



Creating and Customizing WSS Sites

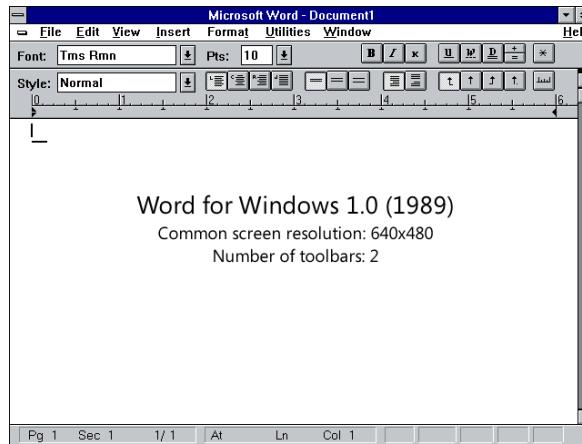
Getting Started with SharePoint Customization

Agenda

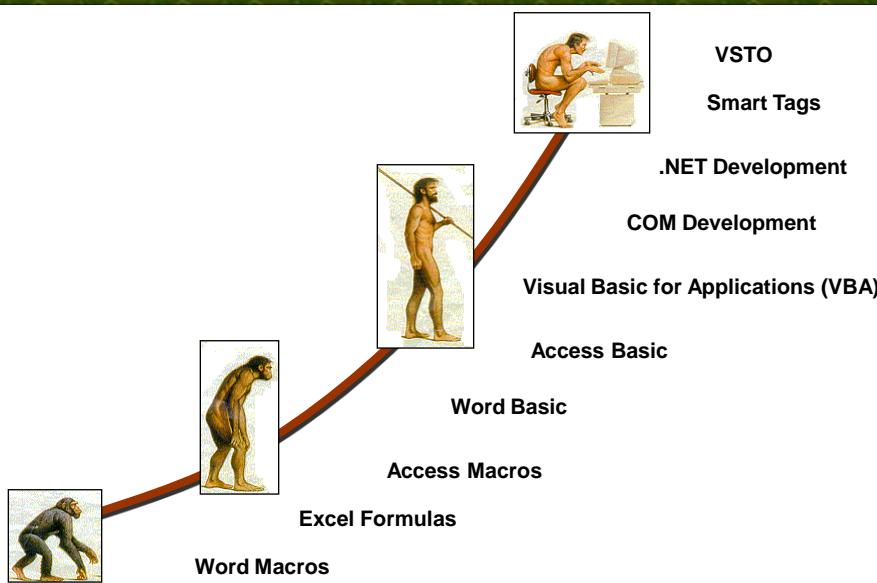
- Architectural overview of SharePoint 2007
 - Windows SharePoint Services 3.0 (WSS)
 - Microsoft Office SharePoint Server 2007 (MOSS)
- WSS as a collaboration solution
- WSS as a server-side development platform
- Overview of MOSS components and services

Microsoft Office Through the Ages

- It all started off with a modest productivity tool from a medium-sized company in Redmond

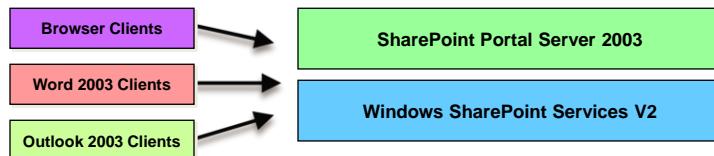


Evolution of the Office Power User

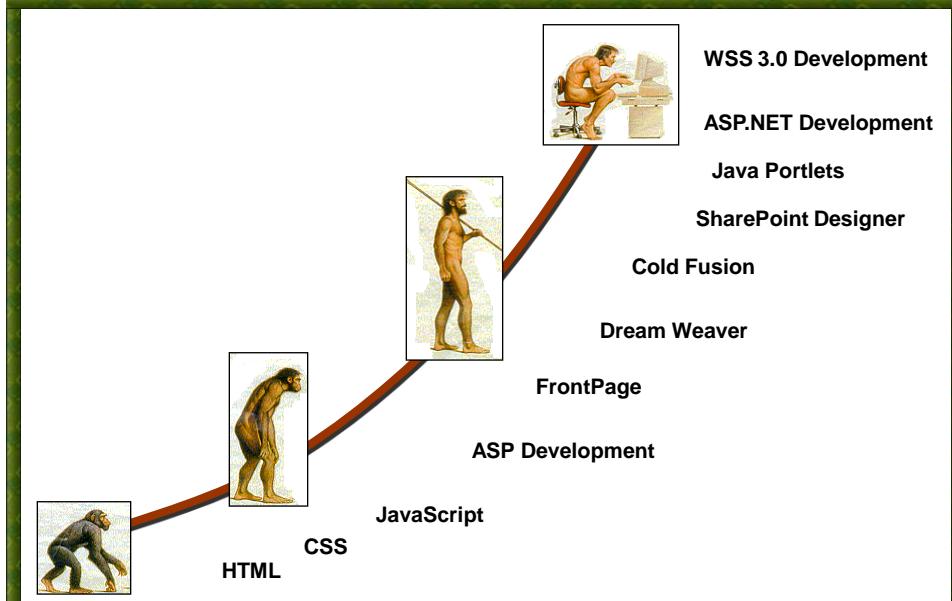


Office 2003 Server Components

- Windows SharePoint Services (WSS v2)
 - Site and Workspace Provisioning Engine
 - Accessibility from browser and Office client applications
 - Out-of-the-box Collaboration Services
- MS Office SharePoint Portal Server 2003 (SPS)
 - Aggregation and search features
 - Social networking (Profiles, Audiences, My Sites)



Evolution of the Web Designer



Student Questionnaire

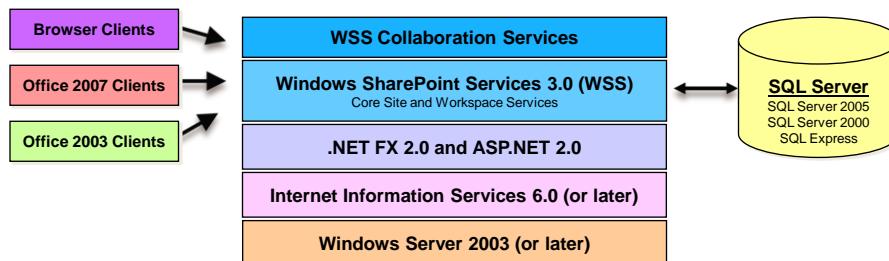
- What's Your Name?
- What Company are you with?
- How have you evolved as User, Designer and/or Developer?
 - Office products (Word, Excel, PowerPoint, Outlook)
 - SharePoint (any version)
 - Web Design (HTML, CSS, JavaScript)
 - Development (ASP.NET, WSS 2.0, WSS 3.0, other)

Introducing The Office 2007 System

- Windows SharePoint Services 3.0 (WSS)
 - Licensed as part of Windows Server 2003
 - Site provisioning engine and core workspace services
 - Out-of-box collaboration features
 - A development platform
think of WSS as ASP.NET extensions
- Microsoft Office SharePoint Server 2007 (MOSS)
 - Licensed separately under its own SKUs
 - New components and services built on top of WSS 3.0
 - Unification of SPS 2003 and CMS 2002
 - Lots of functionality rolled in beyond SPS and CMS

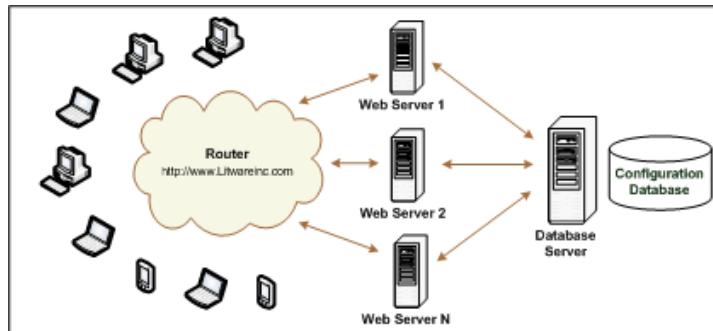
The WSS 3.0 Server-side Platform

- Windows SharePoint Services 3.0 (WSS)
 - An engine for creating/running/managing sites
 - Architecture designed to scale to 10,000s of sites
 - Platform for building Web application and solutions
 - Collaboration services included out-of-the-box



The WSS Farm

- WSS deployment based on a farm
 - Farm requires Web server(s) and database server
 - Farm can be single server or multi-server
 - Each farm has exactly one configuration database



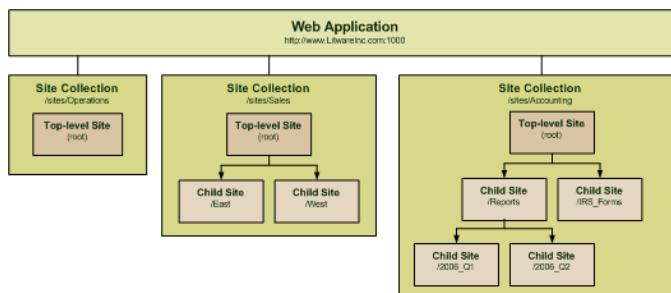
Web Applications

- Web Applications provide HTTP entry points
 - Web Applications based on IIS Web sites
 - Web Application defines one or more URL spaces
 - Web Application security configured independently



Site Collections and Sites

- Sites are partitioned using Site Collections
 - Site collection is scope for administrative privileges
 - Site collection always contains top-level site
 - Site collection may contain hierarchy of child sites
 - Web application can support 1000s of site collections



Watch Out: Inconsistent Terminology

New Term	Old Term	WSS Object Model
Site Collection	Site	SPSite
Site	Web	SPWeb

STSADM.EXE Command-line Utility

- Useful for running administrative commands
 - Can be used interactively from command line
 - Commands can be scripted using batch files

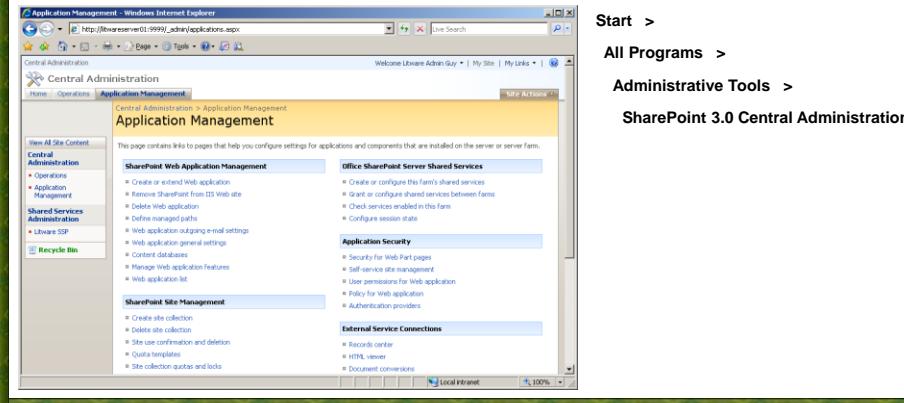
```
C:\>stsadm.exe -help CreateSite
stsadm.exe -o createsite
  -url <url>
  [-owneremail <someone@example.com>]
  [-ownerlogin <DOMAIN\name>]
  [-ownername <display name>]
  [-secondaryemail <someone@example.com>]
  [-secondarylogin <DOMAIN\name>]
  [-secondonryname <display name>]
  [-siteid <val>]
  [-sitetemplate <site template>]
  [-title <site title>]
  [-description <site description>]
  [-hostheaderwebapplicationurl <web application url>]
  [-quota <quota template>]

C:\>STSADM.EXE -o CreateSite -url http://Litwareinc.com/sites/Marketing2007
  -ownerlogin LITWAREINC\Administrator -owneremail administrator@litwareinc.com
  -sitetemplate STS#1
Operation completed successfully.

C:\>
```

WSS Central Administration (WSS CA)

- WSS CA hosted in separate Web Application
 - Used by farm-level administrators
 - WSS CA pages have more links if MOSS is installed



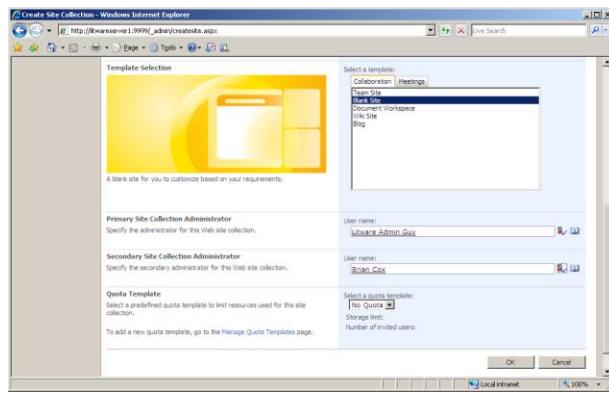
Creating New Site Collections

- Steps to provisioning new site collection
 - Go Application Management tab of WSS CA
 - Click Link titled Create site collection
 - Fill out input form and click OK

The screenshot shows the 'Create Site Collection' dialog box. It has fields for 'Title and Description' (Title: 'Litware Home', Description: 'A site for tracking Litware sales information'), 'Web Site Address' (URL: 'http://litwareinc.com/sites/Sales'), and 'Web Application' (Select a Web application: 'http://litwareinc.com/'). Buttons for 'OK' and 'Cancel' are visible at the bottom.

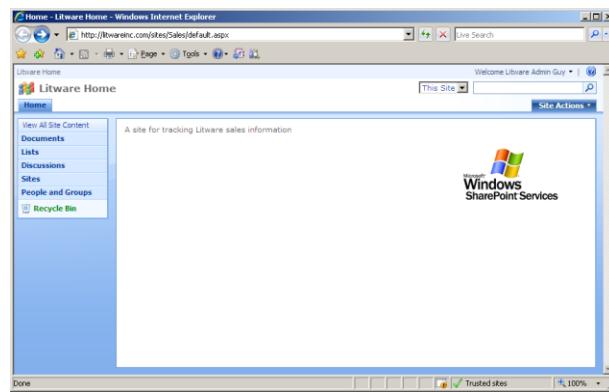
Creating New Site Collections (Part 2)

- Important site collection settings
 - Site template for top-level site
 - Site collection owner(s)



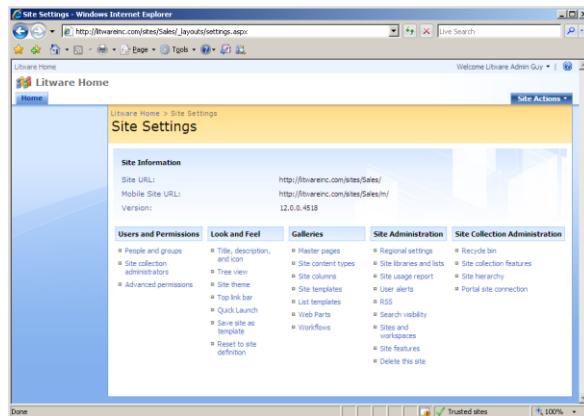
A New WSS Site

- New site collection has top-level sites
 - Site collection owner can provision site elements
 - Site collection owner can create child sites



The Site Settings Page

- Site Settings accessible via Site Actions menu
 - Provides links for site and site collection administration



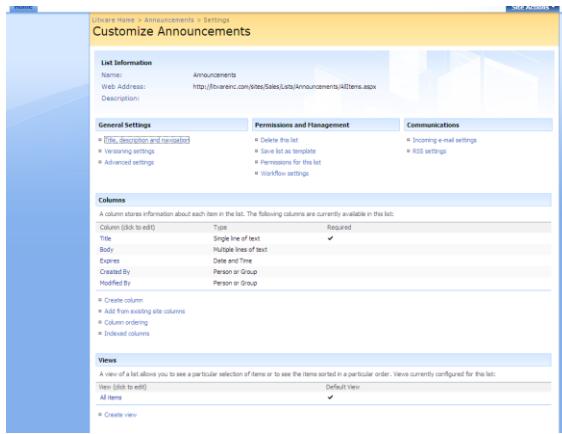
The Create Page

- Create page allows provisioning of site elements
 - WSS provides many collaboration list types out-of-box
 - You can also provision new pages and child site



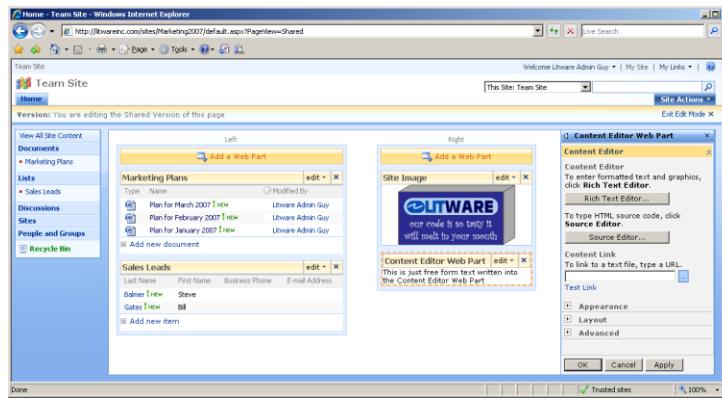
The List Settings Page

- Each List Instance provides a Settings Page
 - You can change list setting and add/remove columns



Page Customization using Web Parts

- Web Parts provide page-level customization
 - User can add Web Parts and modify their properties
 - Web Part support customization and personalization



Customization Versus Development

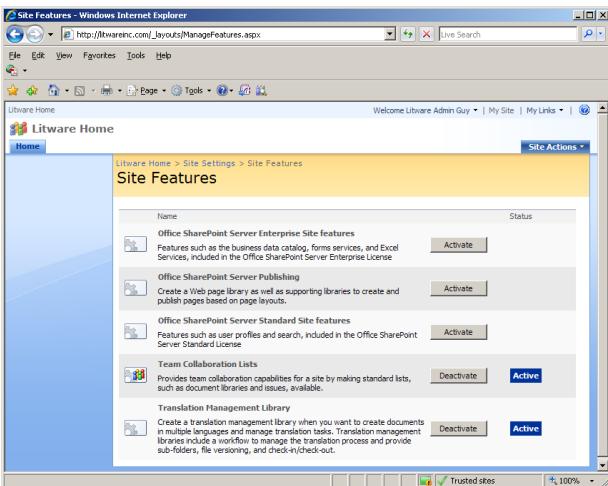
- Site Customizations
 - Changes to one particular site
 - Done using the browser or the SharePoint Designer
 - Changes recorded in content database
 - Easy to do but hard to reuse
- WSS Development
 - Creation of reusable templates/components
 - Templates/components installed on Web server
 - Development based on Visual Studio projects
 - Project source files checked into source code control
 - Projects can be moved through staging to production

What is a Feature?

