

Implementing and Administering an Enterprise SharePoint Environment

There are numerous planning and management issues that your team needs to address when deploying SharePoint. This process can be simplified and you can ensure a successful implementation of SharePoint by having your IT and Windows Server team participate in this workshop. The best results and most successful SharePoint implementation require that team members in different roles understand what will be required from a technical perspective.

In this 5-day workshop we will explore every aspect of managing a SharePoint 2007 Server farm. This includes integration with applications like IRM, ForeFront, and Performance Point. Learn the many ways to back up and restore SharePoint environments; configure multiple server farms and all of the options in Central Administration.

Who Should Attend

Intended for SharePoint administrators, Windows Server administrators, SQL Server DBA's, project managers and those who will play a critical role in the planning, deployment and management of Information solutions using Microsoft SharePoint Server.

Prerequisites

Experience in implementing, managing, and supporting a Microsoft Windows SharePoint Services 3.0 environment. Basic knowledge of Windows SharePoint Services and Microsoft Office SharePoint Server 2007 interoperability. At least 2 years of experience implementing, managing, and supporting Microsoft Windows Server 2003. At least 2 years of experience implementing, managing, and supporting Internet Information Services (IIS). Working knowledge of networking, for example, TCP/IP and Domain Name System (DNS).

Workshop Objectives:

- ▶ Describe Microsoft Office SharePoint Server 2007.
- ▶ Plan and design a Microsoft Office SharePoint Server 2007 implementation.
- ▶ Deploy Microsoft Office SharePoint Server.
- ▶ Administer Microsoft Office SharePoint Server 2007.
- ▶ Implement a portal solution with Microsoft Office SharePoint 2007.
- ▶ Implement a content management solution with Microsoft Office SharePoint Server 2007.
- ▶ Implement intelligence solution with Microsoft Office SharePoint Server 2007.
- ▶ Implement a search and indexing solution.
- ▶ Maintain and optimize Microsoft Office SharePoint Server 2007.

Implementing and Administering an Enterprise SharePoint Environment

I. Overview

- (a) What is SharePoint?
 - Discussion: What Do You Think SharePoint Is?
 - What is SharePoint 2007?
 - SharePoint Services
 - Why SharePoint 2007?
 - Common Collaboration Issues
 - Business Needs
 - SharePoint 2007 Benefits
 - Collaboration Features
 - Document Management Features
- (b) What's New in SharePoint 2007?
 - What's New in SharePoint 2007
 - New Features

II. Installing

- (a) Installing SharePoint
 - Hardware Requirements
 - Software Requirements
 - Security Requirements
 - Installation
 - Installation Ordering
 - Configuration
 - Configuration Wizard
- (b) SharePoint Farms
 - Building a Farm
 - SharePoint Server Roles
 - Application Requirements

Lab: Installing.

- Install WSS
- Install MOSS
- Detach/Attach to SharePoint Farm

III. SharePoint Architecture

Lab: Site Definitions.

- Create One of Each WSS/MOSS Site Definition

Lab: SharePoint Architecture.

- Explore a SharePoint Config File

Lab: SharePoint Architecture.

- Learn Content Database structure
- Use SQL Profiler to Reverse Engineer the Web Front End and Stsadm

Lab: SharePoint Architecture.

- Create a Customized Page
- Analyze a Customized Page

Lab: 12 Hive.

- Explore the 12 Hive

IV. Stsadm

- (a) Overview
- (b) Commands
- (c) Extending

Lab: Stsadm.

- Use Stsadm Command Line Tool

Lab: Extend Stsadm.

- Review the Stsadm Commands xml File
- Extend Stsadm

V. SharePoint Services

- (a) Services
 - Services
 - Document Conversions Launcher
 - Document Conversions Load Balancer
 - Excel Calculation Services
 - Officer SharePoint Server Search
 - Windows SharePoint Services Search
 - Windows SharePoint Services Web Application

Lab: SharePoint Services.

- Explore the SharePoint Services

VI. PowerShell

- (a) Overview
- (b) Commandlets
- (c) PowerShell Variables
- (d) Using With SharePoint

Lab: Install PowerShell.

Install PowerShell
PowerShell Basics —
Commandlets
Variables
Arrays
'While' Loop
'If' Statement
Create an Object
Static Properties

Lab: PowerShell With SharePoint.

Load SharePoint Dll into
PowerShell
Set PowerShell Execution
Policy
Enumerate Webs
Create a Site with PowerShell
Create/Update an Item with
PowerShell
Backup SharePoint with
PowerShell

VII. General Operations Tasks

- (a) Email Settings
 - Overview
 - Outgoing Email
 - Incoming Email
 - Distribution Groups
- (b) Migrating File Shares
 - Overview
 - Issues
- (c) Master Site Directory
 - Overview
- (d) Alternate Access Mappings
 - Overview
 - Scenarios
 - ISA Server 2006
- (e) External Service Connections
 - Records Center
 - HTML Viewer
 - Document Conversions
- (f) Language Packs
 - Language Pack Overview
 - Downloading

Installing

Creating a Site

- (g) Features and Solutions
 - Features Overview
 - Types of Features
 - Feature Scopes
 - Feature Dependencies
 - Feature Sequence
 - Feature Localization
 - Feature Event Receivers
 - Feature Stapling
 - Creating Features
 - Deploying Features
 - Activating/Deactivating
Solutions

Lab: Email Settings.

