



# Planning and Administering SharePoint 2016

Course: 20339-1

## **Course Details**

Audience(s): IT Professional(s)

Technology: SharePoint Server

**Duration:** 40 Hours

## **ABOUT THIS COURSE**

This forty hours 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. This course also provides guidelines, best practices, and considerations that help you optimize your SharePoint deployment.

#### AUDIENCE PROFILE

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.

**Course Content** 











# **Module 1: Introducing SharePoint 2016**

#### Lessons

- Key components of a SharePoint deployment
- New features in SharePoint 2016
- SharePoint 2016 deployment options

# **Module 2: Designing an information architecture**

#### Lessons

- Identifying business requirements
- Understanding business requirements
- Organizing information in SharePoint 2016
- Planning for discoverability

#### Lab: Designing an information architecture - Part one

• Identifying site columns and content types

#### Lab: Creating an information architecture - Part two

Designing a business taxonomy

# Module 3: Designing a logical architecture

#### Lessons

- Overview of the SharePoint 2016 logical architecture
- Documenting your logical architecture

## Lab: Designing a logical architecture

- Planning a logical architecture
- Producing a logical architecture diagram

#### Module 4: Designing a physical architecture

#### Lessons

- Designing physical components for SharePoint deployments
- Designing supporting components for SharePoint deployments
- SharePoint farm topologies
- Mapping a logical architecture design to a physical architecture design

# Lab: Designing a physical architecture

- Designing a physical architecture
- Developing a physical architecture design diagram

# Module 5: Installing and configuring SharePoint 2016 Lessons













- Installing SharePoint 2016
- Scripting installation and configuration of SharePoint
- Configuring SharePoint 2016 farm settings

# Lab: Deploying and configuring SharePoint 2016 - Part one

Provisioning a SharePoint 2016 farm

## Lab: Deploying and configuring SharePoint 2016 - Part two

- Configuring incoming email
- Configuring outgoing email
- Configuring integration with Office Online Server

# Module 6: Creating web applications and site collections

#### Lessons

- Creating web applications
- Configuring web applications
- 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

# **Module 7: Planning and configuring service applications**

#### Lessons

- Introduction to the service application architecture
- Creating and configuring service applications

#### Lab: Planning and configuring service applications

- Provisioning a Managed Metadata Service application with Central Administration
- Provisioning a Managed Metadata Service application with Windows PowerShell
- Configuring the Word Automation Services service application for document conversion
- Configuring service application proxy groups

# Module 8: Managing users and permissions, and securing content Lessons

• Configuring authorization in SharePoint 2016













Managing access to content

## Lab: Managing users and groups

- Creating a web-application policy
- Creating and managing SharePoint groups
- Creating custom permission levels

#### Lab: Securing content in SharePoint sites

- Managing permissions and inheritance
- Managing site-collection security
- Enabling anonymous access to a site

# Module 9: Configuring authentication for SharePoint 2016

#### Lessons

- Overview of authentication
- Configuring federated authentication
- Configuring server-to-server authentication

# Lab: Extend your SharePoint 2016 to support Secure Sockets Layer (SSL)

- Configuring Microsoft SharePoint 2016 to use federated identities
- Configuring Active Directory Federation Services (AD FS) to enable a web application a relying party
- Configuring SharePoint to trust AD FS as an identity provider
- Configuring a web application to use the AD FS identity provider

## Module 10: Securing a SharePoint 2016

#### Lessons

- Securing the platform
- Configuring farm-level security

#### Lab: Securing a SharePoint 2016 deployment

- Configuring SharePoint Server communication security
- Hardening a SharePoint server farm
- Configuring blocked file types
- Configuring Web Part security
- · Implementing security auditing

# Module 11: Managing taxonomy

#### Lessons

Managing content types











- Understanding managed metadata
- Configuring the managed metadata service

# Lab: Configuring content-type propagation

- Creating content types for propagation
- Publishing content types across site collections

## Lab: Configuring and using the managed metadata service

- Configuring the managed metadata service
- Creating term sets and terms
- Consuming term sets

# **Module 12: Configuring user profiles**

#### Lessons

- Configuring the User Profile Service Application
- Managing user profiles and audiences

## Lab: Configuring user profiles

- Configuring the User Profile Service Application
- Configuring directory import and synchronization

# Lab: Configuring My Sites and audiences

- Configuring My Sites
- Configuring audiences

#### **Module 13: Configuring Enterprise Search**

#### Lessons

- Understanding the Search Service Application architecture
- Configuring Enterprise Search
- Managing Enterprise Search

## **Lab: Configuring Enterprise Search**

- Configuring the Search Service Application
- Configuring a file share content source
- 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

# Module 14: Monitoring and maintaining a SharePoint 2016 environment

#### Lessons

- Monitoring a SharePoint 2016 environment
- Tuning and optimizing a SharePoint 2016 environment
- Planning and configuring caching
- Troubleshooting a SharePoint 2016 environment

## Lab: Monitoring a SharePoint 2016 deployment

- Configuring usage and health data collection
- Configuring Sharepoint diagnostic logging
- Configuring Health Analyzer rules
- · Reviewing usage and health data

## Lab: Investigating page load times

- Analyzing network traffic
- Analyzing SharePoint page performance

# At This Course Completion

After completing this course, students will be able to:

- Describe the key features of SharePoint 2016.
- Design an information architecture for a SharePoint 2016 deployment.
- Design a logical architecture for a SharePoint 2016 deployment.
- Design the physical architecture for a SharePoint 2016 deployment.
- Install and configure SharePoint 2016.
- Create and configure web applications and site collections.
- Plan and configure service applications for a SharePoint 2016 deployment.
- Manage users and permissions, and secure content in a SharePoint 2016 deployment.
- Configure authentication in a SharePoint 2016 deployment.
- Configure platform and farm-level security in a SharePoint 2016 deployment.
- Manage information taxonomy in SharePoint web applications and site collections.
- Configure and manage user profiles and audiences.
- Configure and manage the search experience in SharePoint 2016.
- Monitor, maintain, and troubleshoot a SharePoint 2016 deployment.





