



Microsoft Learn Spark possibility

AZ-040

Automate Administration with PowerShell





ADN – Advanced Digital Network Distribution GmbH

1999 NT 4.0

2000 AD

AzureAD

→ Entra ID

Heidelberg

Azure

LN365

Thomas Jäkel

Lead Trainer Cloud Infrastructure

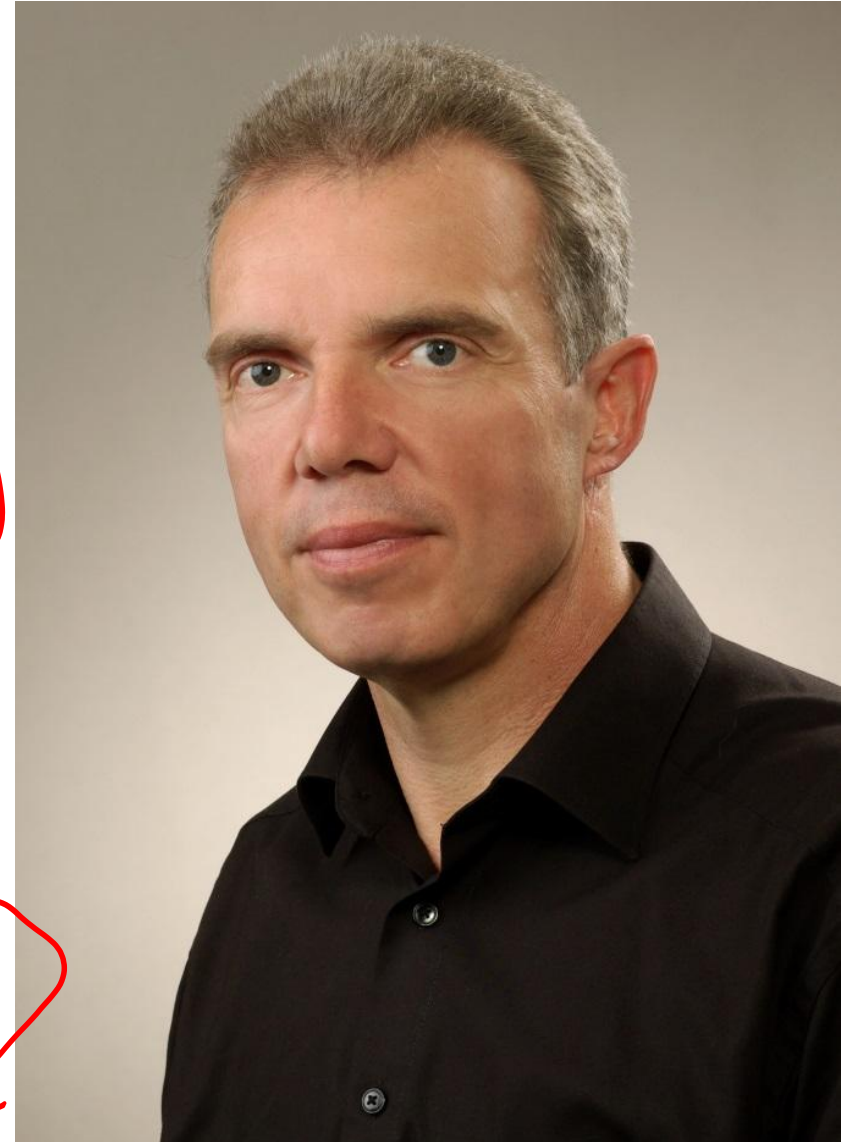
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PS + Git

GitHub

github.com/www42/AZ-040



About this course

Microsoft Learn
LP

Overview

- This course teaches you how to use PowerShell to automate administration of Windows servers..

move

+ move

The Automating Administration with PowerShell course could be a great fit for you if you'd like to:

- Build scripts to accomplish advanced tasks such as automating repetitive tasks and generating reports.
- Automate administration across a broad range of Microsoft products, including Windows Server, Windows Client, Microsoft Azure, and Microsoft 365.

Agenda

AZ-040

- LP 1 Get started with Windows PowerShell
- LP 2 Maintain system administration tasks in Windows PowerShell
- LP 3 Work with the Windows PowerShell pipeline
- LP 4 Work with PowerShell providers and PowerShell drives in Windows PowerShell
- LP 5 Querying management information by using CIM and WMI
- LP 6 Use variables, arrays, and hash tables in Windows PowerShell scripts
- LP 7 Create and modify scripts by using Windows PowerShell
- LP 8 Administer remote computers by using Windows PowerShell
- LP 9 Manage cloud resources by using Windows PowerShell
- LP 10 Manage Microsoft 365 services by using Windows PowerShell
- LP 11 Create and manage background jobs and scheduled jobs in Windows PowerShell

