

55133: PowerShell for System Center Configuration Manager Administrators (3 Days)

Course Overview

This three-day instructor-led course provides students with the knowledge and skills needed to use PowerShell for System Center Configuration Manager (SCCM) administration. In this course, students learn how to access the PowerShell cmdlets included with SCCM 1802 and use them to perform configuration tasks for a primary site. Individual cmdlets will be used in working with objects such as Boundaries, Boundary Groups, Collections, Software Deployment, Patching, Compliance Settings, OSD Task Sequences, and many others. Basic scripting will also be covered so that students can learn how to put PowerShell to use when working with large sets of objects.

Skills Gained

- Create additional site system roles on existing or new servers.
- Modify high level site settings.
- Create and modify Discovery Methods, Boundaries and Boundary Groups.
- Create Collections using any of the membership rules available.
- Delegate authority through Roles and Scopes.
- Install the Configuration Manager client, modify client settings and restrict access to site systems.
- Deploy software to clients.
- Deploy software updates to clients.
- Configure compliance settings targeted against collections.
- Modify settings that govern monitoring functions such as Alerts and Status Settings.
- Work with Task Sequences for Operating System Deployment.
- Write PowerShell scripts using cmdlets learned and scripting constructs to accomplish configuration tasks.

Who Can Benefit

This course is intended for IT professionals who need to manage the day-to-day environment of an SCCM 1802 or newer environment. Knowledge of the workings of a standalone primary SCCM site and basic PowerShell experience is recommended.

Prerequisites

- Basic Windows and Active Directory knowledge.
- Conceptual knowledge of Configuration Manager objects and how they interact.
- Basic experience performing configuration tasks in SCCM using the graphical console.
- Experience working from a command prompt.
- Basic knowledge of the fundamentals of Windows PowerShell.

Course Details

Module 1: Review of System Center Configuration Manager Concepts

- Architecture of an System Center Configuration Manager 1802 Installation
- Managing Assets
- Content Delivery and Management
- Security, Monitoring, and Remote Management

Module 2: Managing Resources

- Implementing Discovery
- Organizing Resources with Collections
- Working with Boundaries

Module 3: Working with Clients

- Installing the Configuration Manager Client
- Managing Client Settings
- Managing Client Operations
- Monitoring Client Status

Module 4: Distributing Software

- Configure the Software Distribution Components
- Working with Distribution Points
- Creating Content for Distribution
- Deploying Software Applications

Module 5: Updating Systems with WSUS and SCCM

- Integrating Configuration Manager and WSUS
- Managing Updates through Software Update Groups
- Creating and Deploying Update Packages
- Working with Automatic Deployment Rules

Module 6: How PowerShell Can Manage Compliance Settings

- Creating Compliance Settings Objects
- Deploying and Monitor the Baseline

Module 7: Configuring Operating System Deployment Objects

- Preparing the OSD Environment
- Working with Task Sequences

Module 8: Working at the Site Level

- Modify the Site
- Adding Site System Roles
- Adding a Secondary Site

Module 9: Security and Monitoring

- Configuring Role Based Administration
- Implementing Endpoint Protection
- Configuring Monitoring Options

Module 10: Using PowerShell Scripting to Automate SCCM Tasks

- Review of Scripting Constructs
- Introduction to the Configuration Manager WMI Classes