

PowerShell Desired State Configuration



BPC-136 2 Days (14 Hours)

Description

In a DevOps approach aimed at increasing operational efficiency between developers and administrators, it is necessary to put in place a mechanism guaranteeing identical configuration on the machines. You will see how to quickly reconfigure your servers with PowerShell 5/4 (DSC and workflow).

Who is this training for ?

For whom

Technicians, administrators and systems and network engineers.

Prerequisites

Good knowledge of the Windows system, PowerShell and AD or equivalent knowledge of the course "PowerShell 5/4, automate Windows administration" (ref. ATU).

Training objectives

- Guarantee a standard configuration on all machines in a specific environment
- Design and configure a PowerShell DSC script
- Implement Pull mode and Push mode of PowerShell DSC
- Write a workflow in the Windows PowerShell scripting language

Training program

Vue d'ensemble de DSC (Desired State Configuration)

- DSC fundamentals.
- Push mode, Pull mode.

Le mode Push

- Push mode principle.
- Configuration scripts, MOF files (DMTF standard).
- Presentation of the nodes.
- Compile and deploy with the basic DSC cmdlets.

DSC et les cmdlettes associées

- The default configuration resources (localconfigurationManager).
- Viewing and modifying the configuration.
- Compiling, running (start-dsconfiguration).

Le mode Pull

- Principe du mode Pull.
- Le module xPSDesiredStateConfiguration.
- Serveur HTTPS, SMB.

Ressources personnalisées

- The schema and properties (schema.
- mof).
- PowerShell module, manifest, folder structure, nested modules.
- Functions Get/Set/Test-TargetResource.
- Creation of new resources, use through a configuration script.

Introduction au workflow

- The workflow under PowerShell.
- The jobs.
- The different operating modes of a workflow.
- The PowerShell variables dedicated to workflow.

Workflow simple

- The different operating modes.
- Declaration of the workflow, the different cmdlets.
- The jobs generated.
- Suspend, resume, restart a workflow.

Workflow avancé

- Scripts in a workflow (inlinescript).
- Workflow variables (\$using, \$psParentactivityID).
- Parallel mode, sequences.
- Jobs.