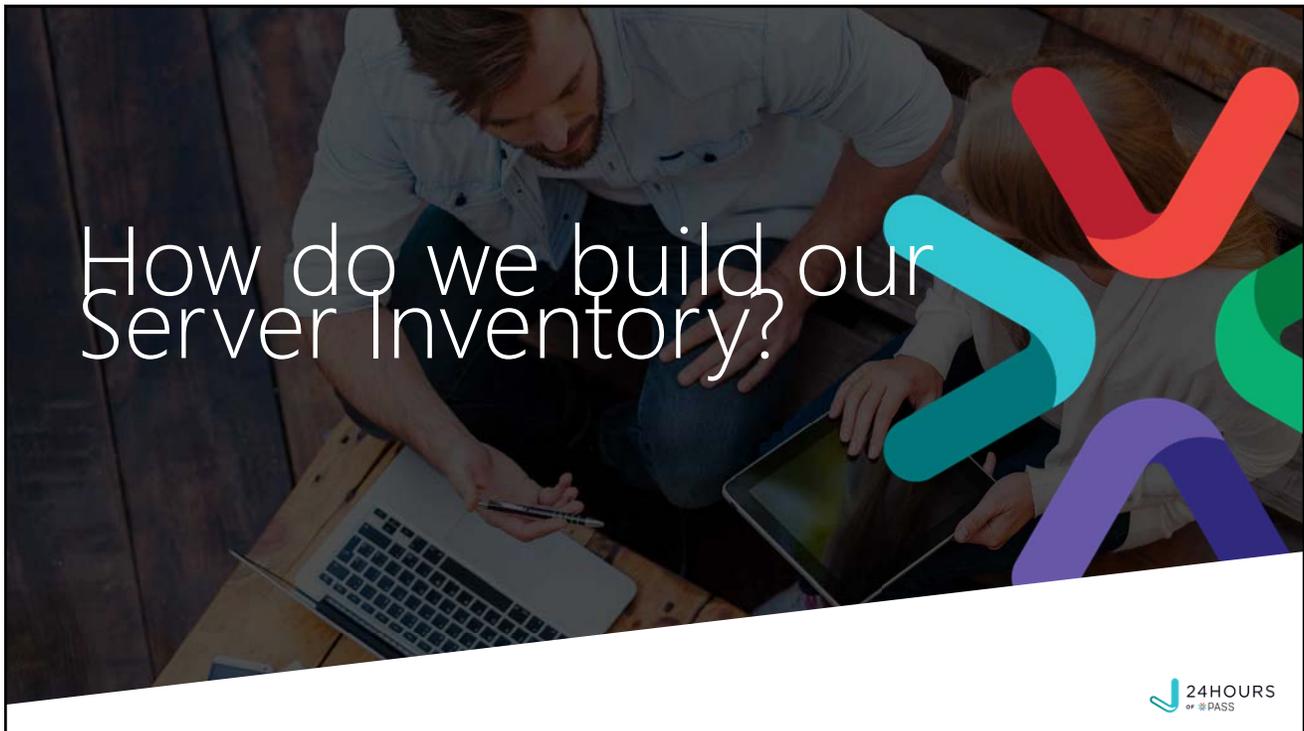
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Why Keep a Server Inventory

- Need to know resource usage
- Understand where resources may be inadequate
- Understand where resources may be excessive
- Ensure licensing compliance
- Provides guidance in emergency recovery



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PowerShell, WMI, SMO

- Automate All The Things
 - PowerShell is the preferred scripting tool on Windows
- Windows Management Instrumentation (WMI)
 - Exposes all the details of a Windows machine
- Server Management Objects (SMO)
 - Management API for SQL Server
 - Introduced in SQL Server 2005
 - Works against all versions since SQL Server 2000

