

# Advanced Automated Administration with Windows PowerShell, On Demand 10962

## Advanced Automated Administration with Windows PowerShell, On Demand 10962



Seminar



Zurzeit keine Termine



Teilnahmebescheinigung



E-Learning



24 Unterrichtseinheiten

Seminarnummer: 29418 | Herstellernummer: OD10962

Stand: 27.04.2024. Alle aktuellen Informationen finden Sie unter <https://akademie.tuv.com/s/29418>

This On Demand online course provides a follow on training from the OD10961: Automating Administration with Windows PowerShell course. It is built on Windows Server 2012 R2 and while it is specifically focused on Windows PowerShell v4.0, is also relevant in v2.0 and v3.0 Windows PowerShell environments. Details zu MOC On Demand Trainings finden Sie unter den Hinweisen weiter unten.

## Nutzen

In dieser MOC on Demand Version ist eine originale MOC Unterlage in digitaler Form enthalten.

After completing this course, students will be able to:

- Create Advanced Functions
- Use Cmdlets and Microsoft .NET Framework in Windows PowerShell
- Write Controller Scripts
- Handle Script Errors
- Use XML Data Files
- Manage Server Configurations by Using Desired State Configuration
- Analyze and Debugging Scripts
- Understand Windows PowerShell Workflow

## Zielgruppe

This course is intended for IT Professionals already experienced in general Windows Server and Windows Client administration or already experienced in administering and supporting Application servers and services including applications such as Exchange, SharePoint, and SQL. System, Infrastructure and Application Administrators working in a Windows or Windows hybrid environment will all find this course

relevant to their day to day jobs and future career and skills development. The course is also intended for IT Professionals who want to build upon existing Windows PowerShell knowledge and skill to learn how to build their own tools for broader general use in their organization, using any Microsoft or independent software vendor (ISV) product that supports Windows PowerShell manageability.

## Voraussetzungen

Before attending this course, students must have:

- Knowledge and experience working with Windows PowerShell or knowledge equivalent to the content covered in course 10961B: Automating Administration with Windows PowerShell
- Experienced in general Windows Server and Windows Client administration or already have experience in administering and supporting Application servers and services including applications like Exchange, SharePoint, and SQL.

## Inhalte des Seminars

Module 1:

Creating Advanced Functions In this module students will learn how to parameterize a command into an advanced function. It is designed to teach several key principles in a single logical sequence, by using frequent hands-on exercises to reinforce new skills.

Lessons

- Converting a Command into an Advanced Function
- Creating a Script Module
- Defining Parameter Attributes and Input Validation
- Writing Functions that use Multiple Objects
- Writing Functions that Accept Pipeline Input
- Producing Complex Function Output
- Documenting Functions by using Content-Based Help
- Supporting -Whatif and -Confirm

Lab : Converting a Command into an Advanced Function

Lab : Defining Parameter Attributes and Input Validation

Lab : Writing Functions that use Multiple Objects

Lab : Documenting Functions by using Content-Based Help

Lab : Supporting -Whatif and -Confirm

Lab : Writing Functions that Accept Pipeline Input

Lab : Producing Complex Function Output

Lab : Creating a Script Module

Module 2:

Using Cmdlets and Microsoft .NET Framework in Windows PowerShell Windows PowerShell provides commands that accomplish many of the tasks that you will need in a production environment. Sometimes, a command is not available but the .NET Framework provides an alternate means of accomplishing a task. Because Windows PowerShell is built on the .NET Framework, it is able to access those alternate means. In this module, you will learn how to discover and run Windows PowerShell commands, and how to use .NET Framework components from inside Windows PowerShell. These two techniques will provide you with the most flexibility and capability for accomplishing tasks in a production environment.

Lessons

- Running Windows PowerShell Commands
- Using Microsoft .NET Framework in Windows PowerShell

Lab : Using .NET Framework in Windows PowerShell

Module 3:

Writing Controller Scripts In this module, students will learn how to combine tools – advanced functions that perform a specific task – and a controller script that provides a user interface or automates a business process.

Lessons

- Understanding Controller Scripts
- Writing Controller Scripts that Show a User Interface

Lab : Writing Controller Scripts that Display a User Interface

Module 4:

Handling Script Errors In this module, students will learn how to perform basic error handling in scripts. The focus will be about how to add error handling to existing tools, primarily as a time-saving mechanism (instead of having students write new tools). A side benefit of this approach is that it will help build the skills that you must have to analyze and reuse existing code written by someone else.

Lessons

- Understanding Error Handling
- Handling Errors in a Script

Lab : Handling Errors in a Script

Module 5:

Using XML Data Files In this module, students will learn how to read, manipulate, and write data in XML

files. XML files provide a robust, yet straightforward way to store both flat and hierarchical data. XML files are more flexible than CSV, more accessible for small amounts of data than SQL Server, and easier to code against than Excel automation.

#### Lessons

- Reading, Manipulating and Writing Data in XML

Lab : Reading, Manipulating and Writing Data in XML

#### Module 6:

Managing Server Configurations by Using Desired State ConfigurationIn this module, students will learn how to write Desired State Configuration (DSC) configuration files, deploy those files to servers, and monitor servers configurations.

#### Lessons

- Understanding D

## Wichtige Hinweise

MOC On Demand Trainings sind original Microsoft Trainings, in denen Sie zeit- und ortsungebunden lernen können. Diese Trainings enthalten:

- Zugang zum offiziellen Microsoft Video on Demand Kurs für 90 Tage ab dem ersten Zugriff.
- Einen Lab-Online-Zugang für praktische Übungen, der ab Kauf 6 Monate gültig ist.
- Eine originale MOC Schulungsunterlage in digitaler Form, wie sie auch in den Live-Trainings eingesetzt wird.

Weitere Details entnehmen Sie unserer MOC On Demand Landingpage unter [www.tuv.com/Microsoft](http://www.tuv.com/Microsoft)

## Terminübersicht und Buchung

Buchen Sie Ihren Wunschtermin jetzt direkt online unter <https://akademie.tuv.com/s/29418> und profitieren Sie von diesen Vorteilen:

- Schneller Buchungsvorgang
- Persönliches Kundenkonto
- Gleichzeitige Buchung für mehrere Teilnehmer:innen

Alternativ können Sie das Bestellformular verwenden, um via Fax oder E-Mail zu bestellen.