Configure the Outgoing Email
Settings
Load Balance Email Load
Configure the Incoming Email
Settings

Lab: Distribution Groups.

Create Active Directory
Distribution Groups

Lab: Migration File Shares.

Migrate a File Share
Blocked File Types
NTFS Permissions

Lab: Master Site Directory.

Setup the Master Site
Directory

Lab: Alternate Access Mappings.

Configure Alternate Access
Mappings
Test Alternate Access
Mappings

Lab: External Service Connections.

Records Center
Document Conversion

Lab: Features and Solutions.

Features
Solutions

VIII. Information Rights Management

- (a) Information Rights Management

- Overview
- Installing
- Configuring
- Troubleshooting

(b) **SharePoint IRM**

- Overview
- SharePoint to IRM Permissions
- Configuring

Lab: Information Rights Management.

- Install Information Rights Management (IRM)
- Configure IRM
- Use IRM

IX. AntiVirus

(a) **Microsoft ForeFront**

- Overview
- ForeFront for SharePoint
- Installing
- Configuring SharePoint
- Configuring ForeFront

Lab: Forefront.

- Install Microsoft Forefront
- Configure Microsoft ForeFront

X. Information Management Policy

Lab: Information Management Policy.

- Create a Basic Policy (Manual)
- Use a Policy

XI. Single Sign On

- (a) Overview
- (b) Setup
- (c) Configuring
- (d) Using
- (e) Applications Scenarios

Lab: Single Sign On.

- Learn How to Configure Single Sign On
- Program Web Parts to Use Single Sign On

XII. Logging Settings

Lab: Logging Settings.

- Learn to Debug SharePoint via Log Files

XIII. Usage Analysis Processing

- (a) Overview
- (b) Configuring
- (c) Architecture
- (d) Reports
- (e) Trouble Shooting
- (f) Custom Log Processing

Lab: Usage Analysis Processing.

- Enable Usage Analysis Processing (UAP)
- Use UAP

XIV. Content Deployment

Lab: Content Deployment.

- Setup Content Deployment Path and Jobs
- Quick Deployment
- Debug Content Deployment

XV. Backup/Restore

- (a) Backup Techniques
 - Things to Backup
 - Ways to Backup
 - Central Administration Backup
 - SQL Server Backup
 - Stsadm Backup
 - Site Template Backup
 - SharePoint Designer
 - List Template Backup
 - Item Level Backup
 - Recycle Bin
 - Event Receivers
 - Gotchas to Backups
- (b) Disaster Recover Techniques
 - Database Redundancy
 - SQL Server Clustering
 - Comparing Solutions
 - Data Protection Manager 2007
- (c) Restore Techniques
 - Restoring

Lab: Backup Central Administration.

- Use Central Administration to Backup and Restore (Farm)

Lab: Backup SQL Server.
Use SQL Server to Backup
SharePoint

Lab: Backup Stsadm.
Use Stsadm to Backup and
Restore a Farm
Use Stsadm to Export a Site
Collection
Use Stsadm to Export a
Single Site

Lab: Backup SiteList Template.
Create a List Template
Create a Site Template
Create a Site from the New
Site Template
Create a List from the New
List Template

Lab: Backup SharePoint Designer.
SharePoint Designer Backup
(Web Package)
SharePoint Designer Backup
(Content Migration)
SharePoint Designer Backup
(Site Template)

XVI. Timer Jobs

- (a) Timer Service
- (b) Timer Job
- (c) SPJobDefinition Class
- (d) WSS Timer Jobs
- (e) MOSS Timer Jobs

Lab: Timer Jobs.
Explore SharePoint Timer
Jobs
Disable a Job
Disable the Timer Service

XVII. Shared Services Provider

- (a) Shared Services Overview
- (b) Shared Services Components
- (c) Shared Services Features
- (d) Life without SSP
- (e) Life with SSP
- (f) Installing

Lab: Shared Services Provider.
Create a Shared Services

Provider (SSP)
Configure Multiple SSPs
Configure Global "My Sites"

XVIII. Application Security

- (a) SharePoint Security
 - Farm Admin vs. Server Admin
 - Authentication methods
 - Windows Groups
 - Service Accounts
 - Changing Accounts/Passwords
 - SharePoint Default Groups
 - Site Permissions
 - Security Trimmed Interface
 - Web Application Policies
 - Web Parts
 - Excel Services
 - Business Data Catalog
- (b) Custom Authentication
 - Overview
 - Configuring
- (c) Code Access Security
 - Overview
 - SharePoint CAS Policies
- (d) Securing Communications
 - IPSec
 - SSL

Lab: Application Security.

