

KOENIG SOLUTIONS • COURSE OUTLINE

PowerShell Fundamentals with Labs (2 Days)

Learn to use PowerShell commands, cmdlets and the pipeline to administer systems and write basic scripts.

2 Days

16 HOURS

4

MODULES

13

TOPICS

7

HANDS-ON ACTIVITIES

COURSE OVERVIEW

The “PowerShell Fundamentals with Labs (2 Days)” course is a comprehensive training program designed to introduce learners to the essential concepts and practices of PowerShell, Microsoft’s Task automation and configuration management framework. Through a combination of theoretical lessons and practical PowerShell labs, the course covers the basics of PowerShell and PowerShell Core, Command syntax, and Cmdlet usage for system administration. Starting with an overview of PowerShell’s background, the course quickly moves into hands-on experiences with PowerShell labs online, where learners can practice Configuring PowerShell, finding, and running commands. Module 2 delves into cmdlets for various administrative tasks, including Active Directory, Network configuration, and other server administration functions. In Module 3, participants will master the PowerShell pipeline, learning to filter, sort, and enumerate objects, and practice sending output to files. Finally, Module 4 introduces learners to the fundamentals of Scripting within PowerShell. This course is ideal for IT professionals who wish to automate tasks and manage systems efficiently using PowerShell. The practical labs ensure that learners gain hands-on experience, which is critical for applying PowerShell knowledge in real-world scenarios.

Who Should Attend

PowerShell Fundamentals with Labs is designed for IT professionals aiming to master automation and configuration management using PowerShell.

Systems Administrators

Network Administrators

Database Administrators

IT Professionals involved in Windows Server management

DevOps Engineers

Technical Support Personnel

Security Analysts with a focus on Microsoft environments

Infrastructure Architects

Software Developers who integrate with Windows environments

Help Desk Technicians seeking to automate routine tasks

Professionals preparing for Microsoft certification exams related to PowerShell

Cloud Engineers working with Azure or other Windows-based cloud platforms

LEARNING OBJECTIVES

- Explain the background of Windows PowerShell and PowerShell Core
- Identify command syntax and find commands
- Apply cmdlets for Active Directory and network administration
- Use the pipeline to select, sort and measure objects
- Filter and enumerate objects in the pipeline
- Send pipeline data as output to a file
- Describe scripting constructs used in PowerShell scripts

COURSE SYLLABUS

4 Modules, 13 Topics

01

Lab A

Lab B

Getting Started with PowerShell

TOPICS

- Overview and background of Windows PowerShell and PowerShell core
- Understanding command syntax
- Finding commands

02

Lab

Cmdlets for Administration

TOPICS

Active Directory administration cmdlets ·
Network configuration cmdlets · Other server
administration cmdlets

03

Lab A

Lab B

Lab C

Lab D

Working with the Windows PowerShell Pipeline

TOPICS

Understanding the pipeline · Selecting, sorting, and
measuring objects · Filtering objects out of the
pipeline · Enumerating objects in the pipeline ·
Sending pipeline data as output

03

Basic Scripting

TOPICS

Introduction to scripting · Scripting constructs

HANDS-ON ACTIVITIES

Practise What You Learn

#	MODULE	ACTIVITY
01	Getting Started with PowerShell	Lab A: Configuring Windows PowerShell
		Lab B: Finding and running basic commands
02	Cmdlets for Administration	Lab: Windows administration
03	Working with the Windows PowerShell Pipeline	Lab A: Using the pipeline
		Lab B: Filtering objects
		Lab C: Enumerating objects
		Lab D: Sending output to a file

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

FLEXIBLE DELIVERY

Learn the Way That Suits You

Classroom Training

Live Online Classes (ILO)

Fly-Me-A-Trainer (FMAT)

Flexi (Self-Paced)

1-on-1 Training

Ready to Get Started?

Talk to a learning advisor about schedules, group training and customised delivery.

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