

Course 10174A: Configuring and Administering Microsoft SharePoint 2010

About this Course

The course teaches students how to install, configure and administer SharePoint, and also manage and monitor sites and users by using SharePoint 2010.

Audience Profile

This course is intended for IT Professionals who are experienced Windows Server 2003 or 2008 administrators and are interested in learning how to administer SharePoint 2010. The course is also intended for part time Business Application Administrators (BAAs) who are engaged in the administering line-of-business (LOB) applications in conjunction with internal business customers.

At Course Completion

After completing this course, students will be able to:

- Prepare for and install SharePoint 2010
- Configure the fundamental service and logical components of a SharePoint implementation
- Administer SharePoint using the user interface, the command line, and Windows PowerShell
- Manage content in Lists and Libraries
- Administer identities and authentication
- Secure content in SharePoint sites
- Manage customizations to a SharePoint implementation
- Configure SharePoint services and applications
- Configure SharePoint social networking features
- Manage SharePoint search
- Configure farms, servers, service applications, and web applications
- Install, upgrade, configure, and operate a SharePoint farm
- Configure high availability and recoverability
- Monitor and optimize SharePoint performance

Prerequisites

In addition to their professional experience, students who attend this training should have experience:

- Administering Active Directory: creating and managing user and group accounts, delegation of administration, configuring Group Policy
- Administering network infrastructure: DNS, TCP/IP connectivity
- General conceptual awareness of Microsoft .NET Framework as it relates to SharePoint 2010
- Administering SQL Server 2005 or 2008: creating logons, assigning roles, using SQL Management Studio
- One year experience using Windows PowerShell cmdlets
- General security and authentication practices

Course Outline

Module 1: Introducing SharePoint 2010

The goal of this module is to enable students to prepare for and install the first server in a SharePoint 2010 farm.

Lessons

- Evaluate the Features of SharePoint 2010
- Prepare for SharePoint 2010
- Install SharePoint 2010
- Advanced Installation of SharePoint 2010

Lab : Install SharePoint 2010

- Exercise 1: Create Active Directory Accounts for SharePoint
- Exercise 2: Install SharePoint Server Prerequisites

- Exercise 3: Install SharePoint Server
- Exercise 4: Run the SharePoint Products Configuration Wizard
- Exercise 5: Configure the Farm with the Farm Configuration Wizard
- Exercise 6 (Optional): Install a Language Pack

After completing this module, students will be able to:

- Describe the relationship between SharePoint, Active Directory, and SQL Server
- Create the accounts and permissions that are required to install SharePoint
- Identify the role of the Prerequisite Installer
- Install the first server in a SharePoint farm

Module 2: Creating a SharePoint 2010 Intranet

The goal of this module is to enable students to configure and administer the fundamental components of a SharePoint farm, including its configuration, logical structure, user-facing features, and underlying engine.

Lessons

- Perform Initial Farm Configuration
- Configure the SharePoint Logical Structure
- Explore the SharePoint Web Application and Physical Architecture

Lab : Create a SharePoint 2010 Intranet

- Exercise 1: Create a Web Application
- Exercise 2: Create a Site Collection
- Exercise 3: Create a Site Collection in a New Content Database
- Describe the high level structure, components, and functioning of the farm
- Perform configuration of a SharePoint farm using the Farm Configuration Wizard
- Understand the logical topology of SharePoint web apps, site collections, and sites
- Experience SharePoint user-facing functionality
- Create a Web application
- Create a site collection
- Configure managed paths
- Create a content database

Module 3: Administering and Automating SharePoint

The goal of this module is to enable students to apply the full range of options for administering and automating SharePoint: Central Administration, STSADM, and Windows PowerShell. The module also introduces students to the logs, which are mentioned in several subsequent modules and are detailed in Module 14.

Lessons

- Configure Central Administration
- Administer SharePoint from the Command Line
- Automate SharePoint Operations with Windows PowerShell

Lab : Automate SharePoint with Windows PowerShell

- Exercise 1: Add SharePoint Functionality to Windows PowerShell
- Exercise 2: Delegate the Ability to Use Windows PowerShell to Manage SharePoint
- Exercise 3: Report Web and Site Collection Properties
- Exercise 4: Create Site Collections Using Windows PowerShell
- Exercise 5: Create and Update Items

Lab : Administer SharePoint with Stsadm

- Exercise 1: Execute Stsadm Commands

After completing this module, students will be able to:

- Load Microsoft.SharePoint.dll into Windows PowerShell 64bit.
- Create a Windows PowerShell Script to Enumerate Webs
- Create a Windows PowerShell Script to Create a SharePoint Site
- Create a Windows PowerShell Script to Create/Update a ListItem
- Automate common SharePoint tasks with Stsadm

Module 4: Configuring Content Management

The goal of this module is to enable students to manage content (lists, libraries, items and documents)
Lessons

- Optimize Content Storage and Access
- Manage Site Content Types and Site Columns
- Configure the Managed Metadata Service

Lab : Configuring List Throttling and Remote BLOB Storage

- Exercise 1: Configure List Throttling
- Exercise 2: Enable FILESTREAM and Provision the RBS Data Store
- Exercise 3: Install RBS on All SharePoint Web and Application Servers
- Exercise 4: Configure the Blob Size Threshold for RBS

Lab : Configure Managed Metadata

- Exercise 1: Configure and Implement Managed Metadata

After completing this module, students will be able to:

- Configure List Query Thresholds
- Setup Remote Blog Storage on a Content Database
- Configure RBS
- Migrate to and from RBS

Module 5: Configuring Authentication

The goal of this module is to enable students to administer authentication to SharePoint web applications.