Application Pools
Web Application Security
Site/List/Item -level Security
SSL Security

Lab: Custom Authentication.

Change the default
authentication method of
SharePoint to use a custom
membership provider
(ASP.NET 2.0).

XIX. InfoPath Services

- (a) InfoPath 2007
 - InfoPath 2007
 - New Features
 - Forms Publishing
 - Importing Forms
- (b) InfoPath and Windows Workflow
 - Windows Workflow Foundation
 - InfoPath and WWF
- (c) InfoPath Forms Services

- IFS Architecture
- Runtime Architecture
- Form Templates
- Uploading Forms
- Unsupported Features
- Upgrading/Quiescing Forms
- IFS Settings
- Forms Integration with ASP.NET

- (d) Best Practices
 - Best Practices

Lab: InfoPath Services.

- Review MOSS Forms
- Publish/Upload a Form to Forms Library
- Verify/Upload/Activate a Form with IFS

XX. Business Data Catalog

- (a) Business Data Catalog Overview
 - Planning Business Data Catalog
 - Application Definition Files
 - Business Data Catalog Web Parts
 - Business Data Catalog Indexing
 - Business Data Catalog
 - Authentication
 - Business Data Catalog with Single Sign on
 - Business Data Catalog Permissions

Lab: Business Data Catalog.

- Import an Application Definition File
- Utilize BDC Web Parts
- Utilize Filter Web Parts

Lab: BDC Application Definition Files.

- Review BDC Schema
- Create a BDC File (Manually)
- Create a BDC File (Code Gen)

Lab: BDC Permissions.

- DataSource Permission Errors
- Application Permission Errors
- Entity Permission Errors

Lab: BDC Authentication.

- Modify BCD to Use Database Credentials

- Modify BDC to Use Single Sign On
- Custom Single Sign On Solution

Lab: BDC Profiles.

- Search and BDC Integration
- BDC Entity Profile

XXI. Search

- (a) Search Overview
 - Search Overview
 - Microsoft Search Products
 - Search Architecture
 - Content Sources
 - Crawl Process
 - Crawl Schedules
 - Crawl Schedule Best Practices
 - Crawling Content
 - Crawl Rules
 - Search Scopes
 - File Types
 - Default Access Account
 - Query Crawl Logs
- (b) Performing Searches
 - Keyword Search
 - Full Text Search
 - URL Query
 - SPQuery
 - CAML Query
- (c) Tuning Search
 - Thesaurus
 - Noise Words
 - Relevance
 - Improving relevance
 - Best Bets
 - Search Web Parts
 - Search Results Customization
- (d) Extending Search
 - Search Terms
 - Protocol Handlers
 - IFilters
 - IStemmers
 - IWordBreakers

Lab: Search.

- Create Content Source
- Create Crawl Schedules
- Crawl All Scopes
- Create Crawl Rule
- Create Search Scopes
- Add a File Type

Set Default Access Account
Query Crawl Logs

Lab: Tuning Search.

Relevance
Keyword and Best Bets
Thesaurus
Noise Words

Lab: Customizing Search.

Customize Search Results

XXII. Excel Services

- (a) Excel Services Trusted Locations
- (b) Shared Data Connections
- (c) User Defined Functions
- (d) Excel Services isThreading
- (e) Excel Services Web Parts
- (f) Excel Services Object Model/Web Service

Lab: Excel Services.

Learn to use Excel Services
Create/Publish to Excel Services
Configure Excel Services
Shared Data Connections
Single Sign On Data Connections

XXIII. User Profiles My Sites

- (a) User Profile Overview
 - User Profiles
 - My Site
- (b) User Profile Settings
 - Profile Properties
 - Importing Profile Data
 - Data Connections
 - Editing Profile Data
 - Security / Policies
- (c) My Sites
 - My Site Overview
 - My Profile
 - Colleagues / My Workgroup
 - Colleague Tracking / In Common With
 - Memberships
 - Organizational Hierarchy
 - Personal vs. Shared Views
 - My Blog
 - My Site Web Parts

My Links

Lab: User Profiles.

Configure User Profiles (Active Directory)
Configure Import Connections
Configure Profile Properties

Lab: My Sites.

Create Your My Site
Your Profile
Colleagues
Colleagues — Tracking Changes
Explore Memberships
Explore In Common With Documents
Configuring My Calendar Web Part
RSS Viewer
Personal vs. Shared Views
My Links

XXIV. Performance Optimization

- (a) Capacity Planning
 - Farm Member Server Hardware
 - Content Databases Metrics
 - SharePoint Maximums
 - System Center Capacity Planner
- (b) Performance Optimization Techniques
 - ASP.NET Caching
 - Simple Recovery Mode
 - Database File Design
 - Database memory
 - IIS Application Pool Unload
 - Start-up/Warm-up Scripts
 - Indexed Views
 - Network Performance
 - System Center Operations Manager

Lab: Performance Optimization.

Database Tuning (Recovery Mode)
Database Tuning (TempDB)
Database Tuning (Indexes)
Warm-up Scripts and Application Pool Timeout