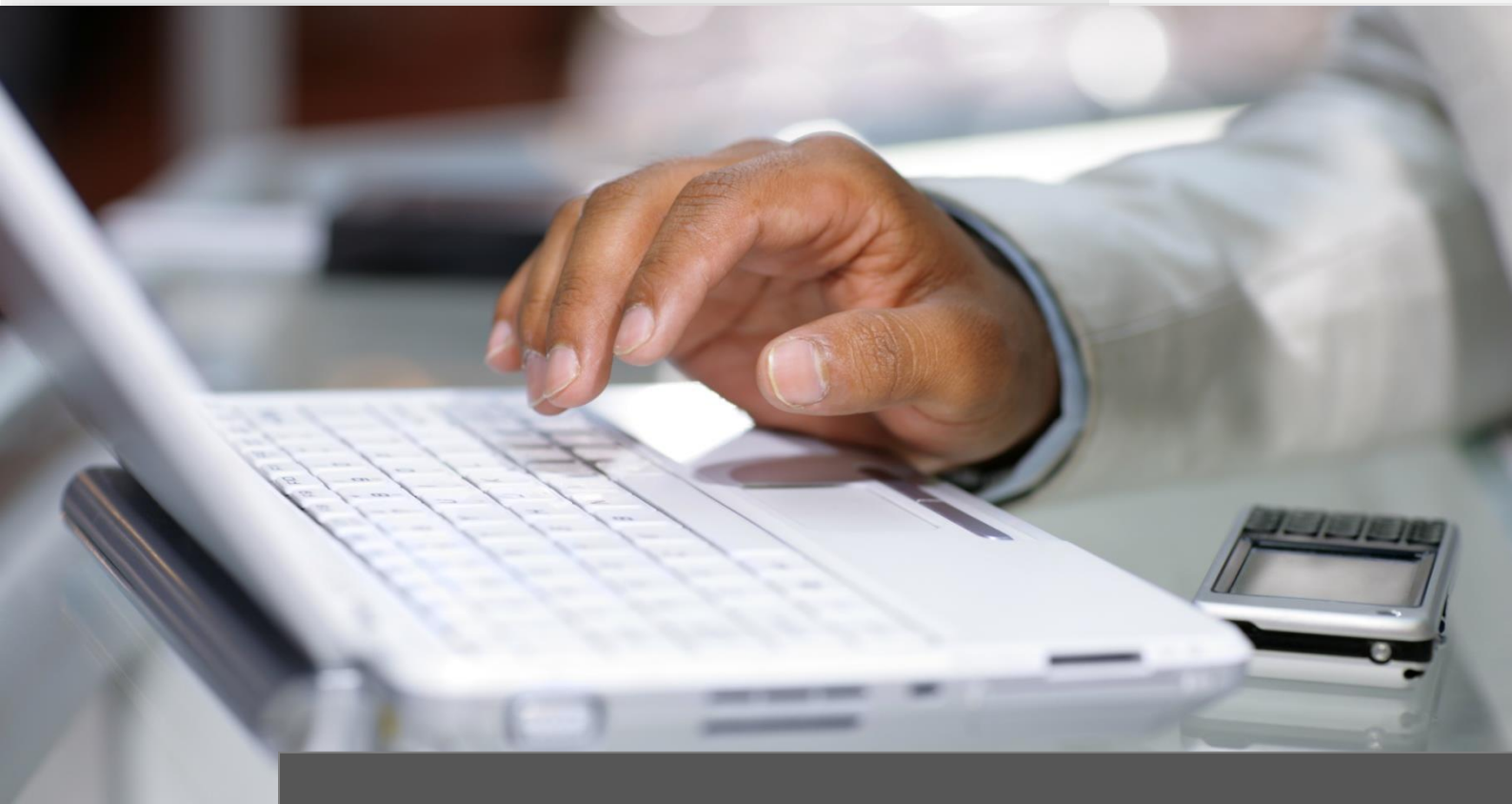


Automating Administration with PowerShell v. 3.0

Online-Training



Ausbildungsinhalte

Automating Administration with PowerShell v. 3.0

Der Workshop bietet einen fundierten Einstieg in die Microsoft PowerShell. Sie erwerben die nötigen Kenntnisse, um grundlegende und erweiterte Aufgaben durch Skripte zu automatisieren.

