User Profiles and Aliases

Information

Four different profiles can be created in PowerShell. The paths to the associated profile files are stored in the PowerShell variable *$Profile*. The profile file offers the possibility to customize and configure profiles for different users and computers. For the individual user, it roughly corresponds to the *bashrc* from GNU/Linux systems. The profile file is executed each time a PowerShell session is started.

Task 1

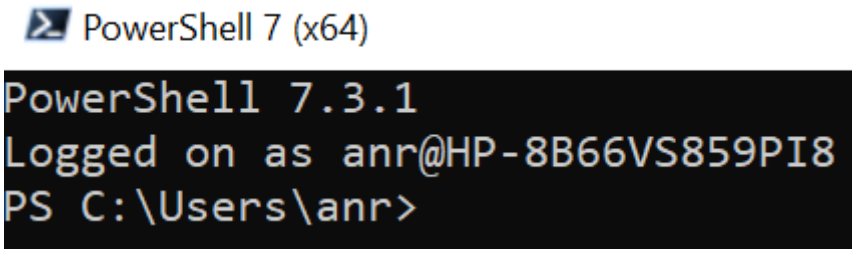
a. By entering *$Profile* , you can see the path under which you can find or create your profile file. Does the file on this path already exist? Check with *Test-Path* .
b. Use the *variable $Profile* in combination with *Format-List* formatting with the *–Force* parameter to display the paths to all four profile files. Write down the names of the four profiles.

Task 2

a. Create the *ps1* file saved in *$Profile* with New-Item. If necessary, use the *–Force* parameter to create missing elements in the path to the file.

b. Open the file using the *Invoke-Item* cmdlet. What app are *ps1* files linked to on your system?

c. Modify the profile file so that when PowerShell starts, it shows which user on which computer you have just opened a PowerShell session. [1]



d. Save the profile file and start a new PowerShell. You should see a message similar to the one in the image.

[1] Under GNU/Linux, there is no variable in *Env:* for the computer name. Use *uname* with a suitable parameter.

Task 3 (Bonus)

Think about the use cases in which you would use the other profile files.

Task 4

a. Use the Get-Alias cmdlet to see alternate names for the *Get-ChildItem* cmdlet . For help using *Get-Alias*, use *Get-Help* or similar. What alias(s) are there for *Get-ChildItem* and how do you know them? Bereits?

b. Find the aliases for the cmdlet for removing (deleting) objects in the file system.

c. Find out which cmdlet belongs to the *alias iex* .

Task 5

a. List all aliases that start with the letter 'H'.

b. List all aliases for the *Remove-Item* cmdlet .

c. Define the following custom aliases:

- *serv* for *get-service*[2]
- *edge* for *Get-Random*

Task 6

a. In the data pane, create two (empty) files *deleteschbar1.txt and deleschbar2.txt*. Create the *delete alias* for the *Remove-Item* cmdlet.

b. Delete the created file *deleteschbar1.txt* with the delete command.

c. Close PowerShell, start a new session, and try to delete the second file *deleteschbar2.txt* with the delete command . What do you conclude from this for the persistence of aliases?

[2] On GNU/Linux, you define *Proc* for *Get-Process*.

Task 7 (Bonus)

Launch a PowerShell.

a. Open the profile file of your current user profile and add the following persistent aliases to it:
   - *delete* for *remove-item*
   - *ll* for *Get-ChildItem*

b. In the Ubuntu operating system (a GNU/Linux distribution), the *poweroff* and *reboot* commands are used to shut down and restart a computer, respectively. In the profile file of your current user profile, create appropriate aliases with these names.

c. Test all created aliases in a new PowerShell session with test files.