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SQL Server® 2008

# Administering SQL Server on Server Core with PowerShell

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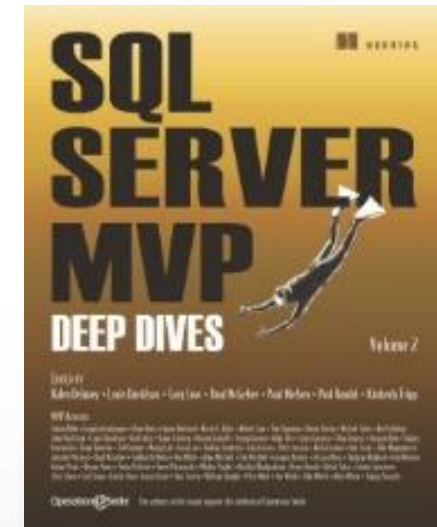
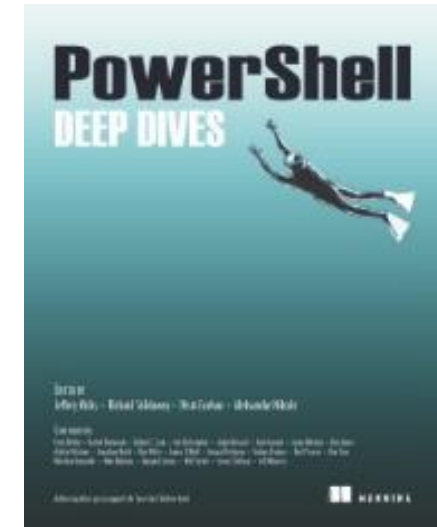
Ben Miller & Associates, Inc.



SQL  
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# About Me!

- Data Platform MVP (6 years and running)
- Certified Master SQL Server
- Contact Information
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  - Twitter: @DBADuck
- SQL Server Chapter Leader Utah
- Independent Consultant
- PowerShell enthusiast
- [SQL PowerShell Stairway](#) on SQL Server Central
- Frequent speaker at SQL Saturdays
- SQLSkills.com PowerShell Immersion Event



# Agenda

- **Why Server Core?**
- **Server Core Background**
- **SQL Server Features Supported on Core**
- **Administering Server Core Beginning**
- **Prerequisites for SQL Server on Core**
- **PowerShell on Core**
- **Managing SQL Server on Windows Core**

# Why Server Core?

- **Server Core has NO GUI !!!**
- **Only Simple-Dialog GUI is allowed, all others disallowed**
  - iSCSI Configuration
  - Some Control Panel items
- **Reduced Surface Area for bugs and updates**
  - Less Updates needed
- **To Keep DBAs from connecting with Remote Desktop to Admin SQL Server 😊**

# Server Core Background

- **Beginning in Windows 2008**
- **SQL is not able to be installed on core until 2012**
- **Windows Core available in each version of Windows since**
- **Configurable Remotely with RSAT tools**

# SQL Server Features Supported on Core

- **SQL Server Engine**
- **Replication**
- **Full Text Search**
- **Analysis Services**
- **Integration Services**
- **Connectivity Tools**
- **Microsoft Sync Framework**

# Administering Server Core Beginning

- **Sconfig**
- **PowerShell**
- **Cmd.exe is the default shell when remoting in**
- **Firewall Rules**
- **Windows Features**
- **Enable PowerShell Remoting (Win2012R2 on by default)**
- **Local Security Policy**
- **Lscsicpl – iSCSI Initiator configuration**

# Prerequisites for SQL Server on Core

- **Install .NET 3.5**
- **Rename Computer**
- **Set IP Address**
- **Join the Domain**
- **Create a User for SQL Services**
- **Configuration.INI or Setup command line**



# PowerShell on Core

- **Set-ExecutionPolicy**
- **Add-Computer**
- **Import-Module**
- **New-PSSession**
- **Enter-PSSession**
- **Exit-PSSession**
- **Invoke-Command**
- **Use of SMO**

# Managing SQL Server on Core

- **Smo.Wmi.ManagedComputer**
- **Services**
- **Service Account**
- **Protocols (TCPIP, NamedPipes)**
- **IP Port**
- **Set-NetFirewallRule**
- **New-NetFirewallRule**

# *Demos*

# Where to go from here?

- **Learn SMO**
- **SQL PowerShell Stairway on SQLServerCentral.com**
  - (<http://www.sqlservercentral.com/stairway/91327/>)
- **SMO Object Model**
  - (<https://msdn.microsoft.com/en-us/library/ms162209.aspx>)
- **Get Involved**
  - (<https://trello.com/b/NEerYXUU/powershell-sql-client-tools-sqlps-ssms>)

# References

- <http://www.darkoperator.com/blog/2013/1/10/set-powershell-as-your-default-shell-in-windows-2012-core.html>
- <http://dbaduck.com> – Presentations

# Questions?



Don't forget to complete an online evaluation!