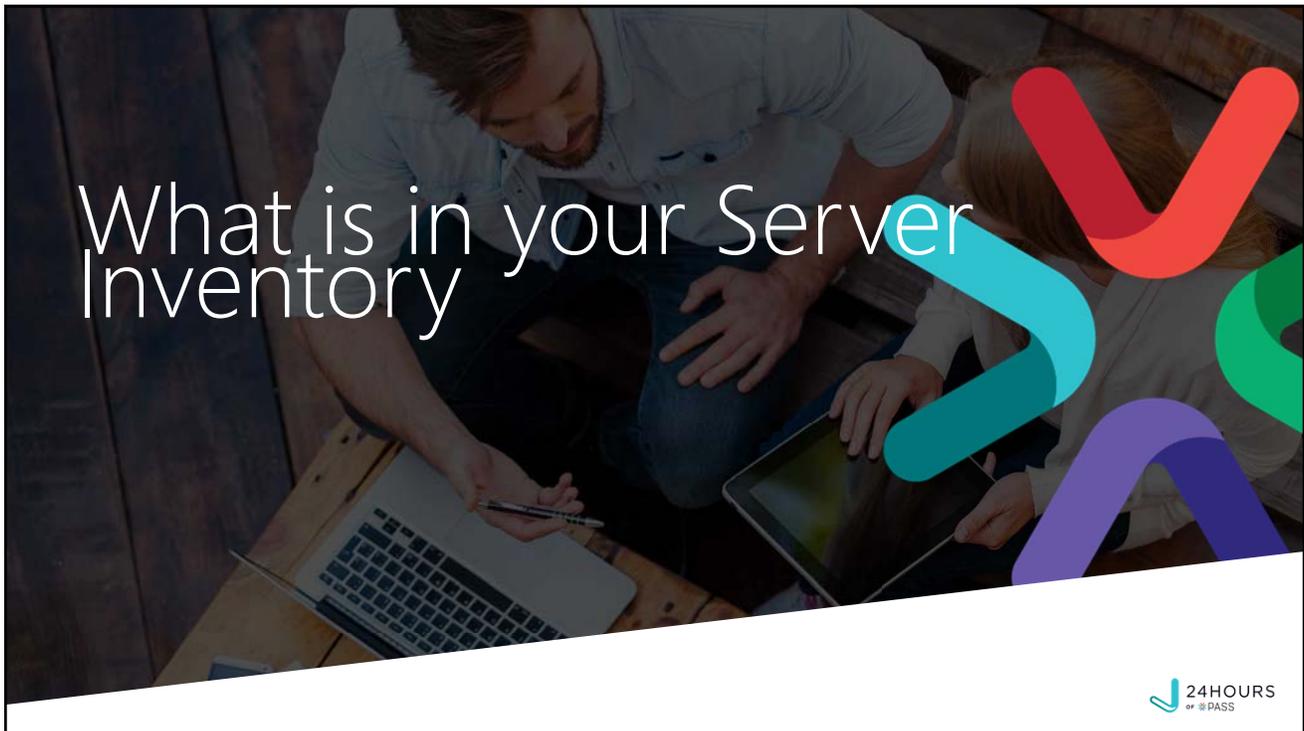
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Building the Server Inventory

- Write your own script (like I did in 2009)
 - Let PowerShell do an Inventory of your Servers
 - <https://www.red-gate.com/simple-talk/sql/database-administration/let-powershell-do-an-inventory-of-your-servers/>
- Use DBATools (<https://dbatools.io/>)
 - building an inventory view of SQL Servers with dbatools
 - <https://dbatools.io/building-an-inventory/>

Building the Server Inventory

- SQL Power Doc
 - Written by Kendal Van Dyke (now with Microsoft)
 - Produces a set of Excel workbooks
 - Open Source on GitHub
 - <https://github.com/kendalvandyke/sqlpowerdoc>
- Demo



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Server Inventory - Machines

- Physical or Virtual
- Name
- Memory Amount
- Hard Disks
 - Drive Letter
 - Size
 - Format
 - Block Size
- Network Card(s)
 - IP Address

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Server Inventory - SQL Server Instances

- Instance Name(s)
- Service Account details
- Configuration Settings
- Server Logins, Roles, Credentials
- Defined Endpoints (Service Broker, Availability Groups, etc.)
- Linked Server configurations



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Server Inventory - SQL Server Databases

- Database Names and Sizes
- Physical disk files, sizes, locations, filegroups
- Database configuration options (Compatibility Level, etc.)
- Database features enabled (change tracking, availability groups, etc.)
- Users, Roles, Application Roles, Schemas, Permissions
- Certificates and Keys



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Server Inventory - SQL Server Agent

- Jobs
- Job Steps
- Schedules
- Operators
- Alerts
- Notifications



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Server Inventory – Let's Examine

- Demo



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Coming up next...

Scripting for Success on Linux- Top Tips and Tricks

Kellyn Pot'Vin-Gorman

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Thank you for attending

Learn more from Allen White

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