

# MWS3-8 - MOC 10962 - ADVANCED AUTOMATED ADMINISTRATION WITH WINDOWS POWERSHELL

Categoria: **Windows Server 2016**

## INFORMAZIONI SUL CORSO



**Durata:**  
3 Giorni



**Categoria:**  
Windows Server 2016



**Qualifica Istruttore:**  
Microsoft Certified  
Trainer



**Dedicato a:**  
Professionista IT



**Produttore:**  
Microsoft

## OBIETTIVI

After completing this course, students will be able to:

- Create advanced functions.
- Use Microsoft .NET Framework and REST API in Windows PowerShell.
- Write controller scripts.
- Handle script errors.
- Use XML, JSON, and custom formatted data.
- Enhance server management with Desired State Configuration and Just Enough Administration.
- Analyze and debug scripts
- Understand Windows PowerShell workflow.

## PREREQUISITI

In addition to their professional experience, students who attend this training should already have the following technical knowledge:

- Experience with Windows networking technologies and implementation.
- Experience with Windows Server administration, maintenance, and troubleshooting.
- Experience with Windows Client administration, maintenance, and troubleshooting.
- Experience with using Windows PowerShell to run commands and to create basic non-modularized scripts.

Students who attend this training can meet the prerequisites by obtaining equivalent knowledge and skills through practical experience as a Windows System Administrator. Course 10961: Automating Administration with Windows PowerShell is strongly recommended to obtain prerequisite skills in Windows PowerShell.

## CONTENUTI

### Module 1: Creating advanced functions

- Converting a command into an advanced function
- Creating a script module
- Defining parameter attributes and input validation
- Writing functions that accept pipeline input
- Producing complex pipeline output

- Documenting functions by using comment-based help
- Supporting –WhatIf and -Confirm

**Lab: Converting a command into an advanced function**

- Converting a command into an advanced function

**Lab: Creating a script module**

- Creating a script module

**Lab: Defining parameter attributes and input validation**

- Defining parameter attributes and input validation

**Lab: Writing functions that accept pipeline input**

- Writing functions that accept pipeline input

**Lab: Producing complex pipeline output**

- Producing complex pipeline output

**Lab: Documenting functions by using comment-based help**

- Documenting functions by using comment-based help

**Lab: Supporting –WhatIf and -Confirm**

- Supporting –WhatIf and -Confirm

**Module 2: Using Microsoft .NET Framework and REST API in Windows PowerShell**

- Using Microsoft .NET Framework in Windows PowerShell
- Using REST API in Windows PowerShell

**Lab: Using Microsoft .NET Framework in Windows PowerShell**

- Using Microsoft .NET Framework in Windows PowerShell

**Lab: Using REST API in Windows PowerShell**

- Using REST API in Windows PowerShell

**Module 3: Writing controller scripts**

- Introducing controller scripts
- Writing controller scripts that display a user interface
- Writing controller scripts that produce reports

**Lab: Writing controller scripts**

- Writing controller scripts that display a user interface
- Writing controller scripts that implement a text-based menu

**Lab: Writing controller scripts that produce HTML reports**

- Writing functions to be used in the controller script
- Writing a controller script that produces HTML reports

**Module 4: Handling script errors**

- Understanding error handling
- Handling errors and timeouts in a script

**Lab: Handling errors in a script**

- Handling errors in a script

**Module 5: Using XML, JSON, and custom-formatted data**

- Reading, manipulating, and writing XML-formatted data
- Reading, manipulating, and writing JSON-formatted data
- Reading and manipulating custom-formatted data

**Lab: Reading, manipulating, and writing XML-formatted data**

- Testing the provided tools
- Updating an XML inventory document

**Module 6: Enhancing server management with Desired State Configuration and Just Enough Administration**

- Understanding Desired State Configuration
- Creating and deploying a DSC configuration
- Implementing Just Enough Administration

**Lab: Creating and deploying a DSC configuration**

- Creating and deploying a DSC configuration

**Lab: Configuring and using JEA**

- Configuring and using JEA

**Module 7: Analyzing and debugging scripts**

- Debugging in Windows PowerShell
- Analyzing and debugging an existing script

**Lab: Analyzing and debugging an existing script**

- Analyzing and debugging an existing script

**Module 8: Understanding Windows PowerShell Workflow**

- Understanding Windows PowerShell Workflow

**Lab: Creating and running a Windows PowerShell Workflow**

- Creating and running a Windows PowerShell Workflow

## INFO

**Materiale didattico:** Materiale didattico in formato digitale

**Costo materiale didattico:** incluso nel prezzo del corso a Calendario

**Natura del corso:** Operativo (previsti lab su PC)