

SQLintersection

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

Getting Started with the DBAtools Module

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Speaker: Ben Miller



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 - 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**
- **Db 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.



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Thank you!

Save the Date!

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2020

Week of April 6

We're back in Orlando!



Access Epcot and Hollywood 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-DbInstance

- **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-DbErrorLog

- **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**