Online-Training	Dauer	Examen
Automating Administration with PowerShell v. 3.0	11 UE	-

Sie lernen einzelne oder mehrere windowsbasierte Server mit Windows PowerShell 3.0 remote zu verwalten und alltägliche Verwaltungs- und Administrationsaufgaben zu automatisieren. Der Schwerpunkt liegt auf Windows PowerShell-Kommandozeilenfeatures und -techniken, um verschiedene Microsoft-Produkte zu unterstützen. Dies schließt Windows-Server und -Clients, Exchange Server, SharePoint Server, SQL Server, System Center und andere ein. Dabei dient Windows Server (die gängige Plattform für all diese Dienste) als Beispiel für die unterrichteten Techniken.

Unterrichtseinheit	UE 01	-
<p>Overview and Background</p> <ul style="list-style-type: none"> ✓ Windows PowerShell Overview ✓ Windows PowerShell Versions ✓ Windows PowerShell vs. Operating System ✓ Two Host Applications ✓ What Version Are You Running? ✓ Precautions When Opening the Shell ✓ Configuring the Console ✓ Configuring the ISE <p>Finding and Learning Commands</p> <ul style="list-style-type: none"> ✓ Familiar-Seeming Commands ✓ Learning Command Syntax ✓ Viewing Help ✓ Finding Commands ✓ Interpreting the Help ✓ Updating Help ✓ "About" Files ✓ Using "About" Files 	<p>Running Commands</p> <ul style="list-style-type: none"> ✓ Full Command Syntax ✓ Specifying Multiple Parameter Values ✓ Shortened Command Syntax ✓ Show-Command ✓ Using Show-Command ✓ Commands that Modify the System ✓ Using -WhatIf and -Confirm 	

Unterrichtseinheit	UE 02	-
<p>Understanding the Pipeline</p> <ul style="list-style-type: none"> ✓ What Is the Pipeline? ✓ Running Commands in the Pipeline ✓ Pipeline Output ✓ Discovering Object Members ✓ Demonstration: Pipeline Basics ✓ When the Pipeline Contains Mixed Output <p>Selecting, Sorting, and Measuring Objects</p> <ul style="list-style-type: none"> ✓ Sorting Objects on a Property ✓ Measuring Objects ✓ Selecting a Subset of Objects ✓ Selecting Properties of Objects ✓ Selecting Objects ✓ Creating Calculated Properties 	<p>Converting, Exporting, and Importing Objects</p> <ul style="list-style-type: none"> ✓ Converting Objects to Another Form ✓ Piping Output to a File ✓ Importing Data ✓ Importing Objects 	

Unterrichtseinheit		UE 03	-
<ul style="list-style-type: none"> Filtering Objects Out of the Pipeline <ul style="list-style-type: none"> ✓ Comparison Operators ✓ Basic Filtering Syntax ✓ Advanced Filtering Syntax ✓ Demonstration: Filtering ✓ Optimizing Filtering Performance Enumerating Objects in the Pipeline <ul style="list-style-type: none"> ✓ The Purpose of Enumeration ✓ Basic Enumeration Syntax ✓ Demonstration: Basic Enumeration ✓ Advanced Enumeration Syntax ✓ Demonstration: Advanced Enumeration Passing Data in the Pipeline By Value <ul style="list-style-type: none"> ✓ Command Input is Only by Parameter ✓ ByValue Parameters Passing Data ByValue ✓ Demonstration: Passing Data ByValue ✓ Manual Parameters Override the Pipeline ✓ Demonstration: Overriding the Pipeline ✓ Parenthetical Commands Instead of the Pipeline ✓ Demonstration: Parenthetical Commands 	<ul style="list-style-type: none"> Passing Data in the Pipeline By Property Name <ul style="list-style-type: none"> ✓ Changing to ByPropertyName ✓ Finding ByPropertyName Parameters ✓ Demonstration: Passing Data ByPropertyName ✓ Expanding Property Values ✓ Demonstration: Expanding Property Values 		

Unterrichtseinheit		UE 04	-
<ul style="list-style-type: none"> Using PSProviders <ul style="list-style-type: none"> ✓ What are Providers? ✓ Accessing Provider Help ✓ Different Provider Capabilities ✓ Working with Providers Using PSDrives <ul style="list-style-type: none"> ✓ What Are Drives? ✓ Working with the File System und Working with Items and Item Properties ✓ Specifying Paths und Working with Drives and Items Using Basic Formatting <ul style="list-style-type: none"> ✓ Default Formatting ✓ Lists, Tables ✓ Basic Formatting 	<ul style="list-style-type: none"> Using Advanced Formatting <ul style="list-style-type: none"> ✓ Custom List Entries and Columns ✓ Custom Table Columns ✓ Sorted and Grouped Tables ✓ Grouped Tables ✓ Select or Format? Redirecting Formatted Output <ul style="list-style-type: none"> ✓ The Output of a Format Command ✓ Examining Formatting Output ✓ Redirecting Formatted Output ✓ Redirecting Formatted Output 		