Lessons

- Classic SharePoint Authentication Providers
- Federated Authentication

Lab : Configuring Custom Authentication

- Exercise 1: Create the ASP.NET Membership Database
- Exercise 2: Create a Web Applications that Uses Claim Based Authentication

Lab : Configuring Secure Store

- Exercise 1: Create User Accounts for Access to External Data
- Exercise 2: Configure Secure Store Services
- Exercise 3: Configure Secure Store Unattended Accounts

After completing this module, students will be able to:

- Create a custom authentication store using ASP.NET
- Configure the default authentication method of a SharePoint Web application to use a custom membership provider
- Understand how to configure Secure Store service
- Setup an application to use Secure Store service

Module 6: Securing Content

The goal of this module is to enable students to manage security of SharePoint content within a Web application.

Lessons

- Administer SharePoint Users and Groups
- Implement SharePoint Roles and Role Assignments
- Secure and Audit SharePoint Content

Lab : Configuring Security for SharePoint Content

- Exercise 1: Managing SharePoint Groups
- Exercise 2: Creating Custom Permission Levels
- Exercise 3: Managing List and ListItem Permission Inheritance
- Exercise 4: Create a Web Application Policy

After completing this module, students will be able to:

- Add users
- Enable access requests
- Configure SharePoint default groups
- Experience the security trimmed interface
- Create groups

- Create custom permission levels
- Explore Permission Inheritance
- Assign Roles to Securable Objects

Module 7: Managing SharePoint Customizations

The goal of this module is to enable students to manage customizations to the SharePoint environment.

Lessons

- Customize SharePoint
- Deploy and Manage Features and Solutions
- Configure Sandboxed Solutions

Lab : Administering Features and Solutions

- Exercise 1: Administering Features
- Exercise 2: Administering Solutions

Lab : Administering Sandboxed Solutions

- Exercise 1: Administering Sandboxed Solutions
- Exercise 2: Modifying Sandboxed Solutions Timer Jobs
- Exercise 3: Configuring Sandbox Points

Lab : Administering the Developer Dashboard

- Configure the Developer Dashboard

After completing this module, students will be able to:

- Describe and manage SharePoint features
- Describe and manage SharePoint solutions (farm)
- Describe sandboxed solutions
- Describe function of sandboxed solution timer jobs
- Configure sandbox solution resource points
- Understand the developer dashboard
- Understand how to enable and disable the developer dashboard

Module 8: Configuring and Securing SharePoint Services and Applications

The goal of this module is to enable students to manage the SharePoint service as a whole, as well as individual services and service applications.

Lessons

- Secure the Enterprise SharePoint Service
- Secure and Isolate Web Applications
- Configure Service Applications

Lab : Administer SharePoint Services

- Exercise 1: Administer SharePoint Services
- Exercise 2: Administer SharePoint Windows Services

Lab : Configure Application Security

- Exercise 1: Configure Web Application and Application Pool Security
- Exercise 2: Configure SSL Security (Optional)

Lab : Administer Service Applications

- Exercise 1: Explore Service Applications
- Exercise 2: Create a Service Application

After completing this module, students will be able to:

- Describe and configure SharePoint services
- Describe and configure SharePoint Windows services
- Understand SharePoint and SQL Permissions requirements
- Understand Application Pools and Identities requirements
- Implement SSL Security
- Find and manage service applications
- Install a new service application

Module 9: Implementing Productivity Service Applications

The goal of this module is to enable students to configure specific service applications.

Lessons

- Implement Business Connectivity Services
- Implement Excel Services Application
- Implement PerformancePoint Services
- Implement InfoPath Services
- Implement Visio Services
- Implement Access Services
- Implement Office Web Apps

Lab : Implement Office Web Apps

- Exercise 1: Install and Configure Office Web Apps
- Exercise 2: Configure and Test the Office Web Apps in a Document Library

After completing this module, students will be able to:

- Describe Office Web Apps features
- Install Office Web Apps

Module 10: User Profiles and Social Networking

The goal of this module is to enable students to manage user profiles, My Sites, and social content

Lessons

- Configure User Profiles
- Implement SharePoint 2010 Social Networking Features

Lab : Lab 10 A: Configuring User Profiles

- Exercise 1: Creating a Service Application
- Exercise 2: Configuring User Profiles
- Exercise 3: Connecting BDC to SharePoint Profiles
- Exercise 4: Administering ForeFront Identity Manager

