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Information Technology & Training

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Course MS55095A

SharePoint 2010 and 2013 Auditing and Site Content Administration using PowerShell

Length: 1 Day

About this Course

This one day class is designed for SharePoint 2010 and 2013 server administrators and auditors who need to query just about anything in SharePoint. The class handout is effectively a cheat sheet with over 175 PowerShell scripts plus the general patterns to create your own scripts.
These scripts cover:

- Using the SharePoint Management Shell and the ISE
- General tips for counting, reformatting and exporting results;
- Understand and drilling up and down the SharePoint object model
- Getting lists / inventories of servers, services web applications, sites, webs, lists, libraries, items, fields, content types, users and much more
- Finding lists by template type, content type and types of content
- Finding files by user, content type, file extension, checked out status, size and age
- Finding inactive sites
- Finding and changing SharePoint Designer settings and finding and resetting customized pages
- Inventorying and managing features
- Deleting and recycling files and list items
- Inventorying users and user permissions and finding out "who can access what"
- Creating sites, lists and libraries
- Uploading and downloading files
- And much more…

Audience Profile

SharePoint server administrators.
SharePoint auditors.
Also valuable for SharePoint developers.

At Course Completion

After completing this course, students will be able to:

- Use PowerShell to query just about anything inside of SharePoint.
- Understand the core SharePoint object model and object hierarchy as seen from PowerShell.
- Format PowerShell output in to reports.
- Manage resources to limit the impact on production servers.
- Create and delete Site Collections, subsites, lists, libraries and content.

Prerequisites

Before attending this course, students must have:

- Very good knowledge of SharePoint and its features.
- Good experience using PowerShell 2 or later or recent completion of a PowerShell class such as 10961 or 50414.

Course Outline

Module 1: SharePoint and PowerShell

This module provides an introduction to the topics covered in the class, introduces SharePoint PowerShell terminology and provides a review of important PowerShell features.
Lessons
History of PowerShell in SharePoint
PowerShell vs. Search
PowerShell, SharePoint Management Shell and cmdlets
Security and Permissions Needed
Getting Started with PowerShell: Counting Items, Custom Columns, Reformatting Numbers, Saving Results to a File
Changing and Updating Content: Creating SharePoint Objects, Changing Objects
Lab : Using PowerShell with SharePoint
Using PowerShell with SharePoint
After completing this module, students will be able to:
Get started using PowerShell to inventory and update SharePoint.

Module 2: Working with SharePoint CMDLETs and Objects
This module introduces the SharePoint object model and some important terminology.
Lessons
GUIDs
Sites vs. Webs
The SharePoint Object Hierarchy
Lab : Working with SharePoint CMDLETs and Objects
Get a list of all Site Collections and their GUIDs
Get a list of all Webs in all Site Collections
Given a web's URL get its parent web and web application
After completing this module, students will be able to:
Explore sites and webs using PowerShell.
Retrieve important properties of common SharePoint objects

Module 3: Managing Memory and Limiting Performance Impact
This explores limiting impact on server memory usage and performance.
Lessons
Memory Management and Disposing Objects
Limiting Impact on Production Servers
Lab : Managing Memory and Limiting Performance Impact
Exploring PowerShell's use of system memory.
Testing the impact of scripts on server performance
After completing this module, students will be able to:
Recognize and manage the impact of PowerShell on a SharePoint server.

Module 4: Working with Content
This module explores SharePoint using PowerShell from the Farm down to individual list items.
Lessons
Getting Farm Information: version, services, services, features
Getting Web Application information
Exploring Site Collections: retrieve Site Collections, Site Collection Administrators, quotas
Working with the Recycle Bins: finding items, getting file counts and bytes, deleted sites
Exploring Webs: web templates, finding webs, finding webs based on template, Quick Launch and Top Link Bar navigation

Exploring Lists and Libraries: finding all lists, lists by type, lists by Content Type, columns/fields, document count by web or library
Exploring Content Types
Finding documents: by a word in the title, file type, content type, size, date age, checked out status, approval status and many more…
Deleting content
Downloading and uploading files
Lab : Working with Content
Explore the farm.
Inventory site collections.
Create a recycle bin report.
Finding all blog sites.
Find all picture libraries.
Find all PDF files over 5 MB.
Delete all videos in a site collection.
After completing this module, students will be able to:
Explorer, inventory and maintain SharePoint content using PowerShell.

Module 5: Users and Security
his module covers the use of PowerShell to explore and document SharePoint permissions.
Lessons
Users: find a user, get a list of all users, working with Active Directory groups
SharePoint groups: Get lists of groups, get the members of a group, find all groups a user belongs to, find the groups associated with a web
Expanding users lists that include Active Directory groups
Documenting Broken Inheritance / Unique Permissions: webs, lists, libraries, folders, items
Working with Role Assignments
Lab : Users and Security
Get a list of all users who have access to a Site Collection.
Get a list of all groups in a Site Collection.
Get a list of all groups a user belongs to.
List all users who may have access to a SharePoint securable.
Get a list of all securables with broken inheritance.
After completing this module, students will be able to:
Explore and document users and user permissions.
Explore and document SharePoint groups.
Explore and document broken inheritance.

Module 6: Managing Sites
This module explorers Site Collection and Web management from PowerShell.
Lessons
Finding Inactive Webs
Creating and Deleting Site Collections
Getting Site Collection Data
Creating and Deleting Subsites
Working With SharePoint Designer Settings
Lab : Managing Sites
Create a report for inactive sites.
Create a site collection and subsites.

Delete a site.
Delete a site collection.
Disable SharePoint Designer in all site collections.
After completing this module, students will be able to:
Manage SharePoint Site Collections and webs from PowerShell.