Unterrichtseinheit		UE 05	-
<ul style="list-style-type: none"> Formatting Output Querying Management Information by Using WMI and CIM Understanding WMI and CIM <ul style="list-style-type: none"> ✓ Architecture and Technologies ✓ The Repository ✓ Finding Documentation ✓ Finding Classes Documentation Querying Data by Using WMI and CIM <ul style="list-style-type: none"> ✓ Listing Namespaces and listing Classes ✓ Querying Instances ✓ Remote Computers ✓ Using CIMSessions 	<ul style="list-style-type: none"> Making Changes by Using WMI and CIM <ul style="list-style-type: none"> ✓ Discovering Methods ✓ Finding Method Documentation ✓ Finding Methods and Documentation ✓ Invoking Methods 		

Unterrichtseinheit		UE 06	-
<ul style="list-style-type: none"> Querying Management Information by Using WMI and CIM Preparing for Scripting Using Variables <ul style="list-style-type: none"> ✓ What Are Variables? ✓ Variable Rules ✓ Using Variables ✓ Math Operators and Quotation Marks 	<ul style="list-style-type: none"> Scripting Security <ul style="list-style-type: none"> ✓ Security Goals ✓ Execution Policy ✓ Understanding Trust ✓ Other Security Features ✓ Shell Security 		

Unterrichtseinheit		UE 07	-
Preparing for Scripting ✓ Working with Security in Windows PowerShell Moving from Command to Script ✓ Start with a Working Command ✓ Identifying Values that Might Change ✓ Parameterizing Changing Values ✓ Parameterizing a Working Command ✓ Test the Parameterized Script ✓ Adding Verbose Output ✓ Documenting the Script ✓ Adding Comment-Based Help	Moving from Script to Function to Module ✓ Wrapping a Script in a Function ✓ Understanding Scope ✓ Testing the Function ✓ Creating a Script Module ✓ Creating a Script Module ✓ Adding Debugging Breakpoints Adding and Using Debugging Breakpoints		

Unterrichtseinheit		UE 08	-
Implementing Basic Error Handling ✓ Understanding Error Actions ✓ Try...Catch Constructs ✓ Logging Errors ✓ Using Basic Scripting Constructs ✓ The If Construct ✓ The Switch Construct ✓ The ForEach Construct ✓ Exploring Other Scripting Features ✓ PSBreakpoints ✓ More Capabilities of Advanced Functions ✓ Additional Scripting Constructs	Moving From a Command to a Script to a Module Administering Remote Computers Using Basic Remoting ✓ Remoting Overview and Architecture ✓ Remoting vs. Remote Connectivity ✓ Remoting Security ✓ Enabling Remoting ✓ Using Remoting: One-to-One ✓ Using Remoting: One-to-Many Remoting Output vs. Local Output		

Unterrichtseinheit		UE 09	-
Using Advanced Remoting Techniques ✓ Common Remoting Options ✓ Sending Parameters to Remote Computers ✓ Multihop remoting	Using Remoting Sessions ✓ Persistent Connections ✓ Creating a Session ✓ Using a Session ✓ Disconnected Sessions ✓ Implicit Remoting Administering Remote Computers		

Unterrichtseinheit		UE 10	-
Using Background Jobs ✓ What Are Background Jobs? ✓ Starting Jobs ✓ Managing Jobs ✓ Retrieving Job Results ✓ Using Background Jobs	Using Scheduled Jobs ✓ What Are Scheduled Jobs? ✓ Job Options ✓ Job Triggers ✓ Creating a Scheduled Job ✓ Retrieving Job Results ✓ Using Scheduled Jobs		

Unterrichtseinheit		UE 11	-
Using Advanced Windows PowerShell Techniques ✓ Using Advanced Windows PowerShell Techniques ✓ Creating Profile Scripts ✓ Working with Alternative Credentials Creating Profile Scripts ✓ What is a Profile Script? ✓ Profile Script Locations ✓ Profile Security Concerns ✓ Creating a Profile Script	Working with Alternative Credentials ✓ What Is a Credential? ✓ Creating and Using a Credential ✓ Persisting Credentials ✓ Creating and Using a Credential		

Weitere wichtige Informationen

Sie haben Fragen oder Anregungen?

Falls Sie Fragen, Wünsche oder Anregungen zu dieser oder zu anderen Ausbildungen haben, stehen wir Ihnen montags bis donnerstags in der Zeit von 08:00 – 17:00 Uhr und freitags von 08:00 – 13:00 Uhr sehr gerne zur Verfügung.

Sie erreichen uns unter:

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