whoisdonabel?

- consults and trains at **QueryWorks**
- wears different hats
- fiddles with **SQL Server** and **PowerShell**
- teaches **SQL Server at BCIT**
- blogs at sqlmusings.com
- tweets as @sqlbelle
- writes (upcoming book, articles)
Cookbook (expected Oct 2012)

≥ SQL Server 2012 with PowerShell V3 Cookbook
Agenda

≥ Introduction
  ▪ Basics
  ▪ ISE
  ▪ SMO

≥ Common tasks (all demos)
  ▪ database settings, monitoring services, checking error logs, backups and restores, import and export XML and BLOB data

≥ Wrap Up
What is PowerShell?

Shell + Scripting Language

Object Oriented + .NET Support

```powershell
PS C:\Users\Administrator> $d = Get-Date
PS C:\Users\Administrator> $d.DayOfWeek
Tuesday
```

```powershell
Sample Import Library.ps1
1 #import libraries
2 [void][System.Reflection.Assembly]::LoadWithPartialName("Microsoft.ReportViewer.WinForms")
3 [void][System.Reflection.Assembly]::LoadWithPartialName("System.Windows.Forms")
Why PowerShell?

Automation and Integration

Web Service → XML → SQL Server → SharePoint Intranet → Word and PDF doc
One tool

Pick the best answer:

a. Worst Tool
b. Worse Tool
c. OK Tool
d. Better Tool
e. Best Tool
f. Any of the above

http://www.flickr.com/photos/usefulguy/226362739/
Learning PoSH for the young Jedi

Get-Help Get-Command -Detailed

Get-Command "*Event*" `-CommandType "Cmdlet" | ` Select Name

$failed = Get-EventLog `-LogName "Security" ` -Message "*failed*"

$failed | Get-Member

http://www.flickr.com/photos/brighton/2153602543
Demo Environment

- Windows Server 2008 R2
- SQL Server 2012
- PowerShell V3 RC
  - From Windows Management Framework 3.0 RC
To get full SQLPS functionality in Shell

<table>
<thead>
<tr>
<th>SQL Server 2008/R2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get-PSSnapin -registered</td>
</tr>
<tr>
<td>Add-PSSnapin SqlServerCmdletSnapin</td>
</tr>
<tr>
<td>Add-PSSnapin SqlServerProviderSnapin</td>
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</tbody>
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<table>
<thead>
<tr>
<th>SQL Server 2012</th>
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<tbody>
<tr>
<td>Import-Module SQLPS -DisableNameChecking</td>
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</tbody>
</table>
Teaser Script

#import SQL Server module
Import-Module SQLPS -DisableNameChecking;

$instanceName = "KERRIGAN";
$server = New-Object ` -TypeName Microsoft.SqlServer.Management.Smo.Server ` -ArgumentList $instanceName;

#display days ago since last backup
$server.Databases | ` Select Name, RecoveryModel, LastBackupDate, ` LastDifferentialBackupDate, LastLogBackupDate | ` Format-Table -AutoSize
Demos: PoSH ISE + Basics

Demo
Demos

- Listing SQLPS cmdlets
- Changing Settings
- Monitoring Services
- Checking Out Errors
- Performing Backups and Restores
- Getting XML and BLOB data out
Resources
PowerShell Resources

≥ PowerShell.com
  ▪ [http://powershell.com](http://powershell.com)

≥ PowerShell Tip of the Day

≥ Free PowerShell Ebook – really good!
PowerShell Books

≥ PowerShell and SQL Server Books
  - SQL Server 2012 and PowerShell V3 Cookbook by Donabel Santos (expected Oct 2012)
  - Microsoft SQL Server 2008 Administration with Windows PowerShell by MAK and Yan Pan

≥ PowerShell Books
  - PowerShell in Action by Bruce Payette
  - PowerShell in a Month of Lunches by Don Jones
  - PowerShell TFM by Don Jones
  - PowerShell in Practice by Richard Siddaway
  - PowerShell In Depth (MEAP) by Don Jones, Bruce Payette and Richard Siddaway
Presentation materials (slides) will be at my blog http://www.sqlmusings.com

Questions? Comments? Feedback? Email me donabel.santos@queryworks.ca

THANK YOU!