

SharePoint Server 2010 Development

Hands on Lab: Microsoft SharePoint Server 2010 Training Enterprise Virtual Machine Infrastructure

Length: 1 Day

Summary: You will create a team site to facilitate collaboration among the team members.

COURSE CONTENT

6 PILLARS OF MICROSOFT SHAREPOINT SERVER 2010

SharePoint 2010 is The Business Collaboration Platform for the Enterprise and the Web. "Collaboration" to cover the spectrum of publishing, sharing, finding, analyzing and managing information that SharePoint enables. "Platform" not only because custom solutions are a major focus of the 2010 release but also "platform" conveyed a solid base for all the out-of-box usage that never requires a developer. Finally, "the Web" to highlight both internet scenarios reaching customers and partners.

- Sites
- Communities
- Content
- Search
- Insights
- Composites

SHAREPOINT SERVER 2010 PLATFORM DEVELOPMENT ARCHITECTURE AND DESIGN

Understand SharePoint Server 2010 platform architecture from the Operating System to Application Layers from building business applications perspective.

- SharePoint 2010 Development Architecture overview
- SharePoint Foundation architecture

- Microsoft.NET 3.5 Architecture (ASP.NET 3.5, C#, WF)
- SharePoint 2010 Object Model Overview
- Visual Studio 2010 Overview
- SharePoint Designer 2010 Overview
- SharePoint PowerShell for Developers
- Walk-through of the SharePoint Object Model in Visual Studio 2010
- Write C# code in Visual Studio 2010 to get the details of the SharePoint Farm

SHAREPOINT TOOLS FOR VISUAL STUDIO 2010

- Integrated SharePoint application development, deployment and debugging in Visual Studio 2010
- Visual Studio Project templates for SharePoint 2010
- Server Explorer, Feature Designer, Package Explorer
- Building and Deploying Solutions in Visual Studio 2010 for SharePoint 2010

SHAREPOINT 2010 CONTENT TYPES

Architected properly and implemented efficiently following the best practices, content types will successfully fuel your SharePoint 2010 implementation for the future. Done correctly and thoughtfully, content types positively impact security, consistency, organization of data, business intelligence, where and how data surfaces, templates, workflow, information policies.

- SharePoint 2010 Content Types and Suggestions
- Configuring and Managing Content Type Hubs
- Content Type Publishing
- Content Type Timer Jobs

SHAREPOINT 2010 BASED LISTS FOR DATA MANAGEMENT

- New SharePoint 2010 List Architecture and Scalability
- Using LINQ to query and join lists (SPINQ)
- ASP.NET Data Services to read/write to SharePoint 2010 lists
- REST Interfaces for Data Management

SHAREPOINT 2010 LISTS AND EVENT HANDLING

- Introduction to Event Handlers in SharePoint 2010
- SharePoint 2010 Event Receiver Architecture
- Communicate with content types such as SharePoint Lists, Document Libraries using Event Receivers.
- SharePoint Objects that Support Event Receivers
- Packaging and Deploying SharePoint 2010 Event Handlers using Visual Studio 2010

SHAREPOINT 2010 FEATURES

- Introduction to SharePoint 2010 feature designer
- Understanding CAML
- Building Feature Event Receiver in Visual Studio 2010
- Deploying and Activating Features in Visual Studio 2010

SHAREPOINT 2010 SANDBOXED SOLUTIONS

One of the biggest problems with SharePoint 2007 development is that all of its solutions run as full trust. This makes farm administrators reluctant to publish any solution that may disrupt the stability of the farm. Sandboxed solutions, new in SharePoint 2010, address this by allowing site collection administrators to deploy solutions that are safe to run.

- Sandbox solution architecture and monitoring
- Farm Solution Vs. Sandboxed Solution
- Sandboxed solution types and limitations
- Build, Deploy and Test a sandboxed SharePoint 2010 web part
- Business Connectivity Services (BCS) and Sandboxed solutions

INFOPATH 2010 FORMS SERVICES

Microsoft InfoPath 2010 forms can be published to document libraries. These forms are then hosted by Forms Services within SharePoint Server 2010.

- InfoPath 2010 Forms Services Architecture
- InfoPath 2010 Forms Design and Publishing
- Forms security, and deployment best practices

SHAREPOINT 2010 WORKFLOWS

- Windows Workflow Foundation Overview
- SharePoint Workflow Architecture and Best Practices
- Workflow Authoring using SharePoint Designer 2010
- Workflow Authoring using Visual Studio 2010
- Managing Workflow Instances in the Farm
- No-code workflows designed in Visio 2010 and developed in SharePoint Designer 2010
- Integrating InfoPath and ASPX forms into SharePoint 2010 Workflows

PAGES, NAVIGATION AND WEB CONTENT MANAGEMENT IN SHAREPOINT 2010

- Introduction to ASP.NET Master Page Architecture
 - SharePoint 2010 Custom Themes and Dataviews
 - SharePoint Designer 2010 Overview
 - Create/edit SharePoint master pages
 - Create/edit layout pages
 - Creating Application Pages, Custom Actions, Site Pages, Web Part and Wiki Pages
 - Discuss the SharePoint 12 Hive and .NET Global Assembly Cache (GAC)
 - Create/edit cascading style sheets
 - Use IntelliSense for both code and style sheets
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- Pages document library and support check out, check in and version control.
- SharePoint 2010 .NET Client side object model, using them in Silverlight, ASP.NET AJAX and Flash ActionScript/ECMAScript

DEVELOPING SHAREPOINT 2010 WEB PARTS

- Web Part Design Web Part Pages and Web Part Zones
- Introduction to Web Part Galleries
- Web Part Settings and Available OOB Web Parts
- Build a Custom Web Part in Visual Studio 2010
- Deployment of Custom Web Parts
- Web Part connections, async processing, persistent properties, verbs and editor parts.

WEB AUTHORING AND PUBLISHING

Web Content Management (Publishing) is a capability of SharePoint 2010 for external websites, branding, web analytics, page ratings, meta data management, video and rich media management, workflow, and deployment. Best practices for when to use SharePoint Designer and when to use Visual Studio to complete customizations.

- Web Content Management Overview
- Solutions provided by Web Content Management features of SharePoint
- Web authoring for Extranets and Internet Web Portals
- Content caching, Rich Content Editor Web Part, Content Approvals and Routing

BUSINESS CONNECTIVITY SERVICES (BCS)

Microsoft Business Connectivity Services is a set of services and features that provide a way to connect SharePoint-based solutions to sources of external data and to define external content types based on that external data.

- Interact with (Read/Write) external data systems such as ERP, CRM and other Line of Business (LoB) applications
- Business Connectivity Services Architecture
- Business Connectivity Services Security Model
- Business Connectivity Services Web Parts

- Business Connectivity Services Integration
- Business Connectivity Services APIs
- Interacting with external lists and content types
- .NET Assembly Connector for Business Connectivity Services

BUSINESS INTELLIGENCE

- SharePoint 2010 Business Intelligence Center Site Template
- Key Performance Indicators (KPIs), Dashboards, Charting Web Parts
- PerformancePoint Services
- SSRS and SSAS Integration
- Visio Services and Excel Services