



Designing a Microsoft SharePoint 2010 Infrastructure

Number of Days: 5

Format: Instructor-Led

Class Code: 10231

Recommended Course Sequence

Knowledge of prerequisites noted below.

Course content is subject to change without notice.

Course Description:

This 5 day ILT course teaches IT Professionals to design and deploy Microsoft SharePoint 2010.

Target Student:

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 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

Delivery Method:

Instructor led, group-paced, classroom-delivery learning model with structured hands-on activities.

At Course Completion:

After completing this course, students will be able to:

- Create a logical architecture design
- Create a logical Service Application architecture
- Create a capacity and performance plan for SharePoint 2010
- Map the logical architecture, service application architecture, and the capacity and performance plan against a physical architecture
- Design a security plan for SharePoint 2010 based on the principle of least-privilege
- Create an authentication plan for SharePoint 2010 that meets the business requirements
- Create a corporate taxonomy plan for a SharePoint 2010 environment and enable consumption of the terms within the term store
- Design a SharePoint 2010 environment that supports social computing features including user profiles and My Sites
- Design and implement search strategy in SharePoint 2010

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- Translate business requirements for content management into an Enterprise Content Management solution
- Create a plan that reflects the role of SharePoint in an overarching corporate Business Intelligence strategy
- Develop the key SharePoint elements of a governance plan that is in agreement with the overarching corporate governance strategy
- Develop a plan for maintaining and monitoring a SharePoint 2010 deployment
- Develop a business continuity plan for SharePoint 2010
- Plan an upgrade from a previous SharePoint Product and Technologies version to SharePoint 2010

Course Outline

Module 1: Designing a Logical Architecture

This module explains how to create a logical architecture design

Lessons
<ul style="list-style-type: none">■ Identifying Business Requirements■ Overview of SharePoint 2010 Logical Architecture■ Documenting Your SharePoint 2010 Environment■ Documenting the Logical Architecture
Lab : Designing a Logical Architecture
<ul style="list-style-type: none">■ Mapping Business Requirements to a Logical Architecture Design■ Creating a Logical Architecture Diagram
After completing this module, students will be able to:
<ul style="list-style-type: none">■ Identify business requirements and describe how business requirements affect the logical architecture of a SharePoint 2010 deployment.■ Map business requirements to SharePoint 2010 architecture components.■ Explain the importance of documentation and describe the options for documenting logical architecture.■ Describe how to document a logical architecture design.

Module 2: Planning a Service Application Architecture

This module explains how to create a logical Service Application architecture.

Lessons
<ul style="list-style-type: none">■ Introduction to the Service Application Architecture in SharePoint 2010■ Service Application Architecture and Components■ Topologies for Service Applications■ Mapping Service Applications to Your Logical Architecture
Lab : Planning a Service Application Architecture
<ul style="list-style-type: none">■ Identifying and Designing Service Applications■ Creating Service Applications and Assigning Proxy Groups

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After completing this module, students will be able to:

- Describe the service application architecture in SharePoint 2010 and list the available service applications.
- Describe the components and options that are available in the service application architecture in SharePoint 2010.
- Describe some of the topology options for service applications and their respective benefits.
- Describe how to map and document business requirements to service applications.

Module 3: Planning for Performance and Capacity

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

Lessons

- Principles of Performance Planning
- Designing for Performance
- Principles of Capacity Planning
- Designing for Capacity

Lab : Planning for Capacity and Performance

- Creating List Views
- Adding Indexes

After completing this module, students will be able to:

- Describe the principles of designing to maximize performance.
- Create a SharePoint 2010 performance design that mitigates 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.

Module 4: 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.

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
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Lab : Designing a Physical Architecture

- Planning the Physical Architecture
- Troubleshooting a Name Resolution Problem
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After completing this module, students will be able to:

- Describe the physical design requirements for SharePoint 2010.
- Describe the supporting requirements for a successful SharePoint 2010

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physical design.
■ Identify SharePoint farm topologies.
■ Map a logical architecture design to a physical architecture design.
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Module 5: Designing a Security Plan

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

Lessons
■ Designing to Secure SharePoint 2010
■ Planning for Service Accounts
■ Planning Security for Users and Groups
■ Planning for SSL
Lab : Designing a Security Plan
■ Designing for Least-Privilege Security
■ Identifying and Resolving Potential Security Issues
■ Granting Read Access to the Production Auditors Group
After completing this module, students will be able to:
■ Describe the security architecture in 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 and groups.
■ Explain the options for implementing Secure Sockets Layer (SSL) in SharePoint 2010.

Module 6: Planning Authentication

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

Lessons
■ Overview of Authentication
■ Introduction to Claims-based Authentication
■ Selecting Authentication Methods
Lab : Planning Authentication
■ Planning Authentication for Contoso, Ltd
■ Enabling Claims-Based Authentication
After completing this module, students will be able to:
■ Describe the different authentication and authorization methods that SharePoint 2010 uses.
■ Describe claims-based authentication in SharePoint 2010.
■ Select the most appropriate authentication method for a given SharePoint 2010 design.

Module 7: 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.

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Lessons
<ul style="list-style-type: none"> ■ Metadata in SharePoint 2010 ■ Overview of Content Types ■ Mapping Managed Metadata to Business Requirements
Lab : Planning Managed Metadata
<ul style="list-style-type: none"> ■ Designing Content Types and a Term Set Framework ■ Creating the Managed Metadata Service Application ■ Importing Term Sets ■ Publishing a Content Type
After completing this module, students will be able to:
<ul style="list-style-type: none"> ■ Describe the function of managed metadata in SharePoint 2010. ■ Describe the function of content types and explain how to apply them to business requirements. ■ Match the managed metadata architecture in SharePoint 2010 to business requirements.

