

PowerShell 3.0, improvement



BPC-115 4 Days (28 Hours)

Description

This course will show you how to use the advanced features of PowerShell V3/V4 to automate administrative tasks under Windows. You will see user interface development, registry, AD administration as well as dedicated network modules like DHCP, DNS and hyper-v.

Who is this training for ?

For whom

Systems and network technicians, administrators and engineers.

Prerequisites

Aucune

Training objectives

- Automate administrative tasks on Windows with PowerShell 3.0
- Manage users with PowerShell scripts
- Modify the registry with PowerShell
- Create, delete and search objects in AD with PowerShell

Training program

Rappels sur la syntaxe

- The basics.
- Variables, operators, and control structures.
- Objects in PowerShell.

Approfondissement

- In-Depth

Approfondissement

- Customizable objects.
- Error handling.
- Advanced functions: creation of help for cmdlets.
- Creation of modules, integration into Windows.
- Creation of code integrating C#, DLLs with PowerShell.
- Self-documented cmdlets.
- Practical work Creation of 'an administration module to manage a personalized fleet in PowerShell.
- Creation of C# code, DLLs and personalized help for the modules created.

Fonctionnalités avancées

- Using jobs, transactions and events.
- Introduction to workflow.
- Introduction.
- NET: adding C# classes, programming 'user interfaces (simple graphics, WinForms).
- Using Primal Form to create a form.
- Culture support (internationalization).
- Practical work Local job management.
- Creation of a fleet management form.

Sécurité et signatures de scripts

- Execution policies, certificate.
- Script, module and formatted file signing.
- Secure storage of sensitive data on disk.
- Practical work Implementation of security elements.

Exploitation avancée de WMI

- General presentation.
- Access to help.
- Management of synchronous and asynchronous events.
- Creation, update and deletion of an instance in the WMI repository.
- Client notions of temporary event, permanent event.
- Monitoring events on classes.
- Practical work Writing complex WQL queries.
- Creating and updating WMI objects.
- Creating WMI events to trigger PowerShell code.

Administration de l'Active Directory 2012 R2

- AD object model and identity principle.
- Creation/deletion/search of objects.
- Management of users, groups, passwords and Group Policy.
- GPO Administration.
- Permissions and Inheritance Flags on AD Domains and OUs.
- Practical work Use of the most common cmdlets of the AD module.
- Account and group management.
- GPO administration.