

## 55133 PowerShell for System Center Configuration Manager Administrators

### Overview

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This course provides you with the knowledge and skills needed to use PowerShell for System Center Configuration Manager (SCCM) administration. In this course, you will 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 you can learn how to put PowerShell to use when working with large sets of objects.

### Prerequisite Comments

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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.

### Target Audience

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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.

### Course Objectives

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- 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 basic PowerShell scripts using cmdlets learned and scripting constructs to accomplish configuration tasks.

### Course Outline

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## 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

## 2 - Managing Resources

Implementing Discovery  
Organizing Resources with Collections  
Working with Boundaries

## 3 - Working with Clients

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

## 4 - Distributing Software

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

## 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

## 6 - How PowerShell Can Manage Compliance Settings

Creating Compliance Settings Objects  
Deploying and Monitor the Baseline

## 7 - Configuring Operating System Deployment Objects

Preparing the OSD Environment  
Working with Task Sequences

## 8 - Working at the Site Level

Modify the Site  
Adding Site System Roles  
Adding a Secondary Site

## 9 - Security and Monitoring

Configuring Role Based Administration  
Implementing Endpoint Protection  
Configuring Monitoring Options

## 10 - Using PowerShell Scripting to Automate SCCM Tasks

Review of Scripting Constructs  
Introduction to the Configuration Manager WMI Classes

## Related Courses, Certifications, Exams

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- 10961 Automating Administration with Windows PowerShell
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