

POWERCLI – WHERE TO START?

TIM HYNES

SYSTEMS ENGINEER, CTO OFFICE, ANS GROUP, UK

@RAILROADMANUK

[HTTPS://VIRTUALBRAKEMAN.WORDPRESS.COM](https://virtualbrakeman.wordpress.com)

#VBROWNBAG TECHTALKS VMWORLD EMEA, 19TH OCTOBER 2016

WHO?



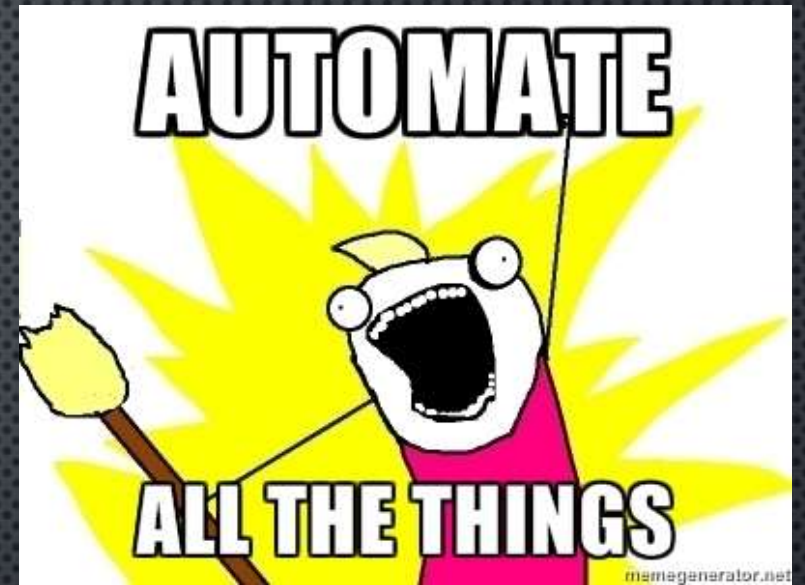
- SYSTEMS ENGINEER FOCUSED ON AUTOMATION IN DELIVERY OF INFRASTRUCTURE SOLUTIONS
- VMWARE vEXPERT 2016
- CISCO CHAMPION 2016
- MULTIPLE VCPS – NSX/VSphere/CLOUD
- MCSA 2012

WHAT?

- WHY SHOULD WE USE AUTOMATION?
- WHY POWERCLI?
- HOW DO I GET STARTED?
- PLACES TO GET HELP

WHY AUTOMATE?

- QUICKER
- MORE CONSISTENT
- KEEP UP WITH BUSINESS DEMAND
- DO MORE WITH LESS
- BREAK DOWN SILOS
- REMOVE HUMAN ERROR
- INCREASE CONTROL



WHY USE POWERSHELL/POWERCCLI?



- UBIQUITOUS ACROSS ALL PLATFORMS
- SIMPLE TO PICK UP
- ALL THE PLUGINS, SO MUCH GOODNESS
- HUGE COMMUNITY OF USERS
- INTEGRATE CHANGES TO MANY PLATFORMS IN A SINGLE SCRIPT

vmware®

VEEAM

IT JUST WORKS!™



SOLIDFIRE



CITRIX®



NetApp™

EMC²

NUTANIX™



amazon
web services™



PURE
STORAGE



CISCO
CISCO



nimblestorage



rubrik

ARISTA



commvault®



HOW DO I GET STARTED?

