

MOC 10231 Designing a Microsoft SharePoint 2010 Infrastructure

Course Summary

Description

This ILT course teaches IT Professionals to design and plan the deployment of Microsoft SharePoint 2010.

Objectives

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

- Describe the core methods for identifying business requirements and how these affect planning for a SharePoint 2010 and SharePoint Online deployment.
- Describe how to plan the service application architecture in SharePoint 2010 and SharePoint Online.
- Describe the principles of designing to maximize performance and capacity in a SharePoint 2010 deployment.
- Describe how to successfully plan the physical components of a SharePoint 2010 deployment.
- Describe the security architecture of SharePoint 2010 and SharePoint Online and the importance of creating a design that is based on the principle of least privilege.
- Explain how to select authentication methods in a SharePoint 2010 and SharePoint Online design.
- Describe how to match the managed metadata architecture in SharePoint 2010 and SharePoint Online to business requirements.
- Describe how to plan a social computing implementation of SharePoint 2010 and SharePoint Online that meets business requirements.
- Describe the architecture and topologies that are available to service a range of search requirements across business models.
- Describe the core functionality of Enterprise Content Management (ECM) in SharePoint 2010 and how it influences solution design.
- Describe core BI principles that will affect planning for SharePoint 2010.
- Describe how to plan for data governance in SharePoint 2010 and SharePoint Online.
- Describe the considerations for developing a maintenance and monitoring plan for SharePoint 2010 that also incorporates the technologies that support SharePoint 2010.
- Describe how to develop a business continuity plan for SharePoint 2010 and SharePoint Online.

Topics

- Designing a Logical Architecture
- Planning a Service Application Architecture
- Planning for Performance and Capacity
- Designing a Physical Architecture
- Designing a Security Plan
- Planning Authentication
- Planning Managed Metadata
- Planning Social Computing
- Designing an Enterprise Search Strategy
- Planning an Enterprise Content Management Strategy
- Planning a SharePoint 2010 Implementation of an Existing Business Intelligence Strategy
- Developing a Plan for Governance
- Designing a Maintenance and Monitoring Plan

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Course Summary (cont'd)

Audience

This course is intended for IT Professionals who use Microsoft SharePoint 2010 in a team-based, medium-sized to large environment. While they may have implemented a SharePoint deployment, they have limited experience in designing a SharePoint infrastructure. They will likely work as a senior administrator who acts as a technical lead over a team of administrators. Members of this audience should have at least 6 months experience with SharePoint 2010 (including pre-released versions of the product)

Prerequisites

Before attending this course, students must have:

- At least 2 years experience administering, deploying, managing, monitoring, upgrading, migrating, and designing SharePoint servers
- At least one year's experience of mapping business requirements to logical and physical technical design
- Working knowledge of network design, including network security
- Completed course 10174A: TS ITPro: Configuring and Managing Microsoft SharePoint 2010, or have equivalent knowledge and experience

Duration

Five days

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Course Outline

I. Designing a Logical Architecture

This module explains how to create a logical architecture design

- A. Identifying Business Requirements

Lab: Designing a Logical Architecture

- Design a Logical Architecture

After completing this module, students will be able to:

- Describe the core methodologies for identifying business requirements and how these affect the logical architecture of a SharePoint 2010 deployment

II. Planning a Service Application Architecture

This module explains how to create a logical Service Application architecture

- A. Introduction to the SharePoint 2010 Service Application Architecture
- B. Mapping Logical Architecture to Service Applications
- C. Service Application Framework Components

Lab: Planning a Service Application Architecture

- Identify and Design Service Applications
- Create Service Applications and Assign Proxy Groups

After completing this module, students will be able to:

- Describe the Service Application architecture in SharePoint 2010
- Map Service Applications against business requirements and the logical architecture design
- Describe the components of Service Applications and why they influence design and management

III. Planning for Performance and Capacity

This module explains how to create a capacity and performance plan for SharePoint 2010

- A. Performance Planning Principles
- B. Designing for Performance
- C. Capacity Planning Principles

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D. Designing for Capacity Resilience

Lab: Planning for Capacity and Performance

- Create a Performance Plan
- Create a Capacity Plan

After completing this module, students will be able to:

- Review and describe the principles of designing to maximize performance
- Create a SharePoint 2010 performance design and understand how to mitigate performance problems
- Describe how capacity planning affects the design of a SharePoint 2010 implementation
- Create a SharePoint 2010 farm design that caters for current and future capacity demands