- A building block for creating SharePoint solutions
 - A unit of design, implementation and deployment
- Features can contain elements
 - e.g. menu items, links, list types and list instances
 - Many other element types possible
- Features can contain event handlers
 - You can add any code which used WSS object model

User's View of Features

- Features support concept of activation/deactivation

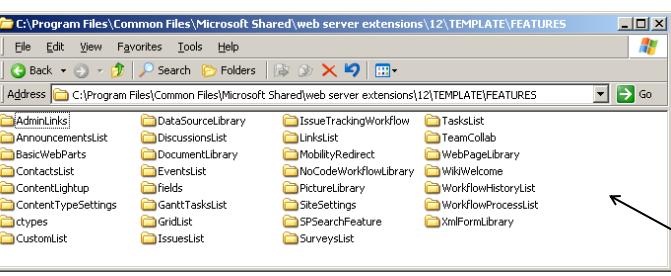


This is the site-level feature management page in a WSS farm where MOSS has been installed.

Much of the functionality of MOSS is enabled and disable by activating and deactivating features that have been developed by the MOSS team.

The Features Directory

- Functionality in WSS based on Features
 - Features are installed at farm level
 - Feature activation makes functionality available
 - WSS supports for different feature activation scopes
 (1) site (2) Site Collection (3) Web Application (4) Farm



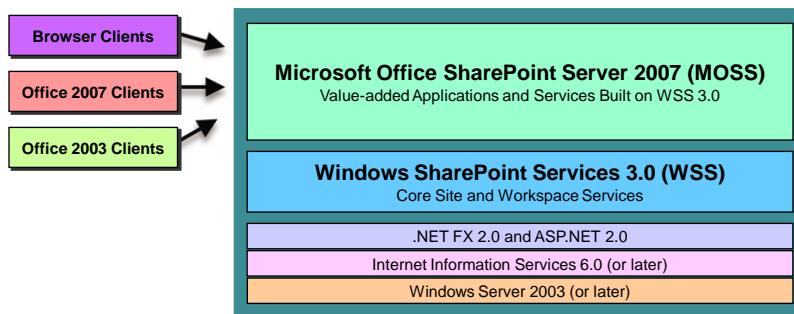
Your custom features will each need a directory created here

Customization Versus Development

- Site Customizations
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 - Done using the browser or the SharePoint Designer
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Microsoft Office SharePoint Server 2007

- Microsoft Office SharePoint Server 2007 (MOSS)
 - Components and services built on WSS 3.0

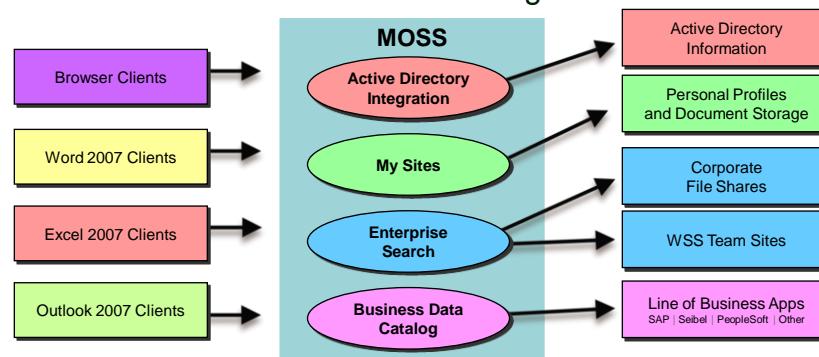


MOSS Services and Components

- What does MOSS Standard Edition provide?
 - Next-generation features of SPS 2003 (Portal)
 - Next-generation features of CMS 2002 (WCM)
- What does MOSS Enterprise Edition provide?
 - Forms Services
 - Business Data Catalog
 - Excel Services

Portal and Search

- MOSS includes next-generation of SPS features
 - User profiles, audience targeting and MySites
 - Enterprise search
 - Introduces Business Data Catalog

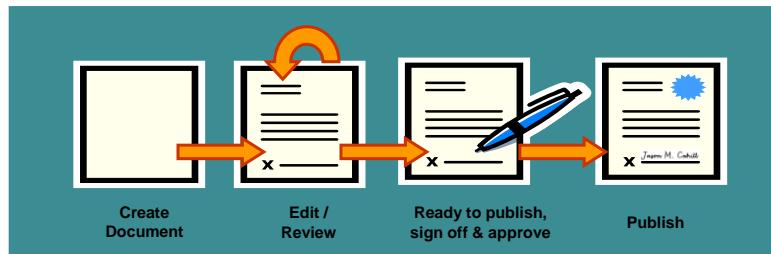


InfoPath 2007 and Forms Services

- InfoPath 2003
 - Capture business data with dynamic, XML-based forms
 - Rich data entry and validation
 - Integration with back-end LOB systems
- InfoPath 2007 and Forms Services
 - Ability to push InfoPath forms to browser-based clients
 - Integration with Office 2007 client applications

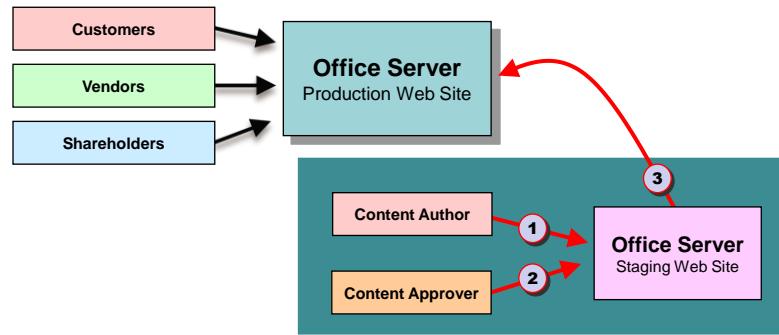
SharePoint 2007 Workflows

- WSS and MOSS provide rich workflow support
 - Support built on Windows Workflow Foundation (WF)
 - WSS provides development platform for workflows
 - MOSS provides several valuable workflows out-of-box



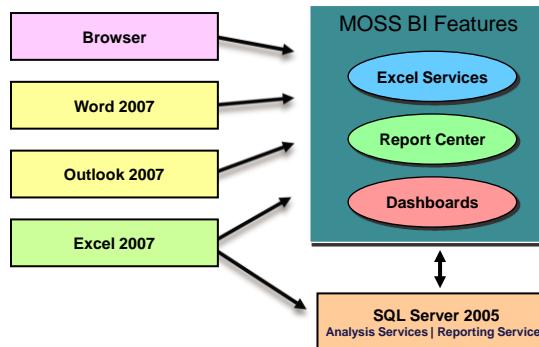
Web Content Management

- WCM features designed for public Web sites
 - Core CMS features integrated into MOSS
 - Features for site branding and customized page layouts
 - Profession publishing features for content approval



Business Intelligence

- The MOSS Vision for Business Intelligence (BI)
 - Provide business insight to all employees
 - Lead to better, faster, more relevant decisions
 - Integrate with BI features of SQL Server and Excel



Schedule of Lectures

1. Creating and Customizing WSS Sites <<< (you are here)
2. Lists, Document Libraries and Content Types
3. Introduction to SharePoint Designer 2007
4. Creating Corporate Portal Sites
5. User Profiles, MySites and Audience Targeting
6. Configuring and Extending Search
7. InfoPath 2007 and Forms Services
8. Workflow and Process Management
9. Web Content Management using Publishing Portals
10. Leveraging the Business Data Catalog
11. Publishing Spreadsheets with Excel Services
12. Creating Dashboards with Report Center

Summary

- Architectural overview of SharePoint 2007
 - Windows SharePoint Services 3.0 (WSS)
 - Microsoft Office SharePoint Server 2007 (MOSS)
- WSS as a collaboration solution
- WSS as a server-side development platform
- Overview of MOSS components and services

The slide features a decorative border at the top with a tiger illustration and a green patterned band. The title 'Lists, Document Libraries and Content Types' is centered in large white font. Below it is a subtitle 'Defining your persistent data structures' in a smaller green font.

Agenda

- Content storage enhancements in WSS 3.0
- WSS storage fundamentals
- Site columns
- Content types
- Provisioning lists and document libraries

Motivation: Content Storage in WSS

- All storage in WSS based on concept of the list
 - Everything is modeled in terms of rows and columns
 - Document library is really just a hybrid list
- WSS adds value on top of generic list concept
 - Transparent content storage in SQL Server
 - Automatic generation of user interface

Platform Storage Enhancements

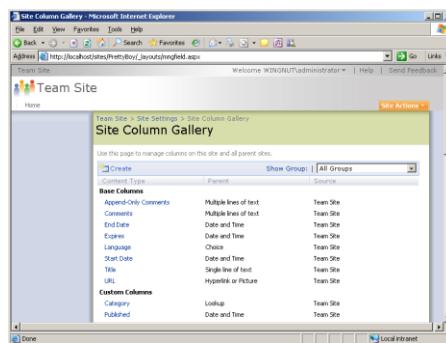
- Parity between lists and document libraries
 - Folders supported for lists as well as document libraries
 - Versioning supported for list items as well as document
 - Events supported on lists as well as document libraries
- List and Document Library Enhancements
 - Recycle bin
 - Required check-out
 - Enhanced versioning
 - New productivity-oriented built-in field types
 - Wide list support allowing 100s of columns (e.g. surveys)
 - Custom column indexing to improve performance

Issues with Managing Content

- Problems with managing content in large companies
 - Many document types identified in an organization, but there is no clear way to enforce standards
 - There's a need to create different types of documents and store them all in one central location
 - Content management application should make list of actions available to users depend on the type of content or document
- WSS provides new features to solve these problems
 - Site Columns
 - Content Types

Site Columns

- Site column is a reusable column definitions
 - Site column can be reused across multiple lists
 - Site column scoped to site in Site Column Gallery
 - Site column visible within site collection to all child sites



Using a Site Column in a List

- Site Columns can be used in List Definitions
 - Site column represents a reusable, named column definition
 - Site column used in lists, document library or content types
 - Updates to a site column can optionally be pushed out to lists, document libraries and content types where it has been used



Creating Site Columns

DEMO

Introduction to Content Types

- Foundation for content management in WSS v3
 - Reusable definition for list schema
 - Defines constraints and requirements for an item type
 - Created by users and developers
 - Reused and extended by users

Examples for Content Types

- Proposals for software projects
 - Requires client assignment
 - Requires review by legal department
- Customer presentation
 - Requires client assignment
 - Requires review by art department

Content Types

- A content type definition can include...
 - Columns to represent metadata or properties
 - A document template for creating new documents
 - Custom forms for new, edit, display (dev only)
 - Event handlers (dev only)
 - Workflows (dev only)

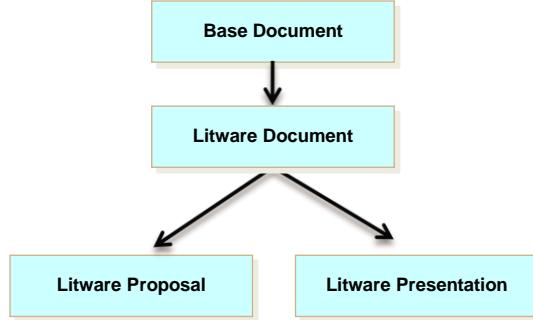
Supporting Multiple Content Types

- Lists can support multiple content types
 - Makes it possible to support heterogeneous content
 - “New button” becomes a dropdown list
 - Input and display forms change depending on content type



Inheriting Content Types

- Allows base definition reuse across multiple types
 - Core properties can be defined in base content type
 - Base content type inherited by more specific content types



Creating Content Types

DEMO

Summary

- Content storage enhancements in WSS 3.0
- WSS storage fundamentals
- Site columns
- Content types
- Provisioning lists and document libraries



**Introduction to
SharePoint Designer**

The Ultimate Power Tool for
Customizing a SharePoint site

Agenda

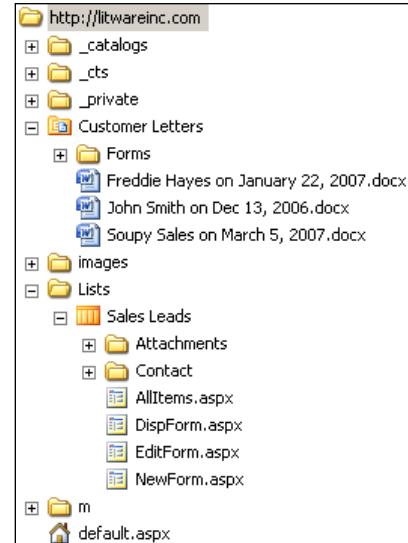
- Introduction to SharePoint Designer
- Creating and Customizing Pages
- Working with Master Pages
- Creating Pages with the DataView Web Part
- Configuring Security with SPD

SharePoint Designer (SPD)

- Next version of FrontPage 2003
 - SharePoint-specific version for solutions builders
 - SPD split apart from new Expressions suite
- Enables four fundamental usage scenarios
 - Customize SharePoint sites
 - Assemble composite applications that pull data from multiple sources
 - Build workflow applications and add application logic
 - Create page templates for WCM (MOSS only)

The Virtual File System of a Site

- Site is a virtual file system
 - made up of folders and files
 - Pages are files
 - Documents are files
 - Stored in content database
- How can you look at it?
 - SharePoint Designer (SPD)
 - Windows Explorer
- SPD uses WebDav protocol for access

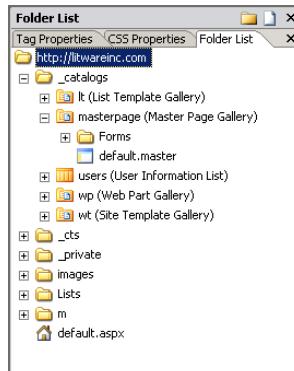


Site Pages Versus Application Pages

- Site Pages exist within virtual file system of site
 - They may or may not be ghosted
 - They support customization via Web Parts
 - They support customization via SharePoint Designer
 - They can be added dynamically within a site
 - Customized pages impact performance and security
- Application Pages are deployed once per farm
 - They do not support customization or Web Parts
 - They are parsed/compiled as classic ASP.NET pages
 - They cannot be added nor modified with SPD

Opening a Site with SPD

- Provides access to virtual file system
 - You can see and open files for editing
 - You can drag-and-drop to add new files



ASP.NET Pages

- .aspx are parsed/processed by ASP.NET runtime
 - Provide more functionality than .htm files
 - Provide support for server-side controls

The screenshot shows the Microsoft Visual Studio code editor for a file named 'Page1.aspx'. The title bar says 'Web Site Page1.aspx'. The code in the editor is:

```

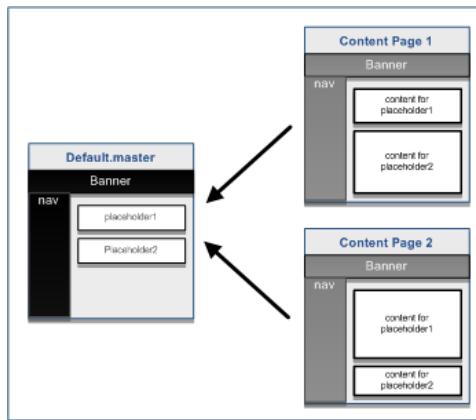
<%@ Page Language="C#" %>
<html dir="ltr">
<head runat="server">
<meta http-equiv="Content-Language" content="en-us">
<meta http-equiv="Content-Type" content="text/html; charset=utf-8">
<title>My First Page</title>
</head>
<body>
<form id="form1" runat="server">
    Hello World
</form>
</body>
</html>

```

At the bottom of the editor, there is a preview pane showing the rendered output: 'Hello World'.