5 7 PS Console ISE ...
Help cmdlet / func

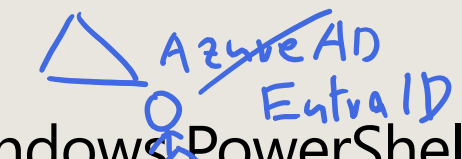
~ | ~ OO

Get-ChildItem

dir Alias
dir HKLM:
dir Cert:
function modules



Azure



Let's get to know
each other

Theoria cum Praxi

Your name

Company affiliation

Title/function

Your experience

Your expectations
for the course



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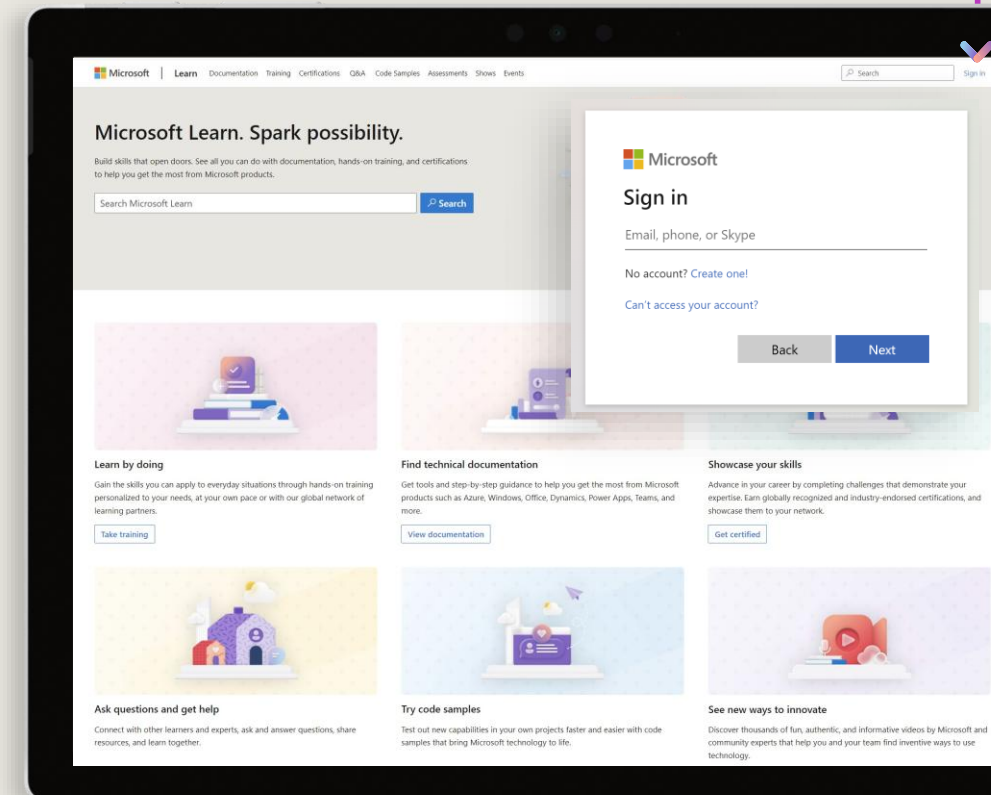
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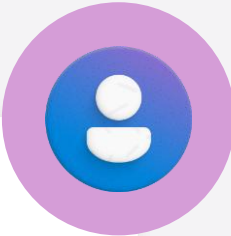
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Let's have a great time together

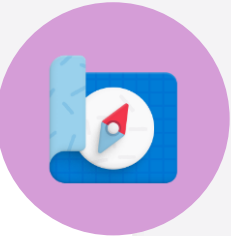
We all contribute to a great class



- Be on time (class hours)
- Be present (avoid mail, calls, side meetings)

9⁰⁰ - 17⁰⁰
12³⁰ - 13³⁰
15 min Fr. 15⁰⁰

What you should know about our facilities



- Internet access ✓
- Parking
- Restrooms
- Emergency

Skillable - Lab Umgebung

1/2 Jahr

The screenshot displays a Skillable lab environment. The main window shows a Windows desktop with a Recycle Bin icon and a taskbar. An Administrator: Windows PowerShell console is open, displaying the output of the command `$PSVersionTable`. The output is a table with columns 'Name' and 'Value'.

Name	Value
PSVersion	5.1.19041.1237
PSEdition	Desktop
PSCompatibleVersions	{1.0, 2.0, 3.0, 4.0...}
BuildVersion	10.0.19041.1237
CLRVersion	4.0.30319.42000
WSManStackVersion	3.0
PSRemotingProtocolVersion	2.3
SerializationVersion	1.1.0.1

Below the console, there is a red scribble. To the right, a sidebar contains a task list for 'Exercise 1: Configuring the Windows PowerShell console application'. The sidebar also includes an 'Exit Lab' button and a 'Save' label. At the bottom, there are 'Previous' and 'Next' navigation buttons and a timer showing '29 Hr 54 Min Remaining'.

Exercise 1: Configuring the Windows PowerShell console application

Task 1: Start the console application as Administrator, and pin the Windows PowerShell icon to the taskbar

- ☐ 1. On **AZ-040T00A-LON-CL1**, select **Start**.
- ☐ 2. Enter `powershell` to display the Windows PowerShell icon. Make sure that the icon name displays **Windows PowerShell** and not **Windows PowerShell (x86)**.
- ☐ 3. Right-click **Windows PowerShell** or activate its context menu, and then select **Run as administrator**.
- ☐ 4. Make sure that the window title bar reads **Administrator** and doesn't include the text **(x86)**. This indicates that it is the 64-bit console application and that an administrator is running it.
- ☐ 5. On the taskbar, right-click the **Windows PowerShell** icon or activate its context menu, and then select **Pin to taskbar**. The **Windows PowerShell console** should now be open, run by **Administrator**, and available on the taskbar for future use.

Task 2: Configure the Windows PowerShell console application

- ☐ 1. To configure Windows PowerShell to use the **Consolas** font:
 - ☐ a. ~~Select~~ the control box in the upper-left corner of the **Windows PowerShell console** window.

Navigation: **Previous** **Next**

29 Hr 54 Min Remaining

End of presentation