IV. Designing a Physical Architecture

This module explains how to map the logical architecture, service application architecture, and the capacity and performance plan against a physical architecture

- A. SharePoint 2010 Physical Design
- B. Non-SharePoint Physical Design
- C. Model Design Topologies
- D. Mapping a Logical Architecture Design to a Physical Architecture Design

Lab: Designing a Physical Architecture

- Design Physical Architecture
- Resolve a Name Resolution Problem

After completing this module, students will be able to:

- Describe the physical design requirements for SharePoint 2010
- Describe the non-SharePoint 2010 requirements for a successful physical design
- Explain how model design topologies are suitable for different environments
- Map a logical architecture design to a physical architecture design

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Course Outline (cont'd)

V. Designing a Security Plan

This module explains how to design a security plan for SharePoint 2010 based on the principle of least-privilege

- A. Designing to Secure SharePoint 2010
- B. Planning for Service Accounts
- C. Planning for User and Group Security
- D. Planning for SSL

Lab: Designing a Security Plan

- Design for Least-Privilege Security
- Identify and Resolve Potential Security Issues
- Grant the Production Auditors Group Read Access

After completing this module, students will be able to:

- Describe the security architecture of SharePoint 2010 and the importance of the principle of least-privilege
- Identify and plan security for core service accounts
- Describe the considerations for implementing security for users, groups and audiences

VI. Planning Authentication

This module explains how to create an authentication plan for SharePoint 2010 that meets the business requirements

- A. Overview of Authentication
- B. Introduction to Claims-based Authentication
- C. Selecting Authentication Methods

Lab: Planning Authentication

- Plan Authentication
- Enable Claims-based Authentication

After completing this module, students will be able to:

- Describe the different authentication methods used in SharePoint 2010
- Describe claims-based authentication in SharePoint 2010

- Explain how to select authentication methods in a SharePoint 2010 design

VII. Planning Managed Metadata

This module explains how to create a corporate taxonomy plan for a SharePoint 2010 environment and enable consumption of the terms within the term store

- A. SharePoint 2010 Metadata Architecture
- B. Overview of Content Types
- C. Mapping Managed Metadata to Business Requirements

Lab: Planning Managed Metadata

- Design Content Types and a Term Set Framework
- Create and Configure the Managed Metadata Service Application
- Import a Term Set
- Publish a Content Type

After completing this module, students will be able to:

- Describe the function of managed metadata in SharePoint 2010
- Describe the function of content types and how they are applied to business requirements
- Match SharePoint 2010 managed metadata architecture to business requirements

VIII. Planning Social Computing

This module explains how to design a SharePoint 2010 environment that supports social computing features including user profiles and My Sites

- A. Overview of Social Computing
- B. Planning SharePoint 2010 Social Computing Functionality
- C. Planning User Profile Services

Lab: Planning Social Computing

- Plan User Profiles
- Configure User Profile Synchronization

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Course Outline (cont'd)

After completing this module, students will be able to:

- Describe social computing functionality in SharePoint 2010
- Describe how the social computing functionality of SharePoint 2010 meets business needs
- Plan user profiles in providing social computing functionality

IX. Designing an Enterprise Search Strategy

This module explains how to design and implement search strategy in SharePoint 2010

- A. Overview of SharePoint 2010 Search Architecture
- B. Search Topologies
- C. Mapping Business Requirements to SharePoint Search
- D. Capacity and Performance Planning for Search

Lab: Designing an Enterprise Search Strategy

- Plan for Search
- Plan Physical Topology
- Create Search Service Applications
- Configure Search

After completing this module, students will be able to:

- Describe the search architectures in SharePoint 2010
- Describe the topologies available to service a range of search requirements across business models
- Describe how to align business requirements against the SharePoint Enterprise and FAST Search architectures
- Plan and document enterprise search for capacity and performance

X. Planning an Enterprise Content Management Strategy

This module explains how to translate business requirements for content management into an Enterprise Content Management solution.

