DuPSUG

Manage your infrastructure with PowerShell

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About_Jaap

- Dutch PowerShell User Group!
- PowerShell Conference Europe
- PowerShell Conference Asia
- Slack
- Reddit
- GitHub
- PowerShell Gallery
- TechNet Forums/Gallery

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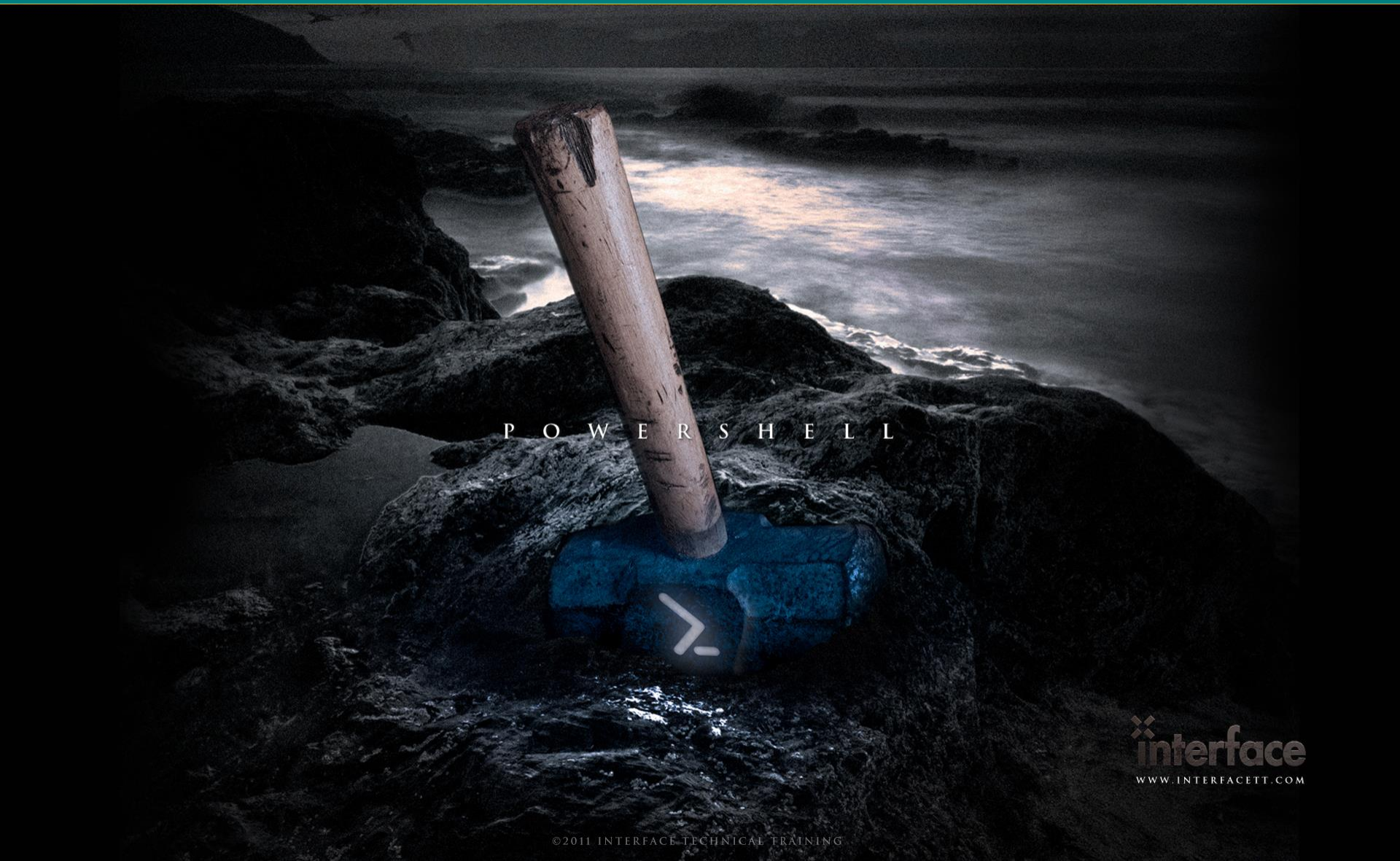
PowerShell
Conference Asia
Singapore 26-28th October 2017
PSConfAsia 2017 - back for a 3rd year

Agenda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Building the tools

- Structured output – Objects!
- Hostname of the system
- Domain name of system
- OS info
- Memory info
- System disk
- Pagefile
- Create a function

Demo 1 - Retrieve hostname

Demo Summary

- Found the host name of the system
- Looked at PowerShell drives
- Explored the Env: drive
- Found the hostname of the system
- Created a PowerShell object
- Exported the object to csv
- Opened csv in Excel

Demo 2 – Get System Domain

Demo Summary

- Found the user domain
- Found the system domain
- Merged output with previous output

Demo 3 – OS Information

Demo Summary

- Used the Win32_OperatingSystem class
- Retrieved the information
- Established Get-WmiObject is obsolete
- Used Get-CimInstance
- Help examples with array indexing
- Used WQL to speed up query
- Get-CimInstance hiding output

Demo 4 – Memory Information

Demo Summary

- Retrieved information from ComputerSystem
- Divided by GB
- Strong typed as integer to remove rounding
- Used format operator to create string

Demo 5 - Timezones

Demo Summary

- Used the Get-TimeZone cmdlet
- Found out that the timezone description does not take DST into account
- Used [datetime] type accelerator
  - UtcNow
  - Now
- Calculated actual time difference
- Combined output into a single string

Demo 6 – System Disk Size

Demo Summary

- Find out which disk is the system disk
- Find out how big the disk is
- Create the correct WQL query
- Format output into a string
- Set number of decimals for size in GB with [math]::round

Demo 7 – Pagefile from registry

Demo Summary

- Found the registry provider PSDrive
- Looked at the 'Memory Management' key
- Retrieved the information using Get-ItemProperty
- Used the –join operator to collapse the array

Demo 8 – Create the function

Demo Summary

- Create the Get-ComputerInformation function
- Create a hashtable
- Fill the values in the hashtable using output from the commands created
- Convert the hashtable to a PowerShell custom object
- Ran the function

Questions?