ASP.NET Background: Master Pages

- ASP.NET 2.0 introduces Master Pages
 - Defines common layouts used across content pages



Master Page Defined in ASP.NET

```
<!-- default.master -->
<%@ Master %>
<html><body>
  <form id="frmMain" runat="server">
    <table width="100%">
      <tr><td> <h1>Litware Inc.</h1><hr /></td></tr>
      <tr>
        <td> <!-- Display Main Body of Page -->
          <asp:contentplaceholder id="PlaceHolderMain" runat="server" />
        </td>
      </tr>
    </table>
  </form>
</body></html>
```

```
<!-- content page linking to default.master -->
<%@ Page Language="C#" MasterPageFile="~/default.master" Title="Page 1" %>

<asp:Content ID="Main" ContentPlaceholderID="PlaceHolderMain">
  Unique page content goes here
</asp:Content>
```

Master Pages in WSS

- Application pages use application.master
 - Farm-wide master page
 - Cannot be customized on per-site basis
- Site Pages use default.master by default
 - default.master is a page template
 - default.master instance created in Master Page Gallery
 - default.master can be customized on per-site basis
 - default.master can be replaced with different template

The Master Page Gallery

- Each site has a Master Page Gallery
 - Instance of default.master automatically provisioned
 - default.master can be customized on per-site basis



Creating Pages using default.master

- Commonly-used placeholders
 - PlaceHolderMain
 - PlaceHolderPageTitle
 - PlaceHolderPageTitleInTitleArea
 - PlaceHolderAdditionalPageHead
- Less commonly used placeholder

PlaceHolderGlobalNavigation	PlaceHolderGlobalNavigationSiteMap	PlaceHolderSiteName
PlaceHolderSearchArea	PlaceHolderTopNavBar	PlaceHolderHorizontalNav
WSSDesignConsole	SPNavigation	PlaceHolderPageImage
PlaceHolderTitleLeftBorder	PlaceHolderTitleBreadcrumb	PlaceHolderMiniConsole
PlaceHolderTitleRightMargin	PlaceHolderTitleAreaSeparator	PlaceHolderLeftNavBarDataSource
PlaceHolderCalendarNavigator	PlaceHolderLeftNavBarTop	PlaceHolderLeftNavBar
PlaceHolderLeftActions	PlaceHolderNavSpacer	PlaceHolderLeftNavBarBorder
PlaceHolderBodyLeftBorder	PlaceHolderPageDescription	PlaceHolderBodyRightMargin
PlaceHolderFormDigest"	PlaceHolderUtilityContent	PlaceHolderBodyAreaClass
PlaceHolderTitleAreaClass		

Adding Web Part Zones to a Page

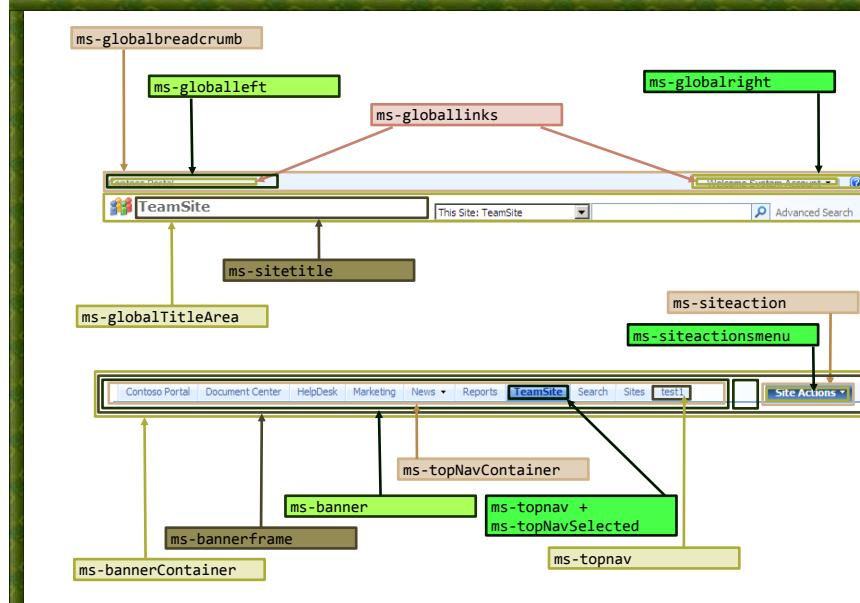
- Web Parts must go inside Web Part Zones
 - SPD allows you to add zones to pages
 - SharePoint uses zone ID to remember Web Part instances and their customization data

SharePoint's use of CSS Files

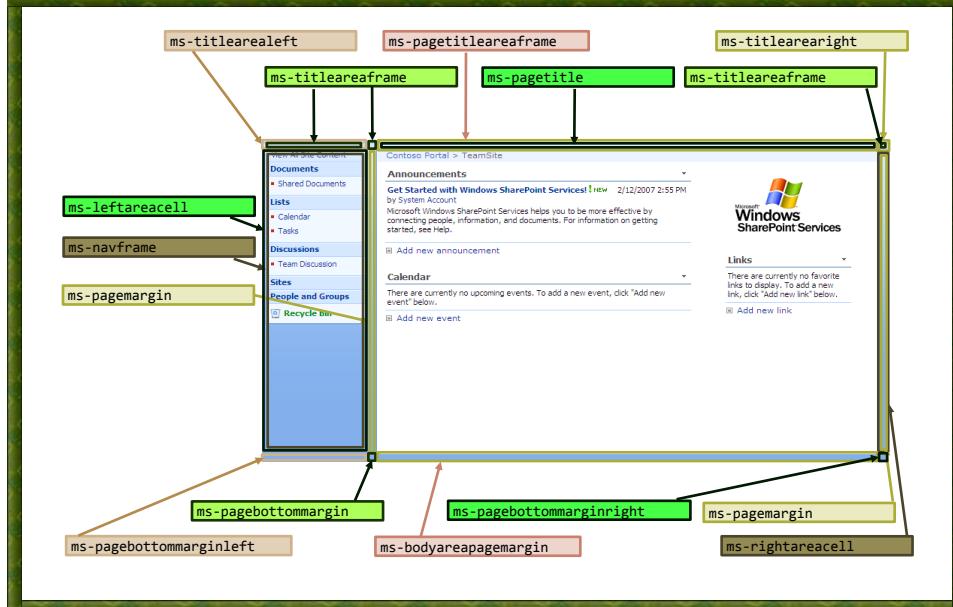
- All styles in WSS initially defined by core.css
 - Located in \TEMPLATE\AYOUTS\1033\STYLES
 - Contains over 4000 lines of CCS class definitions
 - Classes used throughout standard WSS UI elements

- Extending core.css
 - Applying WSS styles (meant for end users)
 - Applying custom CCS files (meant for developers)