Module 8: Planning Social Computing

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

Lessons
<ul style="list-style-type: none"> ■ Overview of Social Computing ■ Planning for Social Computing Functionality in SharePoint 2010 ■ Planning for the User Profile Service
Lab : Planning Social Computing
<ul style="list-style-type: none"> ■ Planning User Profiles ■ Configuring User Profile Synchronization
After completing this module, students will be able to:
<ul style="list-style-type: none"> ■ Describe the social computing functionality that is available in Microsoft SharePoint 2010. ■ Describe how the social computing functionality in SharePoint 2010 meets business needs. ■ Plan user profiles for providing social computing functionality.

Module 9: Designing an Enterprise Search Strategy

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

Lessons
<ul style="list-style-type: none"> ■ Overview of SharePoint 2010 Search Architecture ■ Search Topologies in SharePoint 2010 ■ Capacity and Performance Planning for Search ■ Mapping Business Requirements to Search Design
Lab : Designing an Enterprise Search Strategy
<ul style="list-style-type: none"> ■ Planning for Search ■ Planning Physical Topology ■ Creating Search Service Applications ■ Configuring Search

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After completing this module, students will be able to:
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| <ul style="list-style-type: none"> ■ Describe the search architecture and process in SharePoint 2010. ■ Describe the topologies that are available in SharePoint 2010 to service a range of search requirements across business models. ■ Plan and document enterprise search for capacity and performance. ■ Describe how to map business requirements to the SharePoint Enterprise and FAST search architectures. |
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Module 10: Planning Enterprise Content Management

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

Lessons

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| <ul style="list-style-type: none"> ■ Overview of Enterprise Content Management ■ Planning Tasks for Content Management ■ Planning Features and Policies for Content Management ■ Planning Web Content Management |
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Lab : Planning Enterprise Content Management

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| <ul style="list-style-type: none"> ■ Developing a Content Management Plan ■ Enabling and Configuring Document IDs and Content Organizer ■ Configuring Retention Policies and Records Management |
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After completing this module, students will be able to:
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| <ul style="list-style-type: none"> ■ Describe the core functionality of ECM in SharePoint Server 2010 that influences your design. ■ Describe the major steps that you should take when you plan a content management solution in SharePoint Server 2010. ■ Describe the considerations for planning features and policies for content management for SharePoint Server 2010. ■ Describe how to plan for Web content management in SharePoint Server 2010. |
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Module 11: Planning a SharePoint 2010 Implementation of a Business Intelligence Strategy

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

Lessons

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| <ul style="list-style-type: none"> ■ Overview of Business Intelligence Principles ■ Planning Data Access by Using BCS ■ Planning SharePoint 2010 Business Intelligence Solutions ■ Planning for Reporting and Presentation |
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Lab : Planning a SharePoint 2010 Implementation of a Business Intelligence Strategy
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| <ul style="list-style-type: none"> ■ Planning the SharePoint Business Intelligence Implementation ■ Creating a BI Center and Enabling Excel Services |
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After completing this module, students will be able to:
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| <ul style="list-style-type: none"> ■ Describe the principles of BI. ■ Describe how to plan for data access by using BCS. ■ Describe data and security planning concerns for key BI tools. |
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- Describe the roles of SQL Server Reporting Services and the BI Center in reporting and presenting BI components.

Module 12: 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.

Lessons
<ul style="list-style-type: none"> ■ Overview of Governance ■ Key Elements of a Governance Plan ■ Planning for Governance in SharePoint Server 2010 ■ Governance Implementation Features and Policies in SharePoint Server 2010
Lab : Developing a Plan for Governance
<ul style="list-style-type: none"> ■ Creating a Governance Plan ■ Implementing the Governance Plan
After completing this module, students will be able to:
<ul style="list-style-type: none"> ■ Describe the concept of governance. ■ Describe the key elements of a governance plan. ■ Plan for governance in SharePoint Server 2010. ■ Describe the governance implementation features and policies in SharePoint Server 2010.

Module 13: Designing a Maintenance and Monitoring Plan

This module explains how to develop a plan for maintaining and monitoring a SharePoint 2010 deployment.

Lessons
<ul style="list-style-type: none"> ■ Principles of Maintenance and Monitoring ■ Creating a Maintenance Plan for SharePoint 2010 ■ Creating a Monitoring Plan for SharePoint 2010 ■ Considerations for the Maintenance and Monitoring of Associated Technologies
Lab : Designing a Maintenance and Monitoring Plan
<ul style="list-style-type: none"> ■ Resolving an Error in SharePoint 2010 ■ Splitting a Content Database
After completing this module, students will be able to:
<ul style="list-style-type: none"> ■ Describe the essential principles of a maintenance and monitoring plan. ■ Create a maintenance plan for SharePoint 2010. ■ Create a monitoring plan for SharePoint 2010. ■ Describe the considerations for developing a maintenance and monitoring plan that incorporates technologies that support SharePoint 2010.

Module 14: Planning Business Continuity

This module explains how to develop a business continuity plan for SharePoint 2010.

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Lessons
<ul style="list-style-type: none">■ 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
<ul style="list-style-type: none">■ Creating a Backup and Restore Plan■ Testing the Recovery Process
After completing this module, students will be able to:
<ul style="list-style-type: none">■ 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.

Module 15: Planning for Upgrading to SharePoint 2010

This module explains how to plan an upgrade from a previous SharePoint Products and Technologies version to SharePoint 2010.

Lessons
<ul style="list-style-type: none">■ Identifying Upgrade Scenarios■ Planning Your Upgrade■ Upgrade Considerations
Lab : Planning for Upgrading to SharePoint 2010
<ul style="list-style-type: none">■ Creating an Upgrade and Migration Plan
After completing this module, students will be able to:
<ul style="list-style-type: none">■ 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.