

## Masterclass: PowerShell Basics

Duration: 4 Days    Course Code: PSB

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### Overview:

This intense, 4-day long practical training will provide you with the fundamental knowledge and skills essential for using PowerShell. It will cover lots of interesting, key features like cmdlets, modules and functions, components and objects manipulations, script prerequisites, standard, structures and many more.

During this training you will spend more than 80% of the course time working on PowerShell engine so that you will build some basic scripts, which you can immediately use in your daily work!

This course is delivered by one of the best people in the market in the security field – with practical knowledge from tons of successful projects and with great teaching skills.

The course contents are based on the author's more than 15 years of real-world experience working with PowerShell. If you already have basic knowledge, we recommend to take PowerShell Advanced Course to learn more about some advanced features and acquire Expert skills essential for using PowerShell seamlessly.

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### Target Audience:

IT administrators and everyone who wants to learn how to work with PowerShell and build basic scripts that will help you in your daily work.

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### Objectives:

- All exercises are based on PowerShell. During the course you will spend more than 80% of the course time working on PowerShell engine. The course comes with tons of practical exercises to be performed on our lab environment and author's presentation slides.
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### Testing and Certification

What is wonderful about our certification is that it is lifetime valid with no renewal fees – the technology changes, but fundamentals and attitude remain mostly the same.

Our Virtual Certificates, which entitle you to collect CPE Points, are issued via Accredible.

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## Follow-on-Courses:

### Learning Path: PowerShell

We offer 3 PowerShell courses with different level of advancement – we highly recommend you to get acquainted with the other two courses' agendas to assess which of proposed levels will be the most suitable for your experience and knowledge level.

PSB PowerShell: Basics Course LIVE: 4 days LEVEL 300 LEVEL 400

PSA PowerShell: Advanced LIVE: 2 days LEVEL 400-500

PSU PowerShell: Ultimate Security LIVE: 2 days

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## Content:

### Module 1: PowerShell Introduction

1. What is PowerShell
2. How to run PowerShell on Windows, Linux and MacOS
3. How to find needed commands and help for these commands
4. Some examples of very useful cmdlets
5. Console and Script Editors
6. PowerShell Profile

### Module 2: PowerShell Pipeline

1. How does pipelining in PowerShell work
2. How to use pipeline to sort, select, group, filter and enumerate objects
3. Various options of cmdlet outputs

### Module 3: PSDrives And PSProviders

1. How to enumerate registry, local certificates etc.
2. How to work with non-standard data like AD database
3. How to map network drives in PowerShell

### Module 4: PowerShell Remoting

1. What is PowerShell Remoting and how it is related to PowerShell Direct
2. How to configure systems to use PowerShell Remoting
3. Native PowerShell Remoting features like interactive and noninteractive remoting

### Module 5: PowerShell And WMI

1. How to query data using WMI and CIM
2. How to invoke WMI and CIM methods
3. WMI/CIM Remoting

### Module 6: Background Jobs and Scheduled Jobs

1. How to make some operations fast
2. How to create scheduled PowerShell jobs

### 7: Scripting Prerequisites

1. Execution Policy
2. Code Signing
3. PowerShell Security

4. Working with variables, arrays, collections and hash tables

5. Working with input data

6. Conditions and loops (if, switch, while, do/while, do/until)

### Module 8: From Oneliner To Script

1. Transforming basic PowerShell commands and oneliners into a script

2. Script parameters

3. Script structure best practices

4. Error Handling

5. Basic debug strategies

### Module 9: Functions And Modules

1. What is a function and how to create one

2. Function structure best practices

3. How to create PowerShell script module

## Additional Information:

### Unique exercises:

All exercises are based on PowerShell. During the course you will spend more than 80% of the course time working on PowerShell engine. The course comes with tons of practical exercises to be performed on our lab environment and author's presentation slides.

### Platform and Technical Requirements:

To participate in the course you need a Stable internet connection. For best learning experience we also need you to have a webcam, headphones and a microphone. Open RDP port 3391 for the connection to the Lab environment is needed as well. We will setup a secure Zoom classroom for every day of the course – we will send you a safe link to join the conference by e-mail.

## Further Information:

For More information, or to book your course, please call us on Head Office Tel.: +974 40316639

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