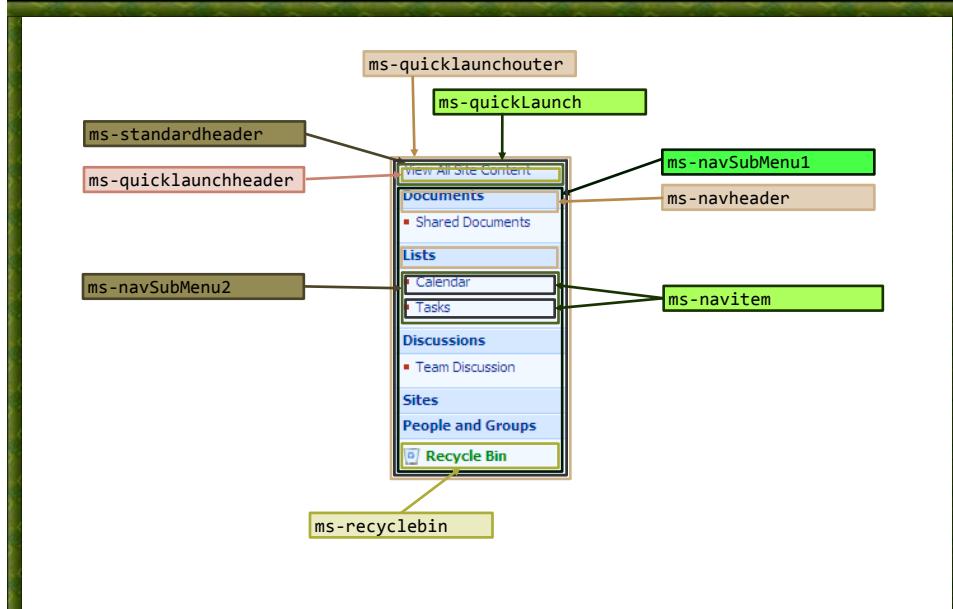
Top Navigation Areas



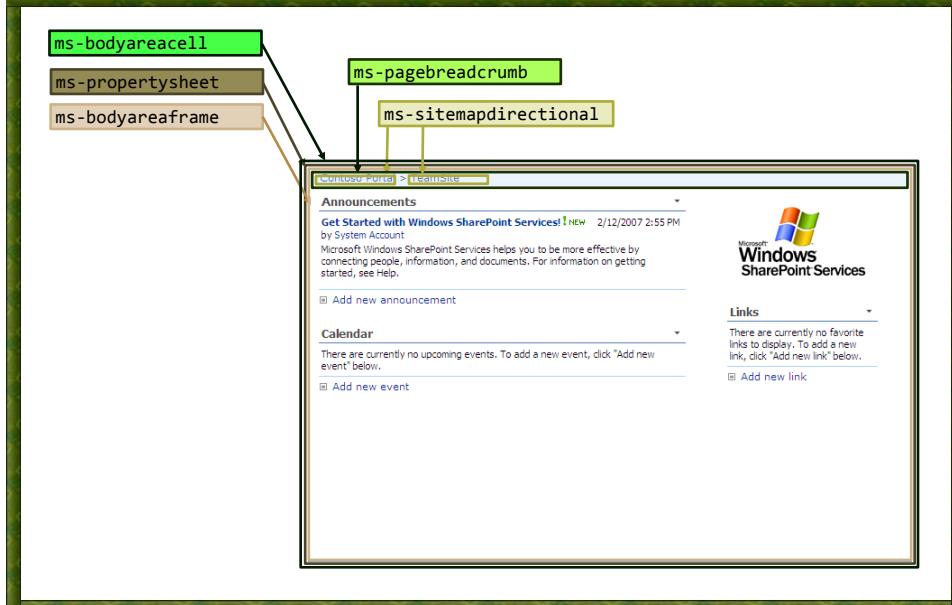
Body Structure



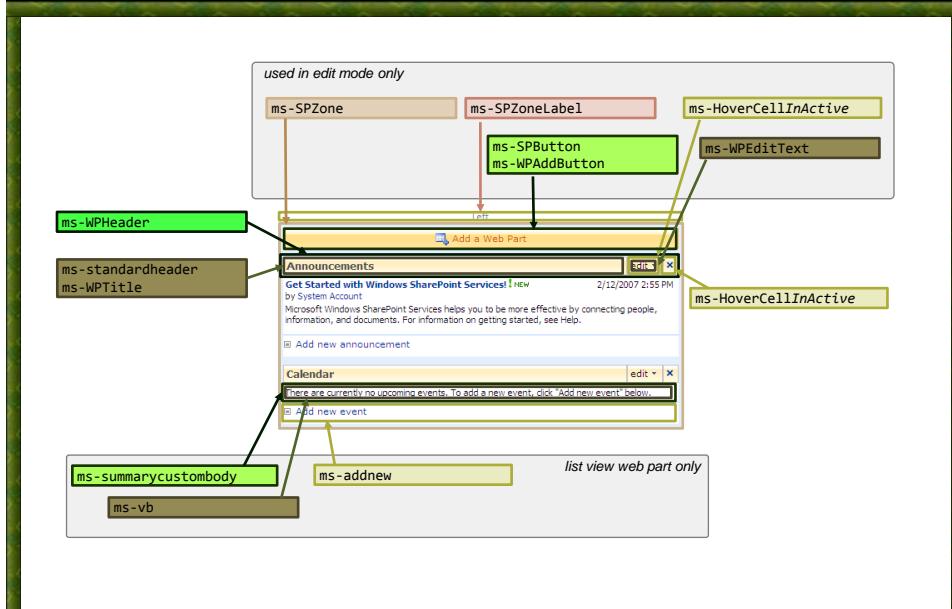
Quick Launch



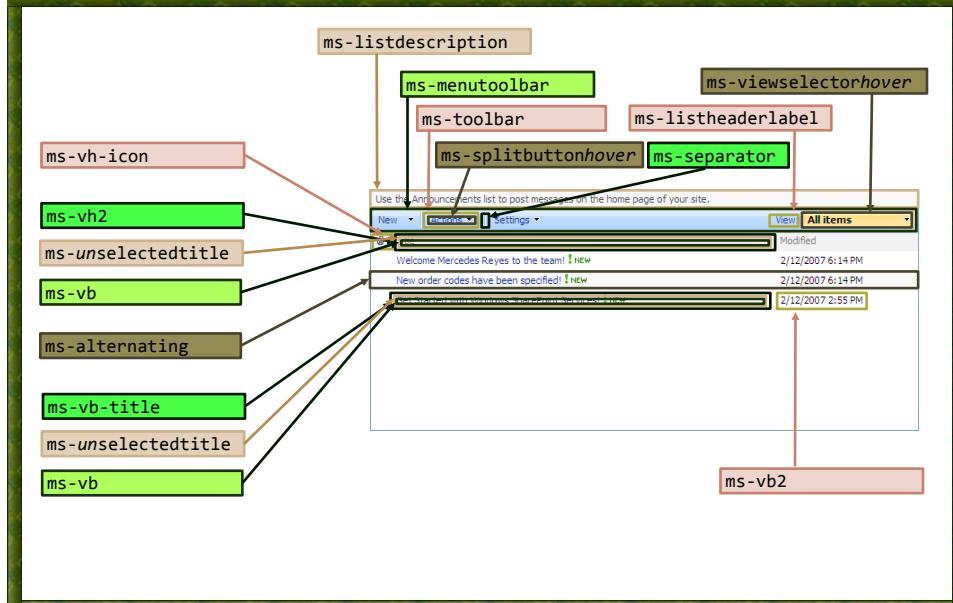
Page Body



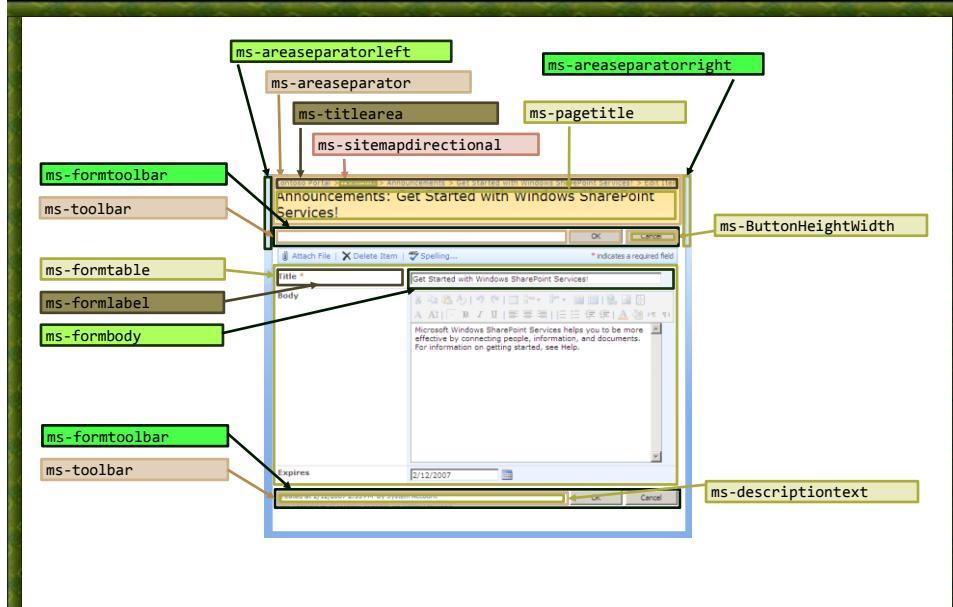
Web Parts



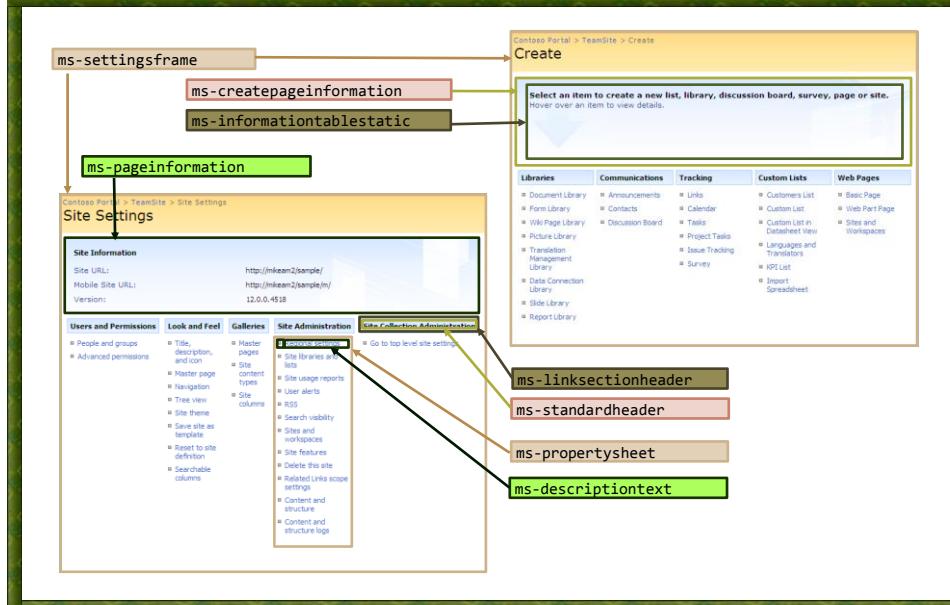
List Views



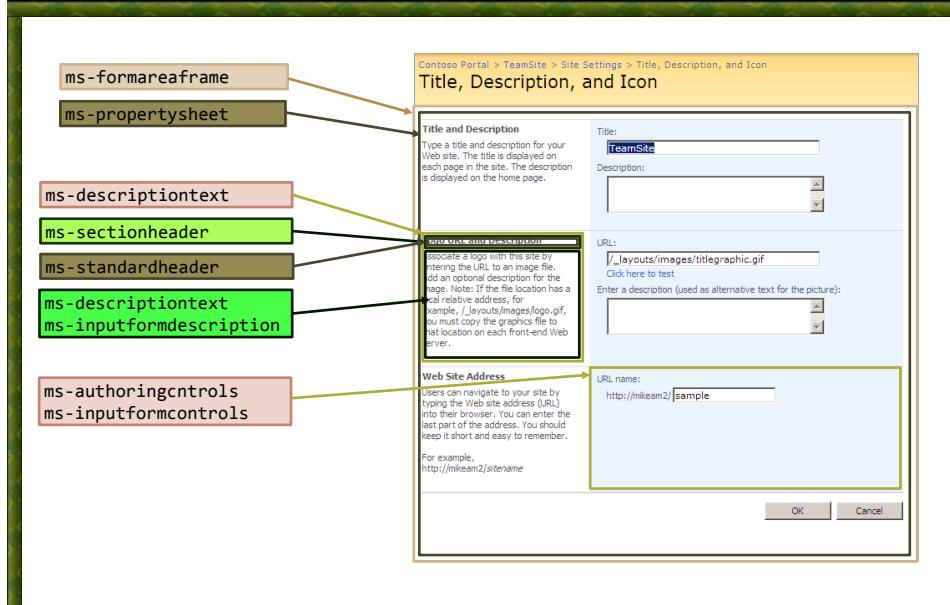
Forms



Application Pages (Landing Pages)



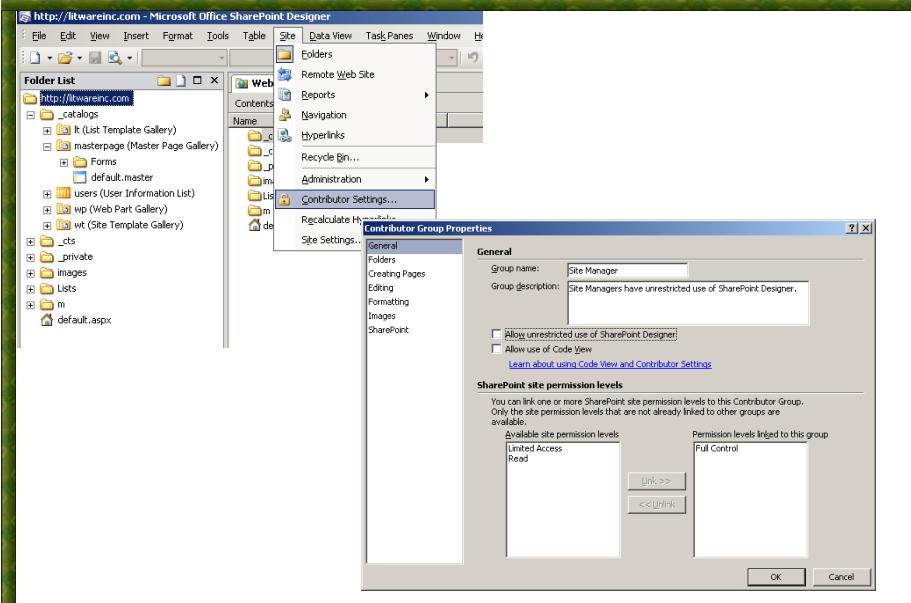
Application Pages (Form Pages)



The DataView Web Part

- DVWP connects to many types of data sources
 - SharePoint Lists
 - Databases through OLEDB (SQL Server, ORACLE, etc.)
 - Web Services and RSS Feeds
- Provides WYSIWYG environment for creating display
 - Drag-and-drop fields from data source onto view
 - Automatically format fields (currency, date, etc)
 - Use conditional formatting
 - Use Web Part connections
- SPD generates XSLT behind the scenes

Control Access to SharePoint Objects



Summary

- Introduction to SharePoint Designer
- Creating and Customizing Pages
- Working with Master Pages
- Creating Pages with the DataView Web Part
- Configuring Security with SPD



TED PATTISON™ GROUP

**Creating Corporate
Portal Sites**

Introduction to Shared Service Providers
and the Corporate Portal site template

Agenda

- History: SharePoint Portal Server 2003
- The Corporate Portal Site Template
- Managing Content
- Shared Service Provider Architecture

SharePoint Portal Server 2003 (SPS)

- SharePoint Portal Server 2003 Features
 - Areas and listings
 - User profiles and audience targeting
 - Search
 - My Sites
 - Shared Services
 - Single sign on

Problems with SPS 2003

- Problems with SharePoint Portal Server 2003
 - A strange semi-undocumented layer on top of WSS V2
 - Limited to one SPS portal site per IIS Web application
 - Portal user interface hard to customize and extend
 - Shared Services architecture hard to deploy and administrate
 - Limited and clunky integration with Content Management Server

Collaboration Portal Site Template

- Used to create SPS-like Portal sites
 - Supplies same basic features as SPS
 - Except that Areas and Listing have been eliminated



Collaboration Portal Architecture

- A collaboration portal is a hierarchy of WSS sites
 - Created as a WSS site collection
 - Created using standard Site Definitions and Features



- Architectural improvements over SPS portals
 - Not limited to one portal per IIS Web site
 - Portals extended using standard WSS V3 development

Site Content and Structure

Pages - All Documents

Type	Name	Modified	Modified By	Checked Out To	Contact	Page Layout
File	Default (default)	2/3/2007 3:17 AM	Litware Admin Guy			Welcome page with Web Part zones

Sharing Resources and Services

- Need to share resources/services across sites
 - Content crawling and index creation
 - Querying for search results
 - Allocating and managing storage for My Sites
- SPS used 1st generation shared services model
 - One portal site is selected as "Master" portal
 - Other portals use shared services of master portal
- MOSS takes a different and better approach
 - Enter the Shared Service Provider (SSP)

SSP Administration

- Functionality of SSP Broken out into Sections

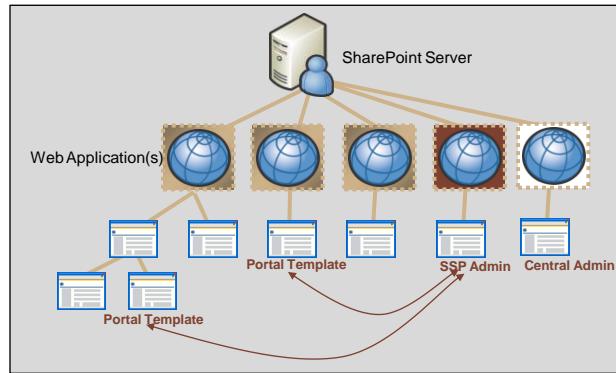
The screenshot shows the SharePoint Shared Services Administration interface. The left navigation bar includes links for Home, Back to Central Administration, Shared Services Administration, and Litware SSP. The main content area is divided into several sections:

- User Profiles and My Sites**: Includes links for User profiles and properties, Profile services policies, My Site settings, Trusted My Site host locations, Published links to Office client applications, Personalization site links, and Personalization services permissions.
- Audiences**: Includes links for Audiences.
- Excel Services Settings**: Includes links for Edit Excel Services settings, Trusted file locations, Trusted data connection libraries, Trusted data providers, and User-defined function assemblies.
- Business Data Catalog**: Includes links for Import application definition, View applications, View entities, Business Data Catalog permissions, and Edit profile page template.

A red box highlights the **Business Data Catalog** section. A green callout box with the text "MOSS Enterprise Edition Only" has an arrow pointing to the same section.

So what is a Portal, Really?

- A Site Collection that...
 - has the correct features activated
 - is consuming services from an underlying SSP
 - might or might not have been created from a portal site template



Collaboration Portal

- Collaboration Portals are
 - For Sharing Information
 - Expanded through Business Users/End Users adding and editing content
- SharePoint features to use to make it easier for your content creators:
 - Create reusable templates
 - Consistent navigation

Save Site as Template

- Custom Site Templates can be created and reused
- Site can be saved with or without content
- The following items will be included with the template:
 - Theme
 - Web Parts
 - Lists/Libraries

Save List as Template

- Helpful when same list structure is going to be used on multiple sites.
- List can be saved with or without content
- Template will include:
 - Views
 - Columns
 - Settings

Navigation

- Like security navigation is inherited
- Links may be added or removed
- The main elements are:
 - Quick Launch Bar (Current Navigation)
 - Top Link Bar (Global Navigation)
 - Breadcrumb

Summary

- History: SharePoint Portal Server 2003
- The Corporate Portal Site Template
- Managing Content
- Shared Service Provider Architecture



The slide features a tiger standing in a lush green jungle environment. In the top left corner, there is a dark blue banner with the "TED PATTISON™ GROUP" logo, which includes a stylized hat and compass icon.

User Profiles, MySites and Audience Targeting

Understanding how to leverage User Profiles
in a SharePoint Server 2007 Solution

Agenda

- User Profiles
- My Sites
- Colleagues
- Personalization
- Audience targeting

User Profiles

- User profiles track user information for social networking
 - Information used to describe users to each other
 - Information users to target information to interested parties
- MOSS maintains user profiles in SQL Server
 - Profile data can be imported from Active Directory or LDAP
 - Profile data can be extended with custom properties
 - Profiles can be extended with BDC data source
- MOSS features that utilize profiles
 - My Sites
 - Audience Targeting
 - People Search

Configuring User Profiles

Administrative control for adding, viewing, managing and importing profiles

You can see and modify user profile properties

Manage Profile Database

Use this page to manage user profiles.

Profile and Import Settings

Use these links to manage user profiles for this site and import new profiles from the Active Directory or LDAP V3 compliant directory service.

Number of user profiles:	7
Source of user set:	Current domain (litwareinc)
Import status:	Enumerating
Membership Import status:	Idle
Import time:	Started full import at 12/13/2005 4:50 PM
Import schedule (full):	Disabled
Import schedule (incremental):	Disabled
Last log entry:	No data source is defined.
Last import errors:	0

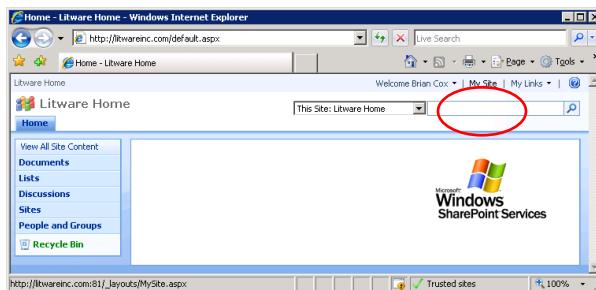
User Profile Properties

Use these links to manage the properties of user profiles.

Number of user profile properties:	42
Number of properties mapped:	18

Creating a new My Site

- Each My Sites is a site collection that...
 - is provided on demand upon first access
 - maps to a specific user profile
 - enables users to edit some aspects of their profile



Private vs. Public My Site Views

- Private
 - Organize personal information
 - Data only they are interested in
 - Personalized Web Parts
- Public
 - Share documents with Colleagues
 - User Profile/Contact Information
 - Determine who sees what information
 - Common Information between user and visitor

Updating A User Profile

Brian Cox - Windows Internet Explorer

http://ltwareinc.com:81/Person.aspx?accountname=LITWAREINC\BrianC

Welcome Brian Cox | My Site | My Links |

My Site

My Profile

Brian Cox

Solutions Developer, IT
N1003 (425) 555-0129

I love biking and designing SharePoint sites.

Details
Responsibilities: Sales, Marketing

Contact Information
Work e-mail: BrianC@ltwareinc.com

Organization Hierarchy

- Luis Bonifaz, Technology Solutions Manager
- Brian Cox, Solutions Developer**
- David Yalovsky, Solutions Developer
- Sandeep Katyal, Solutions Developer

As seen by: Everyone

In Common With You

In this space, other people who view your page will see things they have in common with you such as:

- Direct manager who both share
- Colleagues you both know
- Memberships you both share

Documents

My Site

Find all documents by Brian Cox.

Type	Name	Last Modified	Location	Properties
Image	Steve	8/22/2007 4:24 PM	Profile Pictures	[Edit]

Colleagues

General

- David Yalovsky
- Luis Bonifaz
- Sandeep Katyal

[Add Colleagues] [Manage Colleagues]

Colleagues

My Colleagues - Windows Internet Explorer

http://ltwareinc.com:81/_layouts/MyContactLinks.aspx

Welcome Brian Cox | My Site | My Links |

My Site > My Colleagues

My Colleagues

Add Colleagues | Edit Colleagues | Delete | Group By: Group Name

Name ↑	Show To	My Workgroup	Group Name
General			
David Yalovsky	Everyone	Yes	General
Luis Bonifaz	Everyone	Yes	General
Sandeep Katyal	Everyone	Yes	General

Done

Audiences

- Audience involves creating rules and then compiling
 - Rules define what user accounts should be included or excluded
 - Compilation process adds users to audience table in SQL Server

The screenshot shows the 'View Audience Properties' page for an audience named 'Sales Folks'. The audience has 3 members and was last compiled on 12/13/2005 at 5:03 PM with no errors. A single rule is listed under 'Audience Rules': 'Department Contains Sales'.

