

MOC 20339-1/2: Planning, Administering & Advanced Technologies of SharePoint 2016

Course Summary

Description

This five-day course will provide you with the knowledge and skills to plan and administer a Microsoft SharePoint 2016 environment. The course teaches you how to deploy, administer, and troubleshoot your SharePoint environment. The special areas of focus for this course include implementing high availability, disaster recovery, service application architecture, and Microsoft Business Connectivity Services. This course also focuses on social computing features, productivity, and collaboration platforms and features. Students also will learn about business intelligence solutions, and web content management infrastructure. This course also provides guidelines, best practices, and considerations that help you optimize your SharePoint deployment.

Objectives

By the end of this course, students will be able to:

- Describe the key features of SharePoint 2016.
- Install and configure SharePoint 2016.
- Create and configure web applications and site collections.
- Plan and configure service applications for a SharePoint 2016 deployment.
- Configure and manage user profiles and audiences.
- Configure and manage the search experience in SharePoint 2016.
- Monitor, maintain, and troubleshoot a SharePoint 2016 deployment.
- Plan and design a SharePoint 2016 environment to meet requirements for high availability and disaster recovery.
- Plan and implement Business Connectivity Services and Secure Store Service.
- Configure and manage productivity services for a SharePoint 2016 deployment.
- Plan and configure social computing features
- Plan and configure web content management for an Internet-facing environment.
- Plan and configure business intelligence solutions.

Topics

- Introducing SharePoint 2016
- Installing and Configuring SharePoint 2016
- Creating Web Applications and Site Collections
- Planning and Configuring Service Applications
- Configuring User Profiles
- Configuring Enterprise Search
- Monitoring and Maintaining a SharePoint 2016 Environment
- Planning and Designing for Business Continuity Management
- Planning and Implementing Business Connectivity Services and Secure Store Service Configuring Productivity Services for a SharePoint 2016 Deployment
- Connecting People
- Planning and Configuring Web Content Management
- Planning and Configuring Business Intelligence Solutions

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Course Summary (cont'd)

Audience

The course is targeted at experienced IT professionals who are interested in learning how to install, configure, deploy, and manage SharePoint 2016 installations either in a data center or in the cloud.

Students typically have more than one year of hands-on experience* with planning and maintaining SharePoint and two years' experience with other core technologies on which SharePoint depends, including Windows Server 2012 R2 or later, Internet Information Services (IIS), Microsoft SQL Server 2014 or later, Active Directory Domain Services (AD DS), and networking infrastructure services.

The minimally qualified candidate typically:

- Is an IT professional who plans, implements, and maintains a multi-server deployment of SharePoint 2016.
- Has a working knowledge of, and preferably hands-on experience, with SharePoint Online.
- Has broad familiarity with SharePoint workloads.
- Has experience with business continuity management, including data backup, restoration, and high availability.
- Has broad familiarity with SharePoint Server workloads.
- Has experience with business continuity management, including data backup, restoration, and high availability.
- Has experience with Windows PowerShell.

* The hands-on experience or job experience should be from a solutions-based role where the candidate has worked on multiple solutions in the SharePoint space that includes document management, content management, and search.

Prerequisites

Before attending this course, students must have knowledge of:

- Software management in a Windows Server 2012 or Windows Server 2012 R2 enterprise server environment.
- Deploying and managing applications natively, virtually, and in the cloud.
- Administering IIS.
- Managing an application remotely by using Windows PowerShell 4.0.
- Managing databases and server roles in SQL Server.
- Connecting applications to SQL Server.
- Using Microsoft Hyper-V virtual machines.

An ideal candidate for this course must have at least one year of experience with deploying and administering multiple SharePoint 2013 farms across a large enterprise. Because many customers have not upgraded from SharePoint 2010, a candidate can also have at least two years of experience with SharePoint 2010. However, they also must understand the differences between SharePoint 2010 and SharePoint 2013, particularly in terms of hybridization.

Duration

Five days

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Course Outline

I. Introducing SharePoint 2016

This module describes the structure and capabilities of a SharePoint environment, and the major changes for IT professionals in SharePoint 2016. This module also describes the options available for deploying SharePoint 2016.

- A. The key components of a SharePoint deployment
- B. New features in SharePoint 2016
- C. SharePoint 2016 deployment options

II. Installing and configuring SharePoint 2016

This module explains how to install SharePoint 2016 in different topologies, script the installation, and configure a SharePoint 2016 environment. This module also explains how to configure the core farm-level settings in a SharePoint 2016 deployment.

- A. Installing SharePoint 2016
- B. Scripting the installation and configuring a SharePoint 2016 environment
- C. Configuring SharePoint 2016 farm settings

Lab : Provisioning SharePoint 2016

- Provisioning a SharePoint 2016 server farm

Lab : Configuring SharePoint 2016

- Configuring incoming email
- Configuring outgoing email
- Configuring integration with Microsoft Office Web Apps Server 2016

III. Creating web applications and site collections

IV. This module explains how to create web applications in SharePoint 2016 and how to configure these applications. It also explains how to create and configure site collections in SharePoint 2016 and SharePoint Online.

- A. Creating web applications
- B. Configuring web applications
- C. Creating and configuring site collections

Lab : Creating and configuring web applications

- Creating a web application
- Configuring a web application

Lab : Creating and configuring site collections

- Creating and configuring site collections
- Creating a site collection in a new content database
- Using Fast Site Collection Creation

V. Planning and configuring service applications

This module describes the service application architecture in SharePoint 2016, and how to provision and manage service applications.