- USE WHAT YOU ALREADY HAVE
- START SMALL
- BUILD A DEVELOPMENT ENVIRONMENT
- JOIN A COMMUNITY
- STEAL
- DON'T CHANGE ANYTHING (IN PRODUCTION) UNTIL YOU KNOW WHAT YOU'RE DOING
- EXPECT TO FAIL OFTEN



```
PS C:\Users\thynes> get-vm
```

Name	PowerState	Num CPUs	MemoryGB
----	-----	-----	-----
CUSTEXC01	PoweredOn	2	12.000
CUSTDC01	PoweredOn	1	4.000

```
PS C:\Users\thynes>
```



```
PS C:\Users\thynes> get-vm *EXC*
```

Name	PowerState	Num CPUs	MemoryGB
----	-----	-----	-----
CUSTEXC01	PoweredOn	2	12.000

```
PS C:\Users\thynes>
```

```
PS C:\Users\thynes> get-vm *EXC* | Get-Datastore
```

Name	FreeSpaceGB	CapacityGB
----	-----	-----
Some_Datastore	311.191	972.800

```
PS C:\Users\thynes> get-vm *EXC* | Get-Datastore
```



```
PS C:\Users\thynes> get-vm *EXC* | Get-Datastore
```

Name	FreeSpaceGB	CapacityGB
----	-----	-----
Some_Datastore	311.191	972.800

```
PS C:\Users\thynes> get-vm *EXC* | Get-Datastore
```

```
PS C:\Users\thynes> get-vm *EXC* | Get-Datastore | get-vmhost |  
select name
```

Name

mgtesx01.mylab.local

mgtesx02.mylab.local

prdesx01.mylab.local

prdesx02.mylab.local

```
PS C:\Users\thynes>
```



```
PS C:\Users\thynes> $hosts = get-vm *EXC* | Get-Datastore | get-  
vmhost | select name
```

Name

mgtesx01.mylab.local

mgtesx02.mylab.local

prdesx01.mylab.local

prdesx02.mylab.local

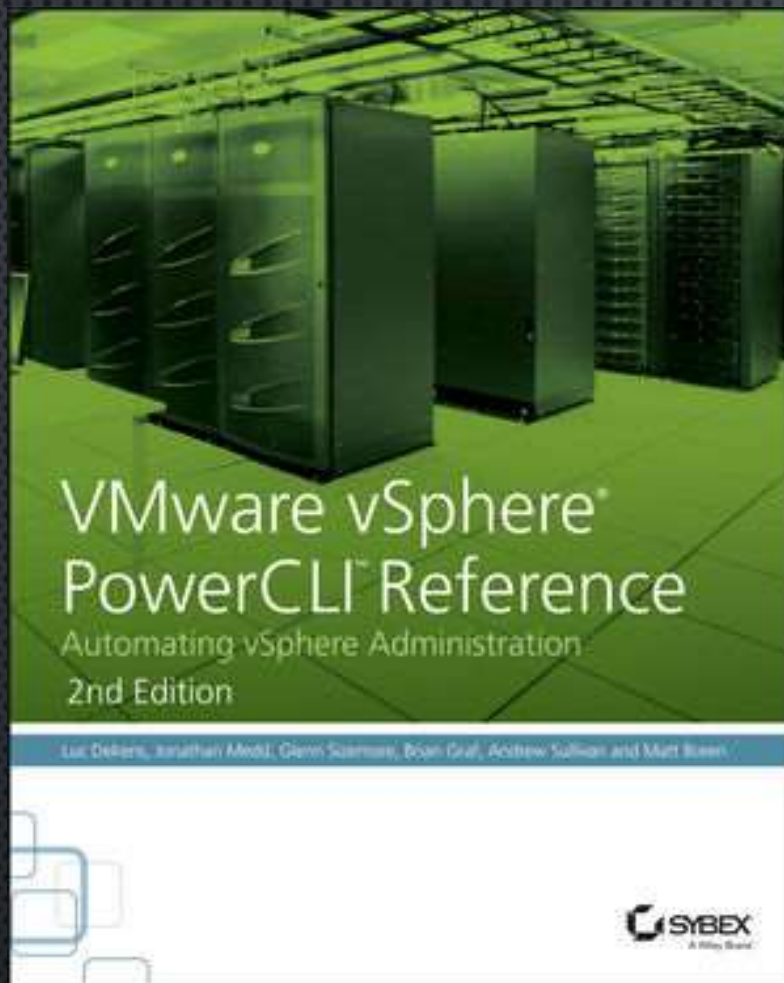
```
PS C:\Users\thynes>
```

```
PS C:\Users\thynes> foreach ($vmhost in $hosts) { Stop-VMHost }
```

```
PS C:\Users\thynes>
```