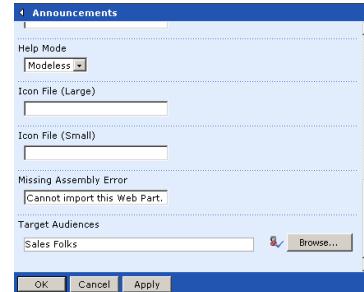
Operand	Operator	Value
Department	Contains	Sales

Audience Targeting

- Content can be targeted at an audience
 - The following groups can be targeted:
 - Distribution/Security Groups
 - SharePoint Groups
 - Global Audiences
 - Great way to get content to interested parties while filtering noise from those that are not interested
 - It is not Security!

Audience Targeting (Cont.)

- The following content can be targeted:
 - Navigational links
 - Web Parts
 - Documents in a library
 - Items in a List



Personalization Sites

- Site template that allows for targeting of information
- Utilizes Current User Filter Web Part
- Link to site can appear in My Site navigation bar
 - Administrator can force link in navigation bar
 - User can “Pin” the site

Summary

- User Profiles
- My Sites
- Colleagues
- Personalization
- Audience targeting



TED PATTISON™ GROUP

Configuring and Extending Search

Making Your Content Searchable

Agenda

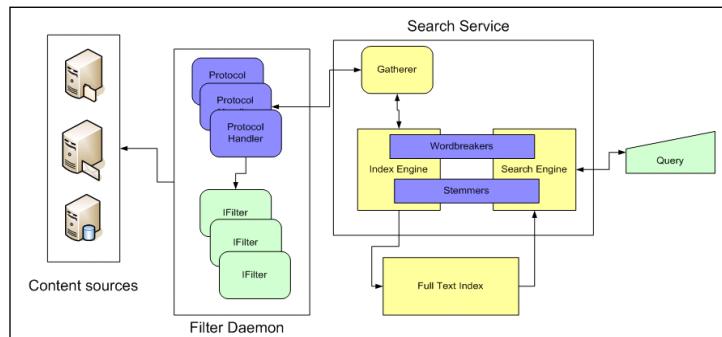
- MOSS Search Architecture
- Configuring content sources
- Creating search scopes
- Using Search Center
- Creating custom search pages

WSS Verses Office Server Search

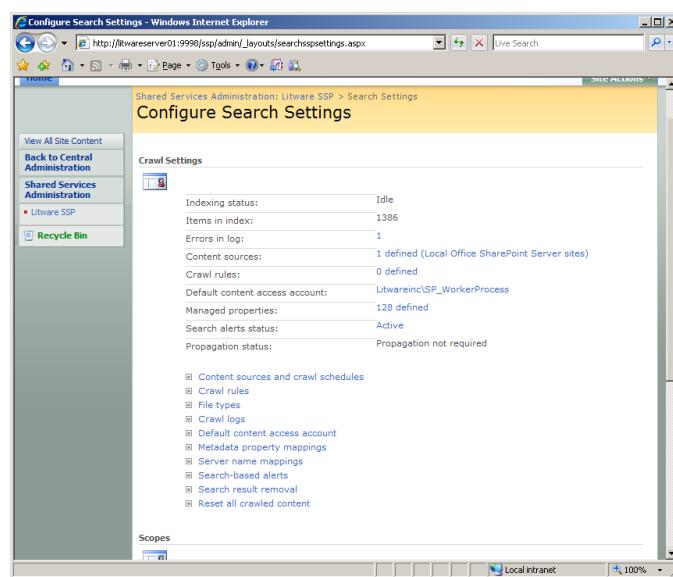
- Windows SharePoint Services (WSS 3.0)
 - WSS search is a subset of MOSS search feature
 - Eases transition from WSS to MOSS
 - Indexing and query always on the same machine
 - Search over site content only
- Microsoft Office SharePoint Server (MOSS)
 - Adds new search functionality over base WSS search
 - Indexer and query can be separated on different machines
 - Multiple catalog supported per indexer and query servers
 - Aggregated content - local + external

Search Architecture and Terminology

- Key pieces to search infrastructure
 - The Gatherer
 - Content sources, protocol handlers and IFilters
 - Index Files



Configuring Search



Search Scopes

- Created at one of two different levels
 - Can be created within content of an SSP
 - Can be created within context of a site collection

The screenshot shows the 'View Scopes' page under 'Shared Services Administration'. It lists three shared scopes: 'People' (Ready, 84 items), 'All Sites' (Ready, 1280 items), and 'My New Search Scope (SSP Level)' (Empty - Add rules, empty). Below these are five site collection-level scopes: 'http://litwareinc.com/sites/LitwarePublishingSite (0)', 'http://litwareinc.com:81/ (0)', 'http://litwareinc.com:81/personal/brianc (0)', 'http://litwareinc.com:81/personal/administrator (0)', and 'http://litwareinc.com/sites/LitwarePortalSite (0)'. Navigation links include 'View All Site Content', 'Back to Central Administration', 'Shared Services Administration', 'Litware SSP', and 'Recycle Bin'.

Adding Rules to a Search Scope

- Each search scope has one or more rules
 - Rules define criteria to include/exclude content

The dialog box is titled 'Add Scope Rule' under 'Scope Properties and Rules'. It has several sections: 'Scope Rule Type' (radio buttons for 'Web Address', 'Property Query (Author = John Doe)', 'Content Source', and 'All Content'), 'Property Query' (instructions to enter a property restriction as a comparison of property to a value, with an example 'Author = Brian Cox'), 'Behavior' (radio buttons for 'Include', 'Require', and 'Exclude'), and 'OK' and 'Cancel' buttons at the bottom.

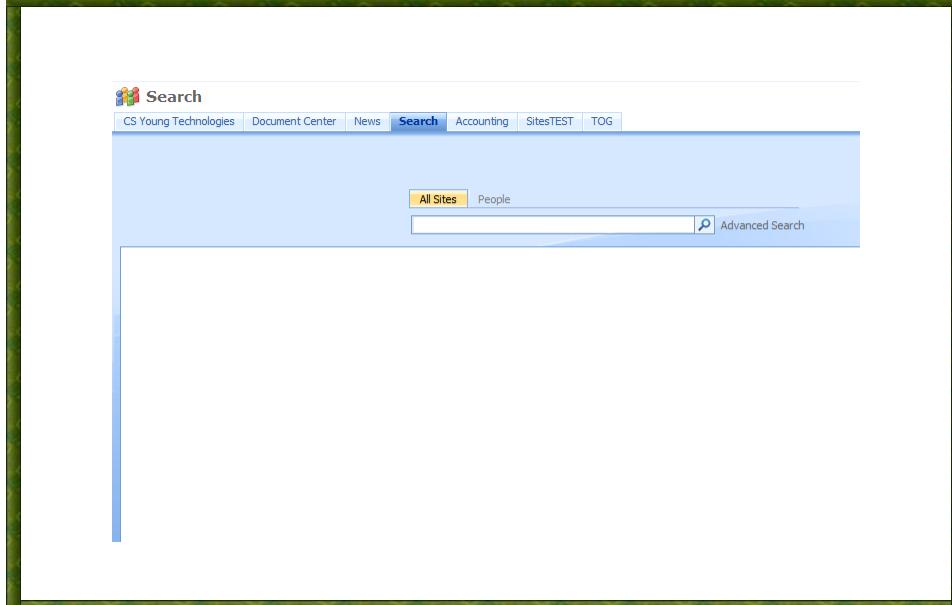
People Search

The screenshot shows a search interface titled "Search" with a navigation bar for "Pet Palace", "Search", "Reports", "Sites", "Departments", "Pet Clothes", "Pet Food", "Pet Toys", "Boston", "Dataview", and "Search". The search term "tyson" is entered in the search bar. The results are displayed under "Exact Match" and "My Colleagues". Under "Exact Match", there is one result: "Tyson Young" with the description "Big Dog - Sleeping -". Under "My Colleagues", there is also one result: "Tyson Young" with the same description. There are links to "View by Relevance", "Alert Me", and "RSS".

Search Center

- Customize and extend Search Center
 - Modify query parameters
 - Add tabs
 - Modify XSLT, CSS on results
 - Custom search Web Parts

Search Center and Search Pages



Search Web Parts

- 9 OOB web parts including
 - Search Box
 - Core Results
 - High Confidence
 - Statistics
 - Pagination
 - Action Links
 - Matching Keywords and Best Bets
 - Search Summary (Did you mean?)
 - Advanced Search

Search Features

- Duplicate Collapsing
- Synonyms
- Hit Highlighting
- Did You Mean?

Possible customizations

- Customize Thesaurus
 - Located at drive:\Program Files\Microsoft Office Servers\12.0\Data\Config
 - Replacement or Expansion sets
 - Eg. Replace “Weirdo” with “Eccentric”
 - Substitution weights and stemming is supported
- Noise Words

Keyword/Best bets

- Highly under utilized
- Keyword is what your user is searching for
 - Can assign a definition to display
- Best bet is what you think they want
 - Links to any web url
- Administered by site collection admin

Search Reporting

- Available from the SSP
- Two types of reports
 - Search queries
 - Search results
- Great feature for understanding your environment

Agenda

- MOSS Search Architecture
- Configuring content sources
- Creating search scopes
- Using Search Center
- Creating custom search pages



**InfoPath 2007 and
Forms Services**

Capturing User Input through Electronic Forms

Agenda

- Background in InfoPath 2003
- The InfoPath Forms Designer
- Integration with WSS forms libraries
- Forms Services Architecture
- Designing Browser-Enabled forms with InfoPath 2007

The Role of InfoPath in Office 2003

- InfoPath was introduced with Office 2003
 - Platform for next generation of electronic forms
- InfoPath Forms
 - Captures XML data
 - Based on XML Schema
 - Requires little/no code

The screenshot shows the Microsoft Office InfoPath 2003 application window titled 'Form1 - Microsoft Office InfoPath 2003'. The form is titled 'Generico Expense Report Form'. It contains several sections: 'Title' (Name: Ioannis Xylaras, Submitted Date: [empty]), 'Total' (\$0.00), 'Status' (Created, Manager Approved, Accounting Approved), and a 'Line Items' section. The 'Line Items' section includes fields for Type, Description, Line Item (\$0.00), Date, Justification, From, To, Daily Rate (\$0.00), Days (0), Receipt Required, Have Receipt, and Repaid by Company. At the bottom are 'Insert New Line Item' and 'Submit' buttons.

Challenges with InfoPath 2003

- Companies like InfoPath 2003, but...
 - They want better support for offline scenarios
 - They want greater reach (browser-based clients)
 - They want a better code-behind model
- InfoPath 2007 introduces several improvements
 - Improved offline support through wizard
 - Forms Services extended InfoPath forms to browser
 - IT People Responsible for the Deployment
 - Code-behind using Visual Studio Tools Applications

Security – Trust Levels



Restricted

- Deployed via email, no auto-updates
- No data connections, no managed code
- Not applicable for browser forms



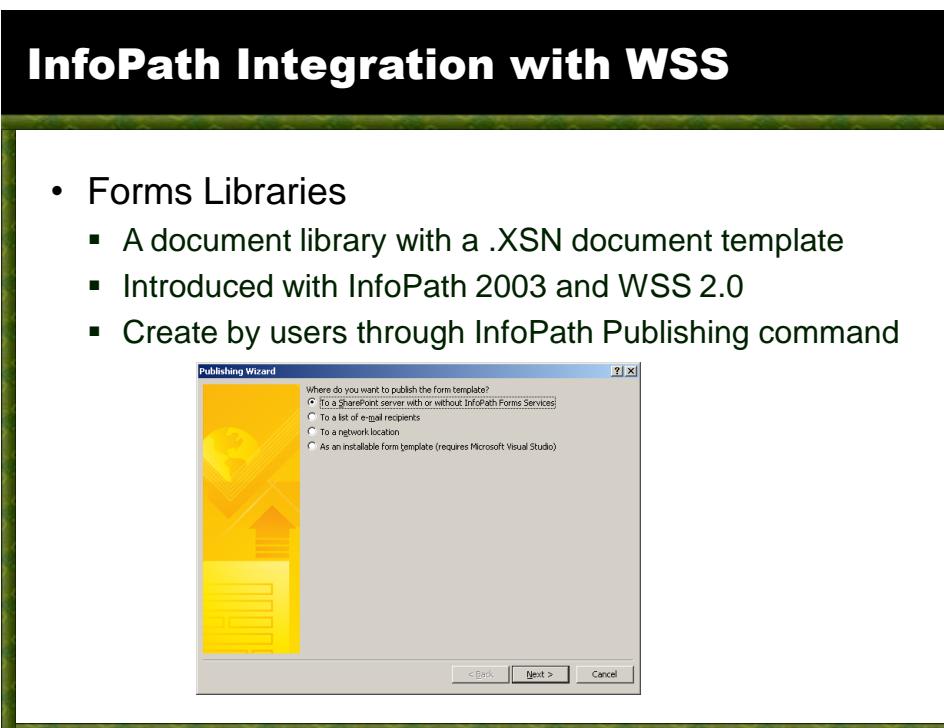
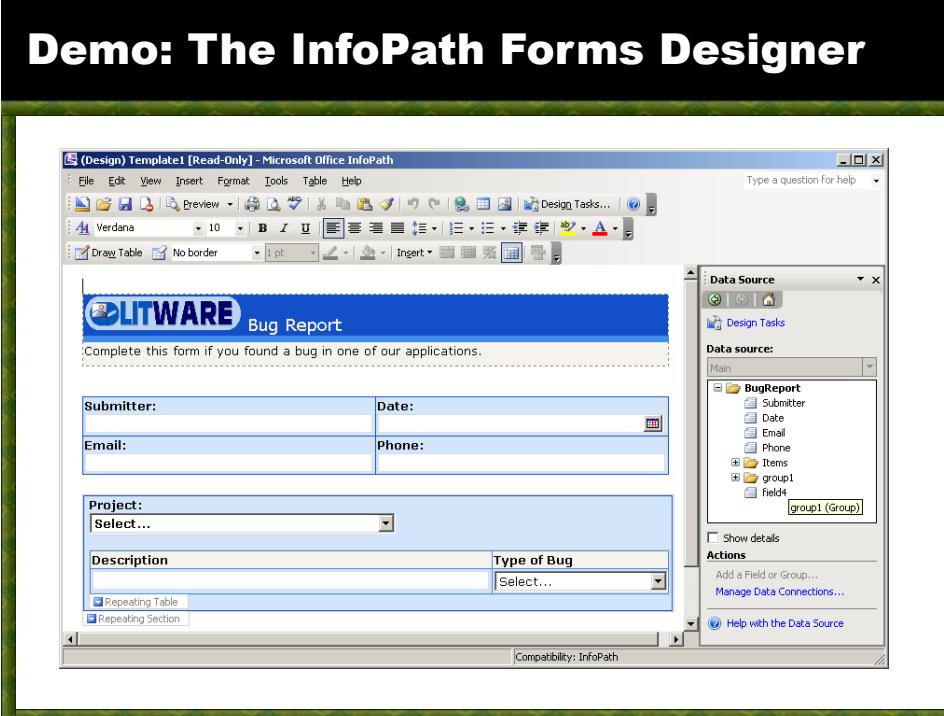
Domain

- Deployed to SharePoint library, browser forms
- Connect to own server only, no code for browser forms
- Use trusted Data Connection Library for cross-domain



Full Trust

- Installed, Digitally Signed, or .NET Code Group
- Must be admin-deployed for browser forms
- Connect to any server, managed code in browser forms



Template Importing

```
graph LR; A[XYZ Document] --> B[Your Importer]; B --> C[XSN Folder<br>(XSF, etc)]; C --> D[InfoPath Designer]
```

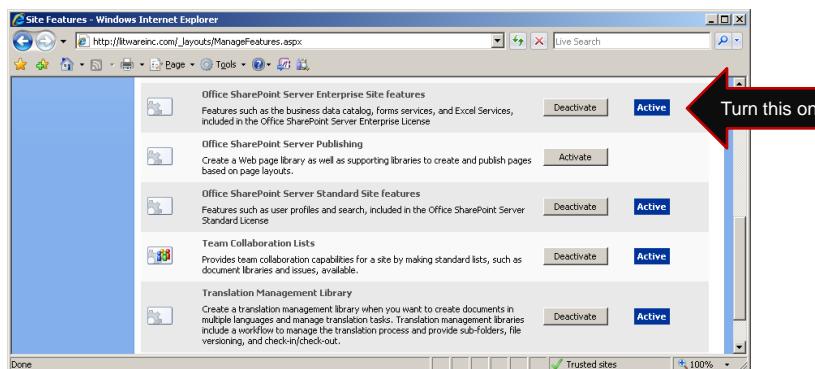
- Built-in support for Word, Excel documents
- Use in combination with the Design Checker

