



## Windows Features with PowerShell

### Task 1

- a. Get a list of all the optional Windows features available on your computer. To do this, use *Get-Command -Noun \*Feature\** to find the appropriate cmdlet.
- b. Run the appropriate cmdlet with the *-Online* parameter .
- c. Find out how to manage optional features from the graphical interface.
- d. (Bonus) Determine how many optional features are available.

### Task 2

- a. Install a TFTP client by enabling its optional feature.
- b. Use the appropriate cmdlet to verify that the *TFTP* feature has the correct status.
- c. Deactivate the TFTP client again.

### Task 3

- a. Enable a Telnet client if one is available for your platform.
- b. (Bonus) Test the Telnet Client by establishing a Telnet session with an appropriately configured switch or router.<sup>1</sup>

### Task 4

- a. Use the *Get-WindowsCapability -Online* cmdlet to check which features are currently installed on your computer. How does the state of a *capability* differ from the state of an *OptionalFeature*?
- b. Investigate how many features that are part of the Remote Server Administration Tools (RSAT) are available.
- c. Install an OpenSSH client on your computer. <sup>2</sup>
- d. Use *Get-WindowsCapability* to verify that the installation was successful. What property does this indicate?
- e. Set the startup behavior of the associated *sshd* service to automatic.
- f. (Bonus) View all available properties of the OpenSSH client feature in list form. How many properties are displayed in total?

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<sup>1</sup> Only when accessing the appropriate hardware or another Telnet server.

<sup>2</sup> Use *Get-Command* to find the right Cmdlet to find.



### Task 5 (Bonus)

- a. Learn about the *Deployment Image Servicing and Management Tool (DISM)* and its command prompt program, *dism*. Use *dism* for the following activities:
  - Enable the Telnet Client.
  - See all available features.
  - Disable the Telnet Client again.
- b. Compare *dism* with the corresponding cmdlets and discuss with a partner what advantages and disadvantages you see in the solutions.<sup>3</sup>

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<sup>3</sup> If partner work is not possible, take notes on your own for later discussion.