



# PowerShell

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MCSM:Directory2012 | MCM:Directory2008 | MVP:Enterprise Security | CEH |  
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## Agenda

- CMD and Windows concepts recap
- PowerShell and netfx versions
- PowerShell command line interfaces
- PowerShell ISE
- command syntax parsing
- expression syntax parsing
- literal/string/text constants, integral values, floating point values, enumerations and simple variables
- CMD text vs. PowerShell object pipelines
- objects/instances and complex variables
- working with DateTime
- arrays, lists, collections, hashtables
- scripts, modules, profiles
- if, else, while, do, switch, functions
- exception (error) handling, try/catch/finally
- ...



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## Audience and prerequisites

- administration of Windows/Microsoft environment
- Active Directory basics
- TCP/IP, DNS
  
- IT admin, developer, data analytic, DevOps, ...
  - any automation use-cases



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## Timing

- 5 days
- 9:00-16:00
- 1 hour lunch break
  - 12:00+/-
  - meal ticket
- passwords, wifi, beverage, ...
  
- knowledge guarantee
- ePresence



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## Slide deck, samples, lab answers and tools

- in all VMs
  - T[ISO]:\sysInternals\procexp.exe
  - T[ISO]:\winrar.exe
  - D[INSTALL]:\VCREDIST\universal-c-runtime
  - D[INSTALL]:\dotnetfx\dotnetcore--PowerShell.msi
  - D[INSTALL]:\dotnetfx\dotnetcore--PowerShell.zip
- on HOST computer
  - C:\TEMP\GOPAS-GOC216\\*.pptx
  - C:\TEMP\GOPAS-GOC216\Training



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## Slide deck notes

- #1, #2, #3, => student task steps
  - if the heading ends with ... the task continues
- #1 answer, #2 answer => answers to student tasks
  - if the heading ends with ... the answer continues
- most PowerShell code that appears on the slides comes also extracted into the form of .PS1 files provided within the Training folder



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