Browser-based Forms

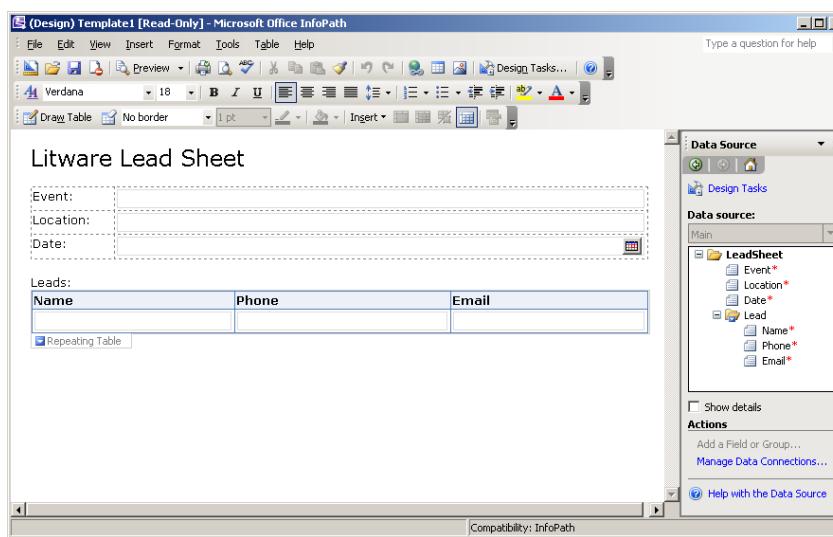
- Forms Services provides HTML rendering
 - Forms must be designed using InfoPath 2007
 - Forms must be designed to be browser compatible

Sites and Browser-based Publishing

- Activate MOSS Standard and Enterprise features
 - Should be done for target site and site collection



Designing a Browser-based Form



Publishing a Browser-based Form

- Saved up to WSS Forms Library
 - MOSS uses document template .xsn file for rendering



Forms Library Settings

- Important Forms Library settings
 - template.xsn is the editable InfoPath form template
 - Open browser-enabled documents
The default is to open with InfoPath rich client if possible

Litware Home > Leadsheets > Settings > Advanced Settings

Form Library Advanced Settings: Leadsheets

Content Types Specify whether to allow the management of content types on this form library. Each content type will appear on the new button and can have a unique set of columns, workflows and other behaviors.	Allow management of content types? <input checked="" type="radio"/> Yes <input type="radio"/> No
Document Template Type the address of a template to use as the basis for all new files created in this document library. When multiple content types are enabled, this setting is managed on a per content type basis. Learn how to set up a template for a library.	Template URL: <input type="text" value="Leadsheets/Forms/template.xsn"/> (Edit Template)
Browser-enabled Documents Specify how to display documents that are enabled for opening both in a browser and a client application. If the client application is unavailable, these documents will always be displayed as Web pages in the browser.	Opening browser-enabled documents <input checked="" type="radio"/> Open in the client application <input type="radio"/> Display as a Web page

Browser-based Rendering

- Browser-based rendering for wide reach
 - Based on DHTML and JavaScript
 - Tested with IE, FireFox, Netscape & hand-held devices

Litware Lead Sheet

Event: Tech Ed Europe 2006

Location: Barcelona

Date: 11/6/2006

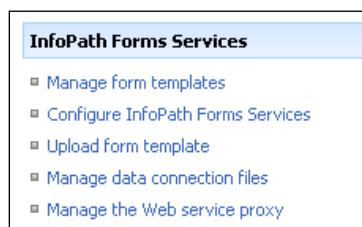
Leads:

Name	Phone	Email
Bob Hinkle	(123)456-6789	a@b.com
Fred Dinkle	(987)654-3210	c@d.com
Cindy Sprinkle	(866)248-1357	e@f.com

Insert item

Forms Services Administration

- Part of WSS Central Administration
 - Used to upload/manage forms and data connections



Application Management

InfoPath Forms Services

Manage the Web service proxy

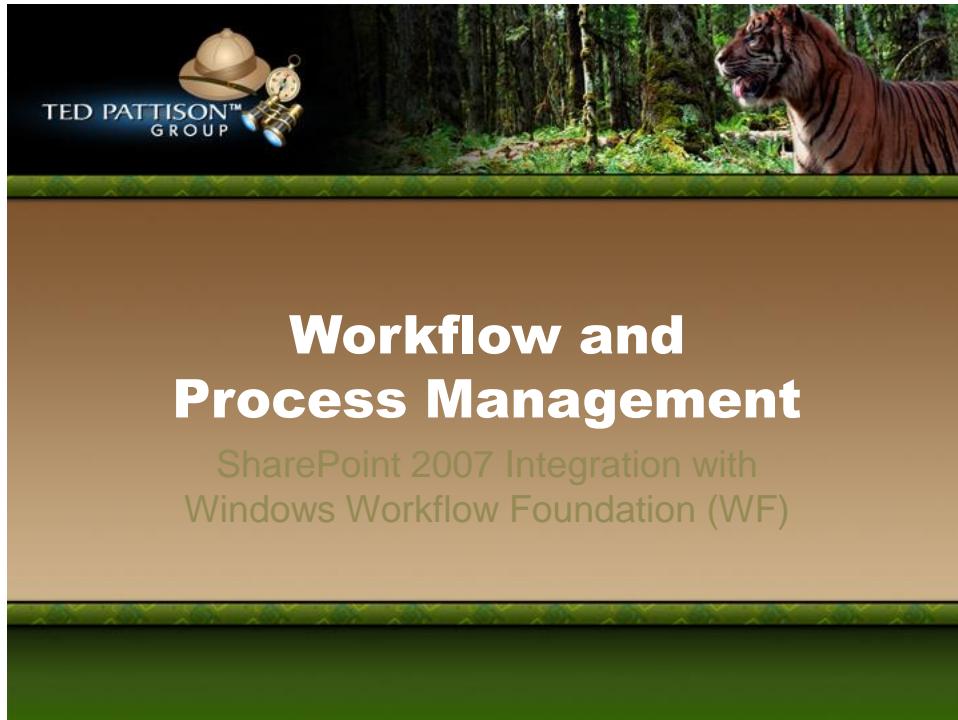
Administrator Uploaded Form Templates

- Some forms must be uploaded by administrator
 - Forms with code and/or forms with data connections
 - Benefit: deployed at farm scope not at site scope

Type	Name	Version	Modified	Category	Status	Workflow Enabled
	ReviewAdministratorForm.ram	1.0.0.50	2/21/2007	Workflow	Ready	Yes
	ReviewTaskForm.ram	1.0.0.34	2/21/2007	Workflow	Ready	Yes
	CollectSignatures_Sign_1033.ram	12.0.0.1	2/22/2007	Workflow	Ready	Yes
	Expiration_Complete_1033.ram	12.0.0.1	2/22/2007	Workflow	Ready	Yes
	IR_CDR_ImportRsp_1033.ram	12.0.0.1	2/22/2007	Workflow	Ready	Yes
	IR_Reviewing_Assoc_1033.ram	12.0.0.1	2/22/2007	Workflow	Ready	Yes
	IR_Reviewing_Inv_1033.ram	12.0.0.1	2/22/2007	Workflow	Ready	Yes
	IR_Reviewing_Modify_1033.ram	12.0.0.1	2/22/2007	Workflow	Ready	Yes
	IR_Reviewing_Pending_1033.ram	12.0.0.1	2/22/2007	Workflow	Ready	Yes
	IR_Reviewing_PendingTask_1033.ram	12.0.0.1	2/22/2007	Workflow	Ready	Yes
	IR_Console_1033.ram	12.0.0.1	2/22/2007	Workflow	Ready	Yes
	IR_Inv_1033.ram	12.0.0.1	2/22/2007	Workflow	Ready	Yes

Summary

- Background in InfoPath 2003
- The InfoPath Forms Designer
- Integration with WSS forms libraries
- Forms Services Architecture
- Designing Browser-Enabled forms with InfoPath 2007



The slide features a tiger standing in a lush green jungle environment. In the top left corner, there is a dark blue banner with the "TED PATTISON™ GROUP" logo, which includes a stylized hat and compass icon.

Workflow and Process Management

SharePoint 2007 Integration with
Windows Workflow Foundation (WF)

Agenda

- Windows Workflow Foundation (WF)
- Understanding Workflow Templates
- The MOSS Workflow Templates
- Creating Workflow Associations
- Starting and monitoring workflow instances
- Creating Workflows with the SharePoint Designer

Process Management

Consultant
enters
timesheet



Account
Manager
Approves



Accounts
Receivable
bills client

Windows Workflow Foundation (WF)

- What is the Windows Workflow Foundation?
 - Development platform for building reactive programs
 - Set of development tools integrated with Visual Studio
 - Runtime components that ship with .NET FX 3.0
- Windows Workflow Foundation concepts
 - WF program
 - Workflow instance
 - Activities

Out-of-the-Box Workflows

	Description
Approval	Routes the content for approval. You can setup this workflow as serial or parallel plus preset the approvers.
Collect Feedback	Routes the content for feedback. When the workflow completes all the feedback is sent to the originator of the workflow.
Collect Signatures	Rather than just sending content for approval, this workflow requires digital signatures on the content. This workflow requires the Office 2007 client and can only be initiated from a client application.
Disposition Approval	This workflow works with the records management capabilities of SharePoint. It allows you to manage document expiration and retention.
Group Approval (available in some languages)	To support hierarchical approvals, this workflow presents a hierarchical control to select the approvers and stamping rather than signatures for approval.
Translation Management	This workflow is used with the Web content management features of SharePoint to support a translation workflow for content to multiple languages.
Three-state (Included in Windows SharePoint Services; works with Issue Tracking list or any list with a Choice column with 3 values)	This workflow ships with Windows SharePoint Services and is a simple issue tracking workflow that shows status of active and resolved issues.

Creating a Workflow Association

Add a Workflow: Proposals

Use this page to set up a workflow for this document library.

Workflow Select a workflow to add to this document library. If the workflow template you want does not appear, contact your administrator to get it added to your site collection or workspace.	Select a workflow template: Description: <input type="button" value="Collect Feedback"/> <input type="button" value="Collect Signatures"/> <input type="button" value="Disposition Approval"/> <input type="button" value="Three-state"/>
Name Type a name for this workflow. The name will be used to identify this workflow to users of this document library.	Type a unique name for this workflow: <input type="text" value="My First Workflow Association"/>
Task List Select a task list to use with this workflow. You can select an existing task list or request that a new task list be created.	Select a task list: Description: <input type="button" value="Tasks"/>
History List Select a history list to use with this workflow. You can select an existing history list or request that a new history list be created.	Select a history list: Description: <input type="button" value="Workflow History"/>
Start Options Specify how this workflow can be started.	<input checked="" type="checkbox"/> Allow this workflow to be manually started by an authenticated user with Edit Items Permissions. <input type="checkbox"/> Require Manage Lists Permissions to start the workflow. <input type="checkbox"/> Start this workflow to approve publishing a major version of an item. <input type="checkbox"/> Start this workflow when a new item is created. <input type="checkbox"/> Start this workflow when an item is changed.

Starting a Workflow Instance

- Users can manually start workflows

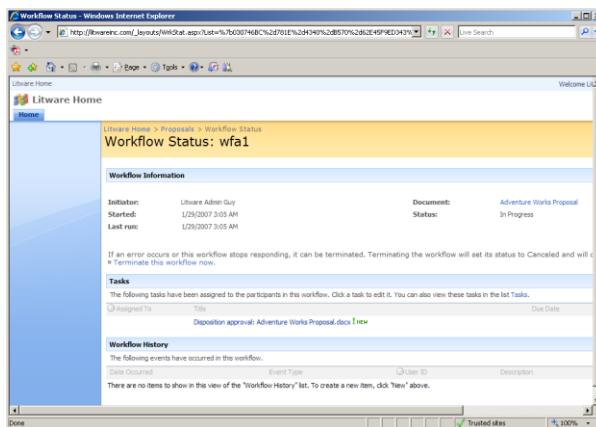
The screenshot shows two windows side-by-side. On the left is a 'Proposals' document library list view. An arrow points from the 'Workflow' option in the context menu of the 'Wingtip Toys Proposal' item to the right window. The right window is a 'Workflow' details page for the same proposal, titled 'Workflows: Wingtip Toys Proposal'. It displays workflow steps like 'Approve', 'Collect Feedback', and 'eFile', and a table for 'Running Workflows' which is currently empty.

Automatically Start a Workflow

- Most of the time to ease the burden on the users workflows are automatically started.
- With SharePoint there are two options:
 - Item is Created
 - Item is Changed

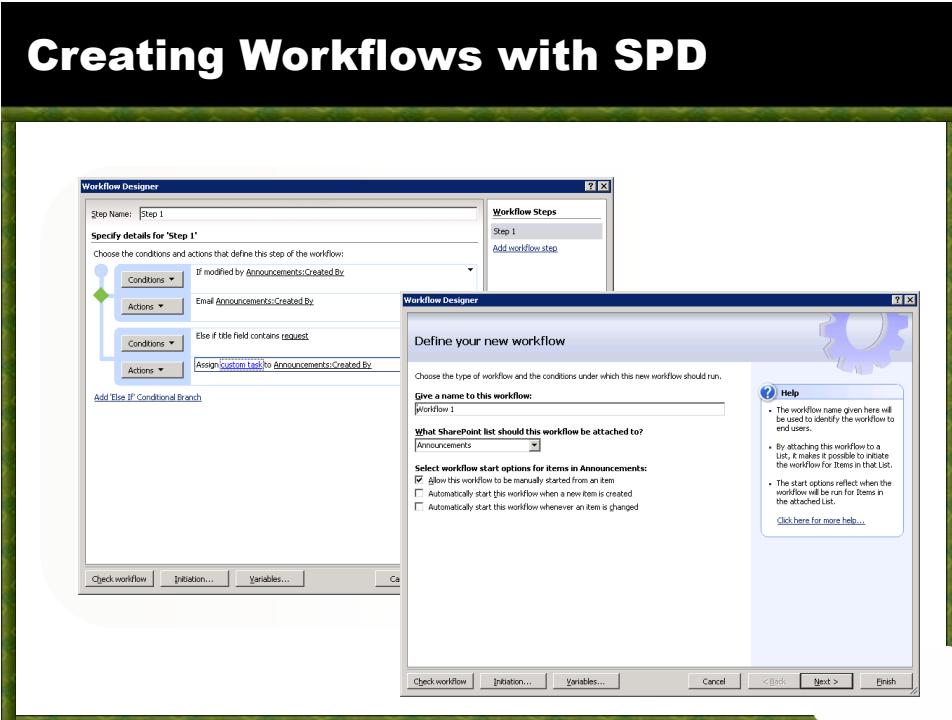
The Workflow Status Page

- Any user can see the status of workflow instance



Workflows and SharePoint Designer

- SPD supports creating workflow associations
 - SPD provides Workflow Designer
 - Offer “no code” approach to adding custom workflows
- Advantages over development with Visual Studio
 - Much lower learning curve
 - Workflow created by user directly in live site
- Disadvantages compared to development
 - Not as much flexibility
 - Very limited reuse



Editing SharePoint Designer Workflows

- SharePoint Designer Workflows can only be edited with SharePoint Designer

A black arrow points from the text 'SharePoint Designer Workflows can only be edited with SharePoint Designer' towards the 'Web Site' tab in the SharePoint Designer ribbon. The 'Web Site' tab is highlighted, indicating it is the active workspace.

- Workflows may be deleted, paused, or resumed through the browser
- Workflow reports are available in browser
 - Activity and Duration
 - Cancellation and Error

SharePoint Designer or Visual Studio .NET?