- A. Overview of Enterprise Content Management
- B. Planning Content Management Policies
- C. Planning Web Content Management

Lab: Planning Enterprise Content Management

- Plan Content Management
- Enable and Configure Document IDs and Content Organizer
- Configure Retention Policies and Records Management

After completing this module, students will be able to:

- Describe the core functionality of ECM in SharePoint that influences your design
- Describe the considerations when planning content management policies for SharePoint 2010
- Describe how to plan for Web content management in SharePoint 2010

XI. Planning a SharePoint 2010 Implementation of an Existing Business Intelligence Strategy

This module explains how to create a plan that reflects the role of SharePoint in an overarching corporate Business Intelligence strategy

- A. Overview of Business Intelligence Principles
- B. Mapping Business Needs to SharePoint 2010 Data Visualization Options
- C. Mapping Business Needs to SharePoint 2010 Information Presentation
- D. Planning External Data Access

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Course Outline (cont'd)

Lab: Planning a SharePoint 2010 Implementation of a Business

- Plan your SharePoint Business Intelligence Implementation
- Create a BI Center and Enable Excel Services

After completing this module, students will be able to:

- Describe core business intelligence principles that will affect SharePoint planning
- Map data visualization in SharePoint 2010 against business requirements
- Map information presentation BI solutions based on SharePoint 2010 against business requirements
- Specify planning criteria for creating data access for business intelligence

XII. Developing a Plan for Governance

This module explains how to develop the key SharePoint elements of a governance plan that is in agreement with the overarching corporate governance strategy

- A. What Is Governance?
- B. Planning for Governance in SharePoint 2010
- C. Implementing the Governance Plan in SharePoint 2010

Lab: Developing a Plan for Governance

- Plan Governance
- Implement the governance plan

After completing this module, students will be able to:

- Describe the concepts of governance
- Plan for data governance in SharePoint 2010
- Implement the governance plan in SharePoint 2010

XIII. Designing a Maintenance and Monitoring Plan

This module describes the essential principles of maintenance and monitoring and maps these against the functionality that is available in SharePoint 2010. It then uses this framework to identify how best to develop a maintenance and monitoring plan for SharePoint 2010.

- A. Principles of Maintenance and Monitoring
- B. Creating a Maintenance Plan for SharePoint 2010
- C. Creating a Monitoring Plan for SharePoint 2010
- D. Considerations for the Maintenance and Monitoring of Associated Technologies

Lab: Designing a Maintenance and Monitoring Plan

- Resolving a SharePoint Error
- Splitting a Content Database

After completing this module, students will be able to:

- Describe the essential principles of maintenance and monitoring plan
- Create a SharePoint 2010 maintenance plan
- Create a SharePoint 2010 Monitoring plan
- Describe the considerations for developing maintenance and monitoring plan that incorporates technologies that support SharePoint 2010

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Course Outline (cont'd)

XIV. Planning Business Continuity

This module describes the components of an effective business continuity plan. It also explains how to map functionality and components in SharePoint 2010 against business requirements for different business continuity metrics.

- Overview of Business Continuity Management
- Developing a Business Continuity Plan for SharePoint Server 2010
- Creating a Backup and Restore Plan for SharePoint Server 2010

Lab : Planning Business Continuity

- Creating a Backup and Restore Plan
- Testing the Recovery Process

After completing this module, students will be able to:

- Describe business continuity management.
- Describe how to develop a business continuity plan for SharePoint Server 2010.
- Describe how to create a backup and restore plan for SharePoint Server 2010.

XV. Planning for Upgrade to SharePoint 2010

This module reviews the options for performing an upgrade to SharePoint 2010 from a range of previous versions. It also outlines the milestones that are necessary to develop a successful upgrade plan.

- Identifying Upgrade Scenarios
- Planning Your Upgrade
- Upgrade Considerations

Lab : Planning for Upgrading to SharePoint 2010

- Creating an Upgrade and Migration Plan

After completing this module, students will be able to:

- Describe the range of upgrade requirement options and the available upgrade methods.
- Describe how to plan an upgrade to SharePoint 2010.
- Explain the key upgrade considerations.

XVI. Planning for SharePoint Online

This module describes the key differences between an on-premise deployment of SharePoint 2010, and SharePoint Online. This section also outlines topics of administration as it relates to planning for SPO, as well as planning for hybrid deployments of both SharePoint 2010 and SharePoint Online. Lessons

- SharePoint Online Planning
- Planning for Administration of SharePoint Online
- Hybrid Deployments

After completing this module, students will be able to:

- Describe the key differences between SharePoint Online and an on-premise deployment of SharePoint 2010.
- Describe the main administrative differences important to planning a deployment on SharePoint Online.
- Explain hybrid deployments of both SharePoint Online and an on-premise deployment of SharePoint 2010.

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