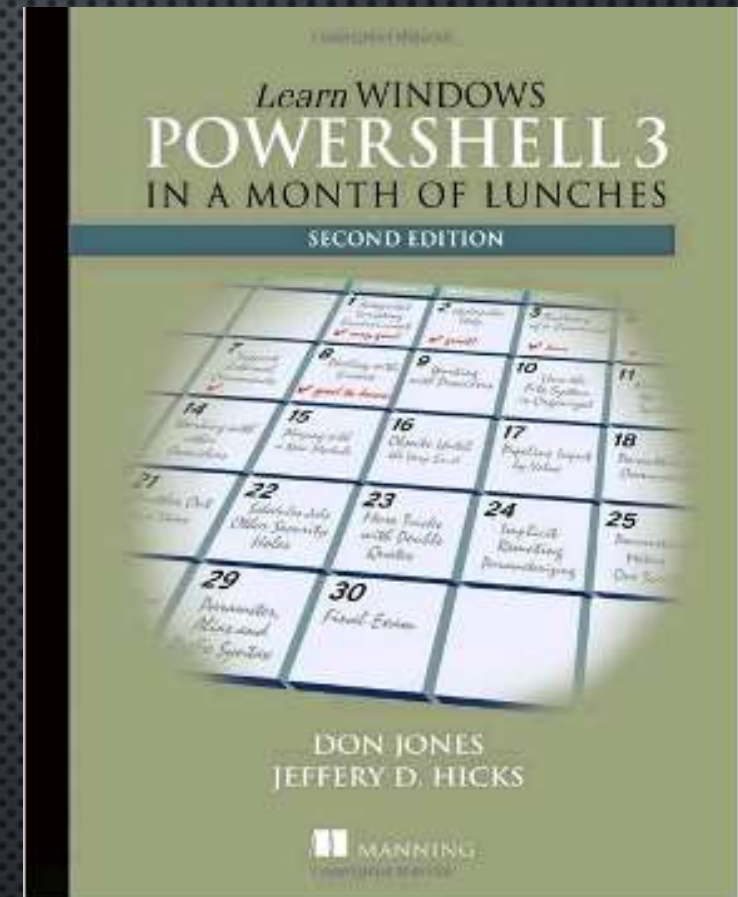

MORE INFORMATION

- SOCIALISE – STACK OVERFLOW, VMWARE COMMUNITIES, TWITTER, MEETUPS
- LEARN BY DOING – CODECADEMY, VMWARE HANDS ON LABS, VAGRANT
- VENDOR DOCUMENTATION – REST API GUIDES, POWERSHELL MODULE DOCUMENTATION
- BLOGS
 - BRIAN GRAF – VTAGION.COM
 - WILLIAM LAM – VIRTUALLYGHETTO.COM
 - ALAN RENOUF – VIRTU-AL.NET
 - JONATHAN MEDD - JONATHANMEDD.NET



Learning PowerCLI

A practical guide to get you started with automating VMware vSphere via PowerCLI



Robert van den Nieuwendijk

[PACKT] enterprise
PUBLISHING

INTERESTING VMWORLD SESSIONS

- INF8038 - GETTING STARTED WITH POWERSHELL AND POWERCLI FOR YOUR VMWARE ENVIRONMENT (ON YOUTUBE)
- INF8036 - ENFORCING A VSPHERE CLUSTER DESIGN WITH POWERCLI AUTOMATION (ON YOUTUBE)
- INF8092 – THE POWER HOUR: DEEP DIVE, DEVOPS, AND NEW FEATURES OF POWERCLI

THANKS FOR LISTENING