	SharePoint Designer	Visual Studio
Supported WF Hosts	WSS/SharePoint Server	WSS/SharePoint Server/Others
Development Model	Wizard-based	Graphical Designer
Types of Workflows Supported	Sequential	Sequential and State
Workflow Type	Markup only; markup file, rules and supporting files are not compiled	Markup with code behind compiled into an assembly
Code Behind	No	Yes
Activities	Built-in and use custom	Built-in, use and develop custom
Forms Technology	Auto-generated, customizable ASP.NET Forms	Design forms in any technology including ASP.NET or Microsoft Office InfoPath
Association	Associated automatically with a single list at design time. No other associations possible.	Can be associated with multiple content types, lists, and document libraries
Initiation	Initiation forms are supported	Initiation forms are supported
Modification	Cannot modify workflow using modification forms	Can modify workflows
Tasks	Supports custom task forms	Supports custom task forms
Deployment	Constructed in live environment	Must build package and deploy workflow using SharePoint feature technology
Debugging	No Debugging	Visual Studio Debugging



Summary

- Windows Workflow Foundation (WF)
- Understanding Workflow Templates
- The MOSS Workflow Templates
- Creating Workflow Associations
- Starting and monitoring workflow instances
- Creating Workflows with the SharePoint Designer



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Web Content Management using Publishing Portals

Creating and managing content on
Internet-facing sites with SharePoint Server 2007

Agenda

- The Publishing Site template
- The MOSS Approval Process
- Creating custom page layouts
- Optimization through Caching Profiles
- Content Translation using Variations
- Converting Office documents
- Paths and Deployment

MOSS WCM Features

- Branding
 - Define the look, feel, and navigation of the site
- Decentralized Authoring
 - Allow users to easily create and contribute content
- Workflow/Scheduling
 - Supervisors approve content before it is posted.
- Data Integrity
 - Enforce validation of content structure for publishing
 - Ensure content published/removed in timely manner

MOSS WCM Design Goals

- Integrate CMS and SharePoint
 - Remove forced choice “CMS vs. SharePoint”
 - Move towards integrated ECM solution
 - Add Internet readiness to Sharepoint
- Make creation of dynamic, produced websites dramatically faster and easier
 - Lower amount of costly custom code
 - Provide great OOB experience
 - Improve user experience across all features

Creating A Publishing Portal

- Creating with WSS Central Administration
 - Create a site collection based on Publishing Portal

The screenshot shows the 'Select a template' dialog box in Microsoft Internet Explorer. The 'Publishing Portal' template is selected. An arrow points from this dialog to a screenshot of the SharePoint site collection 'AdventureWorks' in a browser window. The site features a banner image of people at work and a navigation bar with links like 'About Us', 'Case Studies', 'Job Postings', and 'Press Releases'. The right side of the screen displays the 'Site Actions' menu, which includes options such as 'Edit Page', 'Create Page', 'Create Site', 'Show Page Content Toolbar', 'View All Site Content', 'View Reports', 'Site Settings', and 'Manage Content and Structure'.

Site Hierarchy

- In the past a lot of confusion
 - Windows SharePoint Services 2003 → sites
 - SharePoint Portal Server 2003 → areas
 - Content Management Server 2002 → channels
- In SharePoint 2007 everything is a site

The screenshot shows a SharePoint 2007 site titled 'Litware Internet Site'. The 'Site Actions' menu is open, with the 'Create Site' option highlighted. A red box highlights the 'Create Site' option in the menu. Another red box highlights the top navigation bar with links for 'About Us', 'Case Studies', 'Job Postings', and 'Press Releases'. The right side of the screen shows the 'Site Actions' menu again, listing various site management options.

Navigation

The screenshot displays a SharePoint navigation interface. On the left, a navigation tree shows the site structure:

- Home
- News
- Company
 - Press releases
 - investors
 - Stock
 - Annual reports
 - Pages
 - 2004 Annual report
 - Letter to shareholders
 - FP nav nodes
 - Corporate Governance
 - Businesses
 - Careers
- Events
- Resources (hidden)
- Products and services

A red box highlights the 'investors' node and its sub-items. To the right, a detailed navigation pane shows the current page path: Home > Company > Investors. It also lists 'Press Releases' and 'Investors' under 'Company'.

Dynamic navigation based on site hierarchy

Includes webs, pages and authored links

Navigation links trimmed based on security, workflow state and publishing schedule

Site Content and Structure

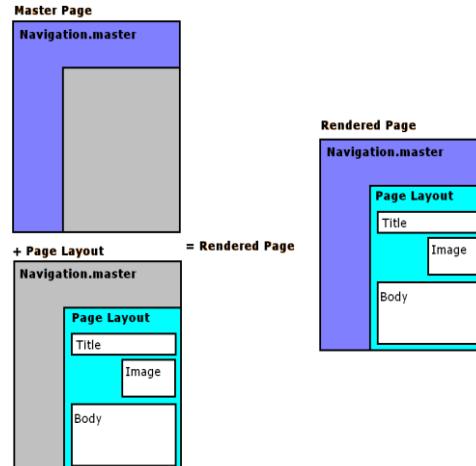
The screenshot shows the SharePoint Site Content and Structure interface. The left navigation pane lists site collections and various document libraries and galleries:

- Litware Internet Site
 - About Litware
 - Case Studies
 - Job Postings
 - Press Releases
 - Documents
 - Images
 - Pages
 - Workflow Tasks
 - Cache Profiles
 - Documents
 - Images
 - Master Page Gallery
 - Pages
 - Reports List
 - Reusable Content
 - Site Collection Documents
 - Site Collection Images
 - Style Library
 - Workflow Tasks

The main content area shows a 'Pages - All Documents' list with one item: 'default.aspx'. Below it is a 'Resources Related To 'default.aspx'' list, which includes 'WelcomeLinks.aspx' and 'PR.gif'.

Page = Master Page + Page Layout

- Master page defines banner and navigation
- Page layout ASPX defines how page content is rendered
- Possible scenario
 - 1-3 Master pages
 - 10-25 Page Layouts
 - 10s of 1000s of Content Pages



Page Layouts

- Page execution:
- Page URL requested
- Page layout executed in content of page
- Content server controls bind to page fields
- Rendered page returned

Inherited from WSS:

- Versioning,
- Check-in/Check-out
- Content types
- Access control
- Workflow

Rendered Page



Page Content: Documents in WSS document library

FileName	Title	Image	Body	Page Layout Ptr
Article1.aspx	"Some Title"		<HTML>	<@page inherit="..,..">
Article2.aspx	"Better Title"		<HTML>	<@page inherit="..,..">
Article3.aspx	"Your Title"		<HTML>	<@page inherit="..,..">
Article4.aspx	"My Title"		<HTML>	<@page inherit="..,..">

Steps to Create a New Page Layout

- Create shared columns
- Create content type
- Add created site columns to content type
- In the Master Page Gallery
 - Create new Page Layout file
 - Check-out file and edit in SharePoint Designer
 - Populate the file with content fields
 - Check-in and approve
- Use the new page layout file

Publishing Cycle

- Workflow based on Windows Workflow Foundation
- Light-weight approval workflow is active OOB
 - Based on approval
 - Minor versions need to be approved to become major versions
 - Visitors only see the major (published) versions
- Workflow can be replaced by custom workflow
 - OOB delivered with MOSS 2007
 - Designed using SharePoint Designer 2007
 - Created using Visual Studio.NET 2005

WCM Web Parts

- Summary Links Web Part
 - Custom annotated, stylized links



- Table of Contents Web Part
 - Displays navigation information of your site



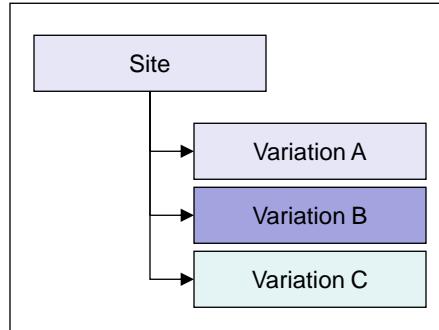
- Content Query Web Part
 - Displays a dynamic view of the content in your site

Multilingual sites

- Common pattern
 - Parallel sites in multiple languages
 - In concept, they are localized mirrors
 - In reality, there are exceptions and customizations for different regions
- Modeled as variations
 - Admin creates multiple labels
 - System creates and maintains parallel versions of containers and items
 - Exceptions are allowed
- Not just for language translations
 - Multilingual sites, multi-device sites, and multi-branded sites

Site Variations

- Allow for publishing of related sites and pages
- Multilingual scenario
- Device targeting



Configuring Document Conversion

Central Administration > Application Management > Document Conversions

Configure Document Conversions

Use this page to configure document conversions.

Web Application: Web Application: http://localhost:1004/

Enable Document Conversions: Enable document conversions for this site? Yes No

Conversion Server: Specify the Load Balancer with which to associate this Web Application. Load Balancer server: OSS1

Conversion Schedule: How often should the Document Conversion timer job run?

Process blocks of conversion:
 Every 1 minutes
 Hourly between [] and [] minutes past the hour
 Daily
 Between [12 AM] and [00 AM]

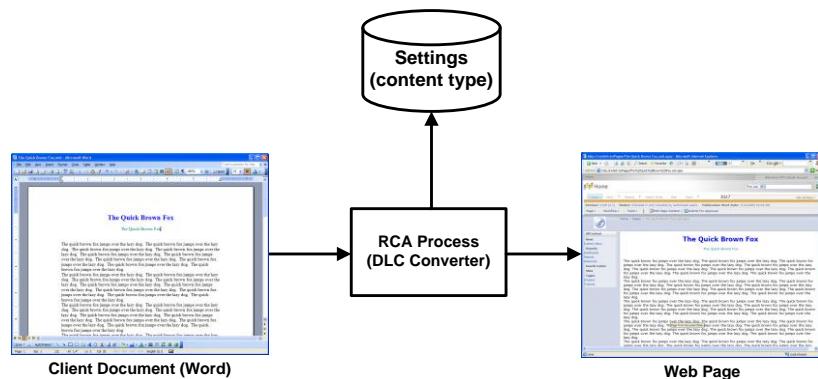
Converter Settings: Customize installed converters.

Customize installed converters.

- Customize "From InfoPath Form to EMF Image" (.xml into emf)
- Customize "From InfoPath Form to PNG Image" (.xml into png)
- Customize "From InfoPath Form to TIFF Image" (.xml into tif)
- Customize "From InfoPath Form to Web Page" (.xml into html)
- Customize "From Word 2003 XML Document to Web Page" (.xml into html)
- Customize "From Word Document to Web Page" (.doc into html)
- Customize "From XML to Web Page" (.xml into html)

Buttons: Apply, OK, Cancel

Smart Client Authoring



- Convert documents of different formats into web pages (server side)
- Linkage between document and page preserved
- Document Content Type stores info about how and where to create page
- Pluggable converter model
 - Builds on document services conversion infrastructure
 - Out-of-the-box converter for Word documents

Content Deployment

- Transfers content from one site collection to another
 - Paths define the relationship between source and destination
 - Jobs define the content to deploy and a schedule

Summary

- The Publishing Site template
- The MOSS Approval Process
- Creating custom page layouts
- Optimization through Caching Profiles
- Content Translation using Variations
- Converting Office documents
- Paths and Deployment



**Leveraging the
Business Data Catalog**

Surfacing backend data in SharePoint Server sites

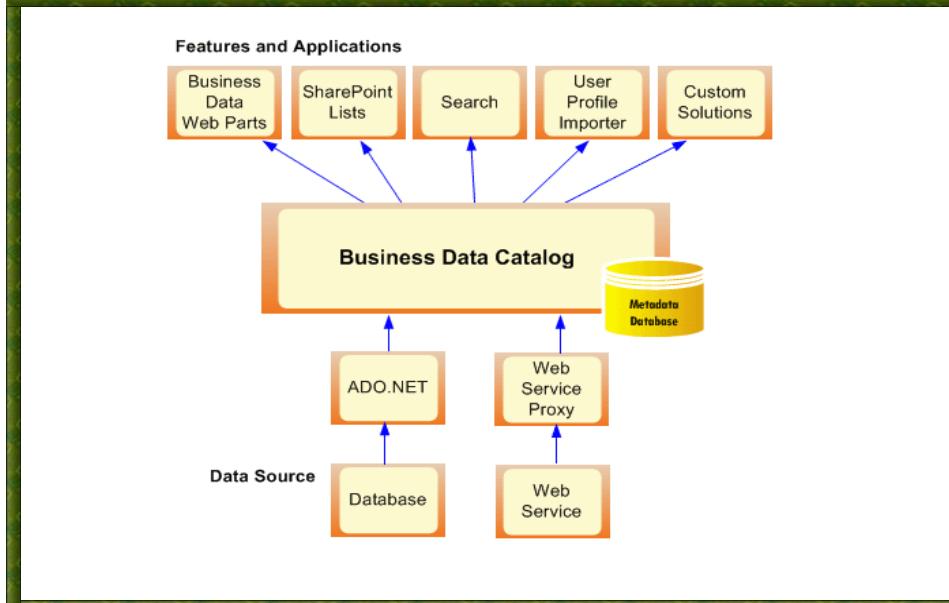
Agenda

- Motivation for the BDC
- Application Definition Files
- Application, Entities, Methods and Associations
- Using the built-in BDC Web Parts
- BDC integration with MOSS search
- Creating custom BDC Web Parts

Design Motivations

- Reduce the need for custom front-end code
 - Reuse SOA investments already in place
- Create manageable method for reusing data
 - Centralized deployment
 - Centralized data security
 - Low latency
- Designed for portal & collaboration scenarios
 - Data query, indexing, personalization
- The BDC is not about: transactions, workflow, data transformation, adapters, precomposition

BDC Architecture



Application Definition Files

```

<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<LobSystem xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://schemas.microsoft.com/office/spa/2005/bdcMetadata BDCMetadata.xsd"
  Type="Database" Version="1.0.0.0" Name="AdventureworksSample"
  xmlns="http://schemas.microsoft.com/office/spa/2005/bdcMetadata">

  <LobSystemInstances>
    <LobSystemInstance Name="AdventureworksSample">
      <Properties>
        <Property Name="AuthenticationMode" Type="System.String">PassThrough</Property>
        <Property Name="DatabaseAccessProvider" Type="System.String">SqlServer</Property>
      </Properties>
    </LobSystemInstance>
  </LobSystemInstances>

  <Entities>
    <Entity EstimatedInstanceCount="10000" Name="Product"/>
    <Entity EstimatedInstanceCount="10000" Name="SalesOrder"/>
    <Entity EstimatedInstanceCount="10000" Name="Customer"/>
  </Entities>

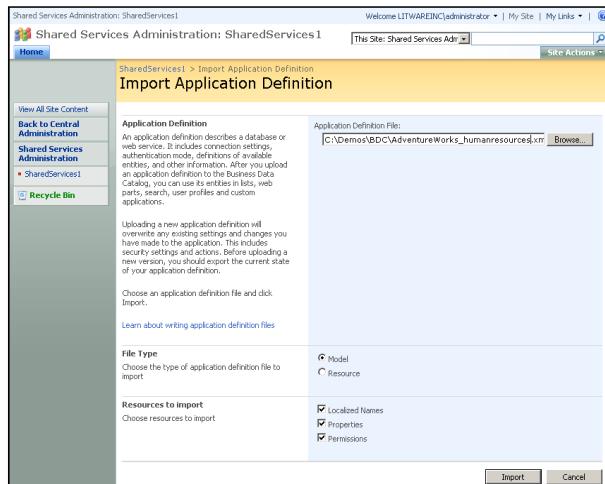
  <Associations>
    <Association AssociationMethodEntityName="Customer"
      AssociationMethodName="GetSalesOrdersForCustomer"
      AssociationMethodReturnParameterName="SalesOrders"
      Name="CustomerToSalesOrder" IsCached="true">
      <SourceEntity Name="Customer" />
      <DestinationEntity Name="SalesOrder" />
    </Association>
  </Associations>
</LobSystem>

```

Tools for Building Definitions

- BDC Meta Man
 - <http://www.bdcmetaman.com/>
 - Free version for SQL Server data sources
 - Licensed version adds Web service, Oracle, ODBC
 - Action builder
 - Visual designer
 - Multiple entity support
 - Configuration of LOBSystems, LOBSystemInstances, Entities, Methods, etc.
- Simego MOSS BDC Design Studio
 - <http://www.simego.com/#MOSS>
- Various efforts on CodePlex, GotDotNet
- Some SDK-delivered functionality is in the works

Importing Application Definition Files



Administration of BDC Applications

The screenshot shows the SharePoint Shared Services Administration interface. The URL is [http://LITWAREINC/SharedServices1/_vti_bin/owstools.dll?ViewApplication&ApplicationID=AdventureWorks_HR](#). The page title is "View Application: AdventureWorks_HR".

Application Information:

- Name: AdventureWorks_HR
- Type: Database
- Definition Version: 1.0.0
- Access Account: Logged-on user
- Maximum Concurrent Connections: Unlimited

Entities:

- Name: Employee
- Department

Examining BDC Application Entities

The screenshot shows the SharePoint Shared Services Administration interface. The URL is [http://LITWAREINC/SharedServices1/_vti_bin/owstools.dll?ViewEntity&EntityName=Employee&ApplicationID=AdventureWorks_HR](#). The page title is "View Entity: Employee".