- A. Introduction to the service application architecture
- B. Creating and configuring service applications

Lab : Configuring services and service applications

- Provisioning a managed metadata service application with Central Administration
- Provisioning a managed metadata service application with Windows PowerShell
- Configuring service applications for document conversions
- Configuring service application proxy groups

VI. Configuring user profiles

This module explains how to configure the User Profile service application, and how to manage user profiles and audiences.

- A. Configuring the User Profile service application
- B. Managing user profiles and audiences

Lab : Configuring user profiles

- Configuring the User Profile service application
- Configuring directory import and synchronization

Lab : Configuring and managing user profiles

- Provisioning My Sites
- Configuring audiences

VII. Configuring Enterprise Search

This module describes the Search service architecture, and explains how to configure the Search service in SharePoint 2016. It also explains how to manage the search experience in SharePoint 2016.

- A. Understanding the Search service architecture
- B. Configuring the Search service
- C. Managing Enterprise Search

Lab : Configuring Enterprise Search

- Configuring the Search service application
- Configuring a file share content source

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Course Outline (cont'd)

- Configuring a local SharePoint content source
- Creating a Search Center

Lab : Optimizing the search experience

- Configuring a result source and a query rule
- Customizing the search experience
- Creating and deploying a thesaurus
- Configuring entity extractors and refiners
- Managing query spelling correction

VIII. Monitoring and maintaining a SharePoint 2016 environment

This module explains how to implement a monitoring plan for SharePoint 2016, and how to optimize the performance of a SharePoint 2016 deployment. It also explains how to plan for and configure SharePoint caching. Further, it explains how to identify and resolve problems in a SharePoint 2016 environment.

- A. Monitoring a SharePoint environment
- B. Tuning and optimizing a SharePoint environment
- C. Planning and configuring caching
- D. Troubleshooting a SharePoint environment

Lab : Monitoring a SharePoint 2016 deployment

- Configuring usage and health data
- Configuring diagnostic logging
- Configuring health analyzer rules
- Reviewing usage and health data

Lab : Investigating page load times

- Analyzing network traffic
- Analyzing SharePoint page performance

IX. Planning and designing for business continuity management

This module explains how to select an appropriate database server configuration to meet availability requirements. It also describes how to design a physical architecture and infrastructure to meet high-availability requirements. Finally, this module explains how to develop and implement a backup and restore strategy.

- A. Designing database topologies for high availability and disaster recovery
- B. Designing a SharePoint 2016 infrastructure for high availability
- C. Planning for disaster recovery

Lab : Planning for high availability

- Planning a Microsoft SQL Server topology & designing SharePoint infrastructure for high availability
- Developing a high-availability physical architecture design diagram

Lab : Designing a backup and restore plan, and performing a backup and a restore

- Creating a backup and restore plan
- Testing the backup and recovery process

X. Planning and implementing Business Connectivity Services and Secure Store Service

This module explains how to configure Business Connectivity Services (BCS), and describes how to configure and manage the Secure Store Service application. It also explains how you can configure and manage BCS models.

- A. Configuring BCS
- B. Configuring the Secure Store Service
- C. Managing BCS models

Lab : Configuring Business Connectivity Services and the Secure Store Service

- Configuring the Business Data Connectivity service application
- Configuring the Secure Store Service

Lab : Managing Business Data Connectivity models

- Importing and configuring Business Data Connectivity (BDC) models
- Configuring a Secure Store Service target application
- Creating profile pages for BDC models

XI. Configuring productivity services for a SharePoint 2016 deployment

This module describes SharePoint apps and the supporting SharePoint infrastructure. This module also explains how to provision and configure SharePoint apps and app catalogs, and how to manage app usage within a SharePoint 2016 deployment. Additionally, this module describes how to provision Microsoft Access Services, Visio Services, Word Automation Services, PowerPoint Automation Services, and SharePoint Translation Services

- A. Understanding the SharePoint app architecture

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Course Outline (cont'd)

- B. Provisioning and configuring apps and app catalogs
- C. Managing apps
- D. Provisioning productivity services

Lab : Configuring and managing SharePoint apps and app catalogs

- Configuring a SharePoint farm to support apps
- Creating and configuring a corporate catalog
- Deploying and monitoring apps

XII. Connecting people

This module explains how to implement user profiles and configure synchronization for a SharePoint 2016 deployment, and how to plan and configure My Site and social features. This module also describes how to configure community sites.

- A. Planning user profiles
- B. Enabling My Sites and social features
- C. Building communities

Lab : Configuring profile synchronization and My Sites

- Configuring user profile synchronization by using Microsoft Identity Manager 2016
- Configuring user profile policies

XIII. Planning and configuring web content management

This module explains how to plan and configure a web content management infrastructure to meet business requirements. This module also describes how to configure managed navigation and product catalog sites, and how to configure support for multilingual sites. Additionally, it explains and how to plan and manage design and customization for publishing sites, and how to plan and configure support for mobile users.

- A. Planning and implementing a web content management infrastructure
- B. Configuring managed navigation and catalog sites
- C. Supporting multiple languages and locales
- D. Planning and managing design and customization
- E. Supporting mobile users

Lab : Configuring managed navigation and catalog sites

- Configuring a catalog site
- Configuring a publishing site to use catalog content

Lab : Configuring device channels

- Configuring device channels

XIV. XIII: Planning and configuring business intelligence solutions

This module explains how to plan a business intelligence (BI) architecture for a SharePoint 2016 deployment, and how to deploy and manage BI services.

- A. Planning a business intelligence architecture
- B. Deploying and managing business intelligence services

Lab : Configuring PowerPivot for SharePoint 2016

- Installing and configuring the PowerPivot add-in
- Verifying the PowerPivot for SharePoint functionality