Lab : Configuring My Sites

- Exercise 1: Configuring My Sites
- Exercise 2: Creating a My Site
- Exercise 2: Updating a User Profile
- Exercise 3: Administering Colleagues
- Exercise 4: Configuring Personal and Shared Documents
- Exercise 5: Creating A My Site Personal Blog
- Exercise 6: Administering My Tags and Notes

After completing this module, students will be able to:

- Configure user profiles (Active Directory)
- Configure import connections
- Configure profile properties
- Explore ForeFront Identity
- Configure My Sites
- Administer a My Site

Module 11: Administering and Configuring SharePoint Search

The goal of this module is to enable students to configure SharePoint Search.

Lessons

- Configure Search
- Refine Search

Lab : Configure Search

- Exercise 1: Create and Configure A Content Source
- Exercise 2: Configure Search Settings
- Exercise 3: Add and Configure A Search Scope

Lab : Refine Search

- Exercise 1: Configure Relevance
- Exercise 2: Create Keywords and Best Bets
- Exercise 3: Configure a Thesaurus
- Exercise 4: Configure Noise Words

After completing this module, students will be able to:

- Create and configure content sources
- Modify the default search settings
- Create and configure search scopes
- Tweak relevance algorithms
- Create keyword & best bets
- Create and update thesaurus files
- Create and update noise word files

Module 12: Installing and Upgrading to SharePoint 2010

The goal of this module is to enable students to install and upgrade to SharePoint 2010 in a variety of scenarios, and to keep SharePoint 2010 up-to-date.

Lessons

- Install SharePoint Servers and Farms
- Upgrade to SharePoint 2010
- Monitor and Troubleshoot installation and upgrade
- Update SharePoint

Lab : Implementing Advanced SharePoint 2010 Installations

- Exercise 1: Create a Multi-Server Farm
- Exercise 2: Configure SharePoint Server Roles
- Exercise 3: Install Language Packs

Lab : Scripting a SharePoint 2010 Install

- Exercise 1: Creating a SharePoint 2010 Install Script
- Exercise 2: Configuring SharePoint 2010 via Scripts
- Exercise 3: Creating a SharePoint 2010 Service Applications Script

Lab : Implementing SharePoint 2007 Upgrade Requirements

- Exercise 1: Defragmenting Content Databases
- Exercise 2: Migrating Content Between Databases
- Exercise 3: Truncating and Backing Up Content Databases
- Exercise 4: Installing Cumulative Update (Oct 2009)
- Exercise 5: Analyzing the Upgrade

Lab : Upgrading SharePoint 2007 to SharePoint 2010

- Exercise 1: Upgrading the SharePoint Binaries
- Exercise 2: Implement a Database Attach Upgrade
- Exercise 3: Implementing a Visual Upgrade

After completing this module, students will be able to:

- Create a multi-server farm
- Configure server roles
- Install a language pack
- Install SharePoint 2007 Service Pack 2
- Install Cumulative Update (Oct 2009)
- Perform a database attach upgrade
- Perform a visual upgrade

Module 13: Implementing Business Continuity

The goal of this module is to enable students to configure business continuity for SharePoint

Lessons

- Lesson 1: Configure High availability
- Lesson 2: Backup and Restore SharePoint

Lab : Implement a Backup Strategy

- Exercise 1: Implement a Central Administration Backup Strategy
- Exercise 2: Implement a Windows PowerShell Backup Strategy

Lab : Implement a Restore Strategy

- Exercise 1: Implement a Central Administration Restore Strategy
- Exercise 2: Perform a Partial Restore

After completing this module, students will be able to:

- Understand backup options

- Use Central Administration to back up your farm
- Use Windows PowerShell to back up your farm
- Restore your SharePoint farm from back up
- Understand partial restore techniques

Module 14: Monitoring and Optimizing SharePoint Performance

The goal of this module is to enable students to monitor SharePoint performance, health, and usage, and to identify and remediate performance and health problems.

Lessons

- Monitor Performance
- SharePoint Health Analyzer
- Usage reports and web analytics
- Monitor and Optimize SharePoint Performance

Lab : Configure Diagnostic Logging

- Exercise 1: Configure Diagnostic Logging

Lab : Administer Logs with the ULS Viewer

- Troubleshoot Correlation Errors

Lab : Configure Health Analyzer Rules

- Configure Health Analyzer Rules

Lab : Build Reports Using the SharePoint Logging Database

- Exercise 1: Configure the Logging Database
- Exercise 2: Write Reports with the Logging Database

After completing this module, students will be able to:

- Configuring diagnostic logging
- Understand logging levels
- Enable event throttling
- Set log file size limits
- Understand ULS Log file structure
- Understand when to use the ULS Viewer
- Explore SharePoint Health Analyzer
- Understand Health Analyzer rules
- Identify and monitor system performance bottlenecks