SQLintersection

Session: Tuesday, 11:45 am-1:00 pm

Getting Started with the DBAtools Module

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Speaker: Ben Miller

- Current Data Platform MVP since 2009
- Microsoft Certified Master in SQL Server
- Author https://dbaduck.com
 - MVP Deep Dives #2
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Reminder: Intersect with Speakers and Attendees

- Tweet tips and tricks that you learn and follow tweets posted by your peers!
 - Follow: #SQLintersection and/or #DEVintersection
- Join us Wednesday Evening for SQLafterDark
 - Doors open at 7:00 pm
 - Trivia game starts at 7:30 pm Winning team receives something fun!
 - □ Raffle at the end of the night

 Lots of great items to win including a seat in a five-day SQLskills Immersion Event!
 - The first round of drinks is sponsored by SentryOne and SQLskills







Overview

- DBAtools Module Stats
- Key Concepts for the Module
- Getting the Module
- Loading the Module
- Documentation Slides



DBAtools Module Stats

- 500+ Commands
- 163 Get Commands
- 26 Set Commands
- 30 Copy Commands
- 15 Export Commands
- 28 New Commands
- 25 Remove Commands
- 49 Test Commands
- And many more.....



Key Concepts for DBAtools

- SqlInstance (alias ServerInstance Array)
- Database (Array)
- EnableException
- ExcludeDatabase
- Dba prefix for all Commands
- DbaDb prefix for all commands pertaining to Database
- Requires PS v3.0+
- SMO Object vs. Information



Getting the Module

- Install-Module
- Invoke-Expression (Invoke-WebRequest -UseBasicParsing https://dbatools.io/in)
- Save-Module –Name dbatools –Path c:\temp
- Then copy paste works great!



Loading the Module

- 1. Run a Command and auto load
- 2. Manually import with Import-Module
- Beware of AutoLoading modules



Demo

DBAtools Module



Review

- DBAtools Module Stats
- Key Concepts for the Module
- Getting the Module
- Loading the Module
- Documentation Slides



Questions?



Don't forget to complete an online evaluation!

Getting Started with the DBAtools Module

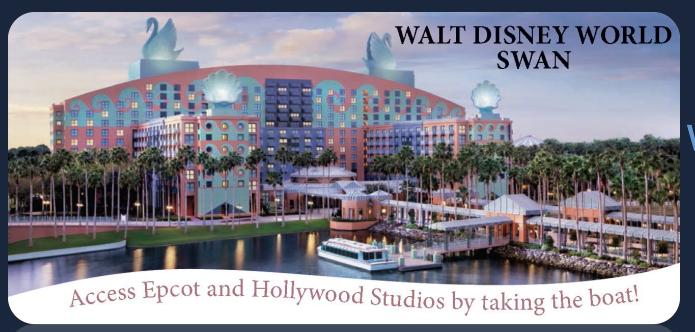
Your evaluation helps organizers build better conferences and helps speakers improve their sessions.



Thank you!

Save the Date!

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2020

Week of April 6

We're back in Orlando!



Access prede and Honywood Studios by taking the boat!

Leave the every day behind and enter a world of wonder and enchantment at the Walt Disney World® Resort. Located in the heart of the most magical place on earth, the Walt Disney World Swan and Dolphin Resort provides a truly extraordinary backdrop for our event! Beautiful tropical landscaping, tranquil waterways, and classic art and architecture work together to create a stunning landmark!

Connect-Dbalnstance

- Used to Connect to a SQL Server Instance
- Returns an SMO.Server
- Can use either SQL Auth or Windows Auth
- StatementTimeout set to 0
- Supports most scenarios of connection
 - Availability Groups
 - Mirroring "Failover Partner"



Get-DbaDatabase

- Single or Multiple Database
- Many Filter options
 - Status ('Emergency', 'Normal', 'Offline', 'Recovering', 'Restoring', 'Standby', and 'Suspect')
 - Owner gets databases that have this Owner
 - ExcludeDatabase list of database to exclude by name
 - Database list of databases to include by name
- Returns SMO objects of Database



Get-DbaDiskSpace

- Gets disk space of one or many computers
- Get-DbaDiskSpace –Computername computer1, computer2
- Pros
 - Great information (even for trend gathering)
 - Only parameter necessary is computername
 - Can send multiple Computer Names in
 - Only lists drives of type 2, 3 (fixed drives non-removable)

Cons

Uses WMI so you need to be Admin on the target computer



Get-DbaErrorLog

- One or many SqlInstances
- Can specify LogNumber
- Search with –Text parameter
- Source parameter (Logon, Server, etc)
- Before parameter
- After parameter



Get-DbaLastGoodCheckDb

- Gives the last DBCC date of a database
- Multiple Servers / versions
- Multiple Databases
- Filters
 - ExcludeDatabase
- Returns latest date
- Uses DBCC DBINFO() WITH TABLERESULTS



Get-DbaLogin

- Multiple Servers
- Returns SMO.Login
- Filters
 - HasAccess
 - WindowsLogin
 - SqlLogins
 - NoSystem
 - Locked
 - Disabled



Get-DbaMaxMemory

- Multiple Instances
- Information about MaxServerMemory setting
- Returns TotalMB and SqlMaxMB



Get-DbaServerProtocol

- Multiple Servers allowed
- Lists all Protocols and their status

- Works across machines
- Credential for alternate connection



Get-DbaTcpPort

- Nice way to remotely get the Port
- Pretty simple really, but nice to not have to be on the machine



Get-DbaSpConfigure

- PowerShell equivalent of sp_configure
- Sister command Set-DbaSpConfigure
- Gets/Sets sp_configure items



Backup-DbaDatabase

- Quick way to back up databases
- Will use Default Backup Directory if not specified



Get-DbaDbBackupHistory

- Key Parameters
- Last(Full, Diff, Log)
- Last (Get the chain of Full, Diff, Log)
- Since (date time)



Restore-DbaDatabase

- Key Parameters
- DestinationPrefix (what should be put in front of filenames)
- DestinationDataDirectory
- DestinationLogDirectory
- TrustDbBackupHistory



Invoke-DbaQuery

- Think Invoke-SqlCmd
- Get Data from a Query into PowerShell and do something with it
- -As Parameter lets you output it as a certain type



Write-DbaDataTable

Puts data into a data table from a data table