## Administering SQL Server on Server Core with PowerShell

Your evaluation helps organizers build better conferences  
and helps speakers improve their sessions.

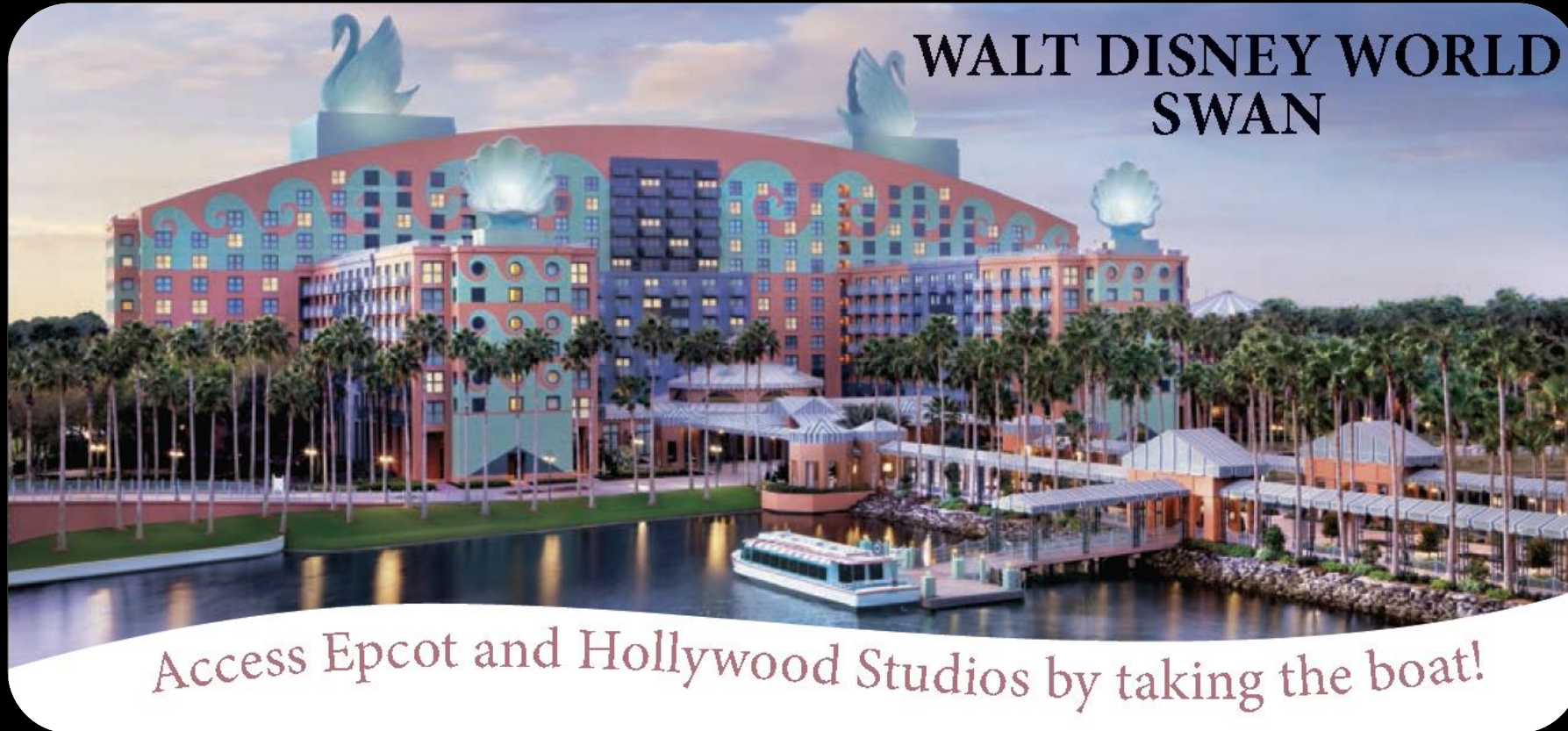


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**Thank you!**

# Save the Date!

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