Entity Information:

- Name: Employee
- Application: AdventureWorks_HR
- Crawlable: No

Fields (of default view):

Name	Type	Title	Display by Default
Name	System.String		X
Email	System.String		X
Employee ID	System.Int32		X
First Name	System.String		X
Job Title	System.String		X
Last Name	System.String		X
Phone	System.String		X

Relationships:

Name	Related To	Role in Relationship
DepartmentToEmployees	Department	Destination

Actions:

Name	Type	Default	Description
View Profile	X		http://moess16613/isp/admin/Content/Employee.aspx?EmployeeID={0}

Filters (of finder method):

Name	Type	Default
EmployeeID	ComparisonFilter	
LastName	WildcardFilter	

Adding Actions to an Entity

The screenshot shows the 'Add Action' dialog box within the SharePoint Central Administration interface. The dialog has several sections:

- Name:** Action Name: Open data in custom page
- URL:** Navigate to this URL: http://example.com/edit.aspx?id={0}
- URI Parameters:** Parameter Property: EmployeeID
- Icon:** Standard icon: Edit

At the bottom are 'OK' and 'Cancel' buttons.

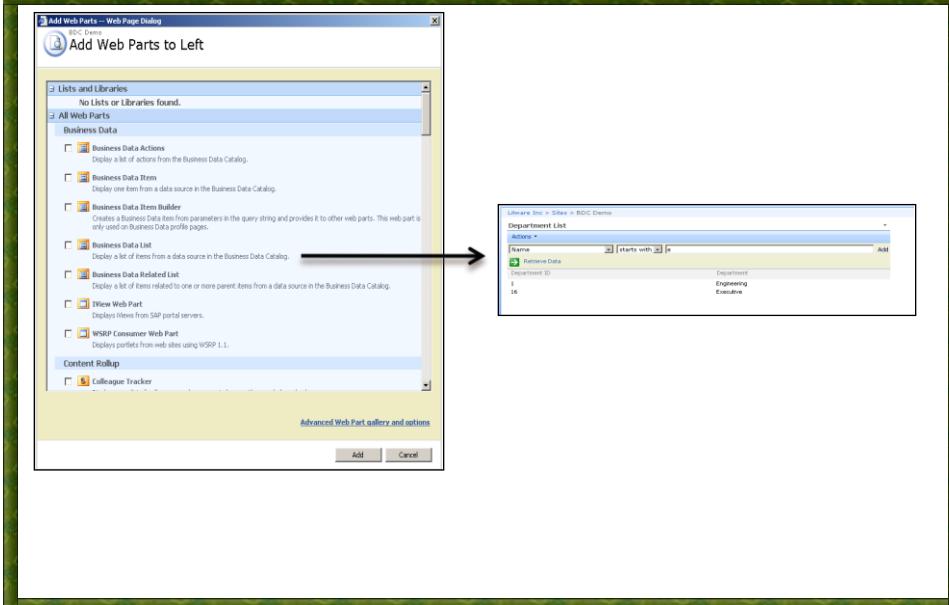
Administrating Security

The screenshot shows the 'Manage Permissions: AdventureWorks_HR' page within the SharePoint Central Administration interface. The page displays a list of users and groups with their assigned rights:

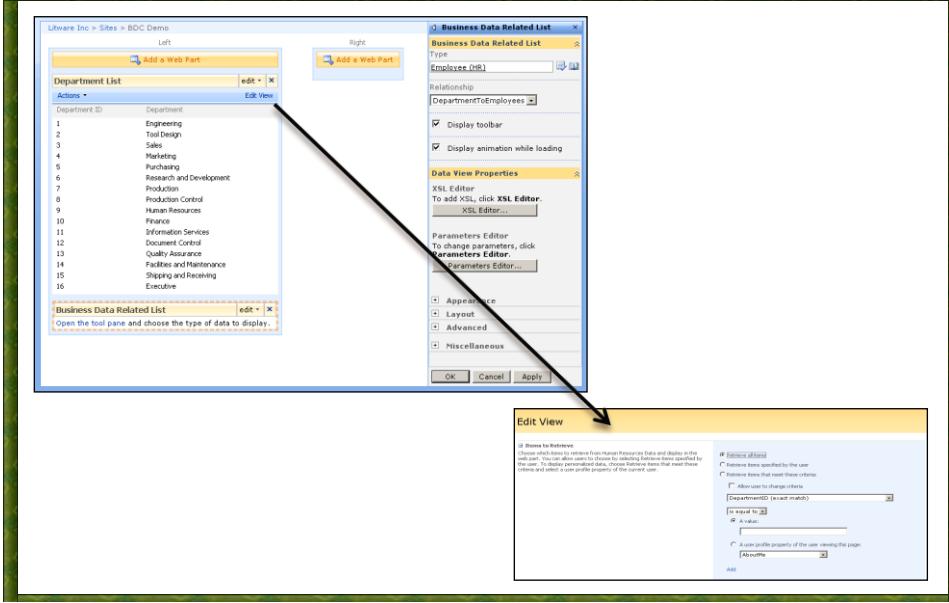
User/Group Name	Rights
LITWAREINC\administrator	Edit, Execute, Selectable in clients, Set Permissions
NT AUTHORITY\Authenticated Users	Execute, Selectable in clients

At the top, there are links for 'Add Users/Groups', 'Remove Selected Users', 'Modify Permissions of Selected Users', and 'Copy all permissions to descendants'.

Using BDC Web Parts



Editing BDC Web Parts



Connecting Web Parts with Associations

The screenshot shows a SharePoint page with two lists: 'Department List' and 'Employee List'. The 'Department List' contains 16 items with Department IDs 1 through 16 and their corresponding names. The 'Employee List' contains 10 items with Employee IDs 2 through 11 and their names. A blue border surrounds both lists, indicating they are connected via associations.

Department ID	Department	Employee ID	First Name	Last Name	Job Title	Department
1	Engineering	2	Kevin	Brown	Marketing Assistant	Marketing
2	Tool Design	6	David	Bradley	Marketing Manager	Marketing
3	Sales	46	Sariya	Hampadoungsataya	Marketing Specialist	Marketing
4	Marketing	106	Mary	Gibson	Marketing Specialist	Marketing
5	Purchasing	119	Jill	Williams	Marketing Specialist	Marketing
6	Research and Development	203	Terry	Eminizer	Marketing Specialist	Marketing
7	Production	269	Wanida	Bensoho	Marketing Assistant	Marketing
8	Production Control	271	John	Wood	Marketing Specialist	Marketing
9	Human Resources	272	Mary	Dempsey	Marketing Assistant	Marketing
10	Finance					
11	Information Services					
12	Document Control					
13	Quality Assurance					
14	Facilities and Maintenance					
15	Shipping and Receiving					
16	Executive					

Searching through BDC Applications

The screenshot shows the 'Add Content Source' page in SharePoint Administration. It includes fields for Name (Employees), Content Source Type (Business Data), Applications (AdventureWorks_HR), Crawl Schedules (Full Crawl: None, Incremental Crawl: None), and a checkbox for 'Start full crawl of this content source'.

Add Content Source

Name: *

Content Source Type:

- SharePoint Sites
- Web Sites
- File Shares
- Exchange Public Folders
- Business Data

Applications:

- Crawl entire Business Data Catalog
- Crawl selected applications
- AdventureWorks_HR

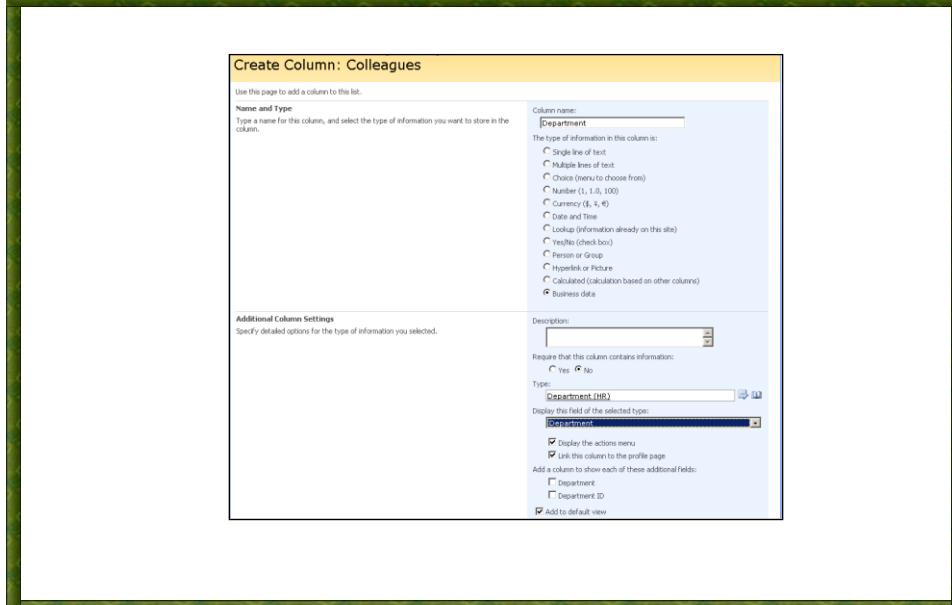
Crawl Schedules:

Full Crawl: Create schedule

Incremental Crawl: Create schedule

Start full crawl of this content source

Adding BDC Columns to WSS Lists



Summary

- Motivation for the BDC
- Application Definition Files
- Application, Entities, Methods and Associations
- Using the built-in BDC Web Parts
- BDC integration with MOSS search
- Creating custom BDC Web Parts

The slide features a decorative border at the top with a tiger illustration and a green chevron pattern. The title 'Publishing Spreadsheets with Excel Services' is centered in large white font. Below it is a subtitle 'Running Excel spreadsheets on the server' in a smaller green font.

Publishing Spreadsheets with Excel Services

Running Excel spreadsheets on the server

The slide has a black header bar with the word 'Agenda' in white. The main content area contains a bulleted list of topics:

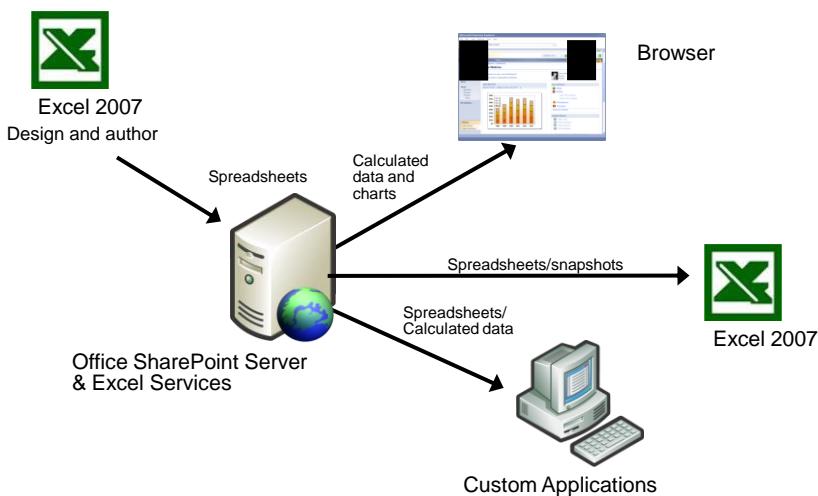
Agenda

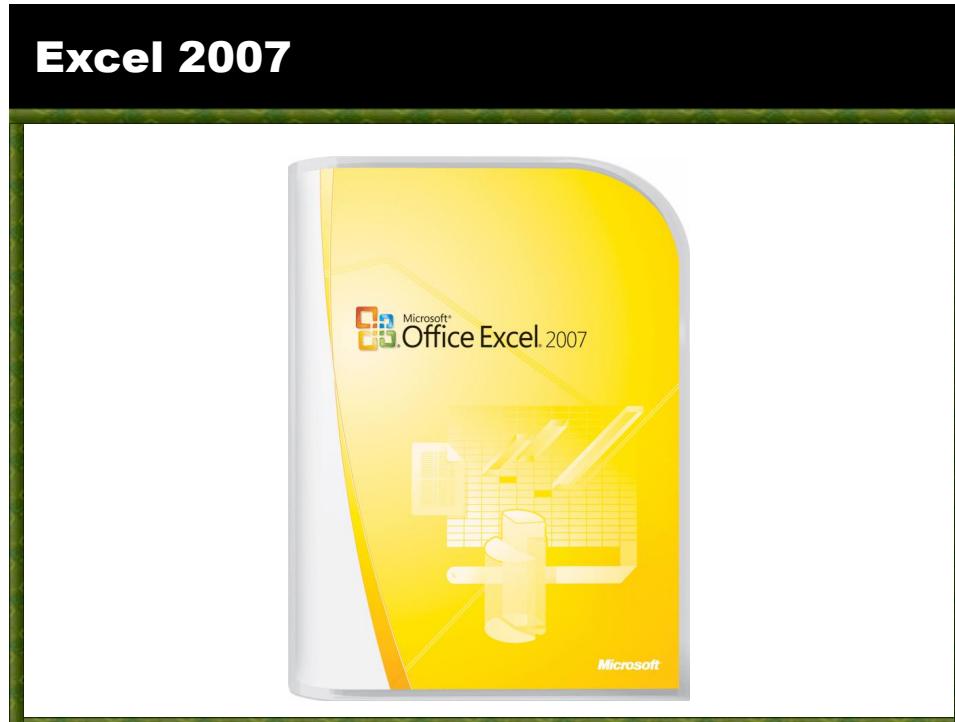
- Excel Services Architecture
- Configuring Trusted Locations
- Publishing spreadsheets that render as HTML
- Using Data Connections

Why Do We Need Excel Services?

- Common customer requirements/complaints
 - Distributing spreadsheets to users creates many copies
 - Excel doesn't play well in the BI dashboard and reporting world
 - It's difficult to protect proprietary information in spreadsheets
 - Incorporating Excel logic into applications is hard
 - Excel was designed as a desktop application
(read: Excel really stinks as a server-side application)

Excel Services





Configuring Trusted Locations

Shared Services Administration: Litware SSP > Excel Services Trusted File Locations

Excel Services Trusted File Locations

This is a list of Excel workbook file locations that you consider trustworthy. Excel Services denies requests to open files that are not stored in one of the trusted locations.

Add Trusted File Location				
Address	Location Type	Trust Children	Workbook Calculation Mode	Allow External Data
http://litwareinc.com/sites/excellab	Windows SharePoint Services	Yes	File	Trusted data connection libraries and embedded

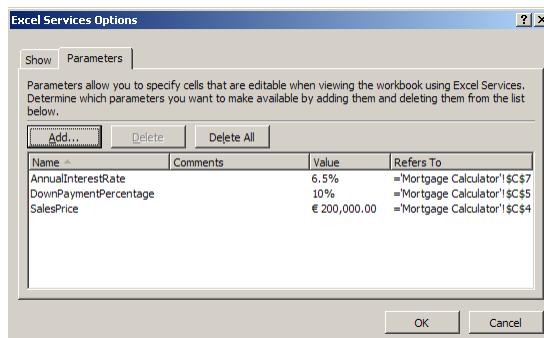
Walk Through of using Excel Services

1. Add the URL of the document library as trusted location
 1. SharePoint Central Administration
 2. In Application Management, configure the Farm's core services
 3. In Excel Services Management, add the URL of the doc lib as a trusted file location
2. In Excel 2007, publish to Office Server
 1. Decide what worksheets to publish
 2. Named ranges can be dynamically populated with values in the browser
 3. Give the URL of a document library
3. Users now have Web access to the spreadsheet



Parameters

- Allows the creator of the document to determine what cells can be edited by the user viewing the workbook in Excel services.



Excel Features will not load

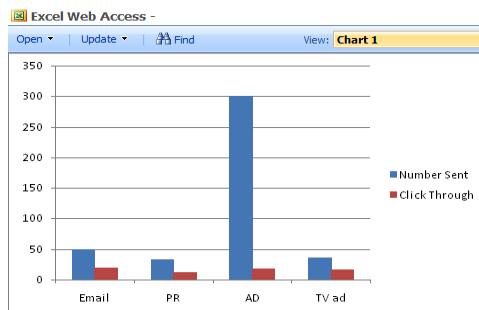
- **Code**
- Information Rights Management (IRM) protection.
- ActiveX controls.
- Embedded smart tags.
- PivotTables report with multiple consolidation ranges.
- External references (workbooks that contain links to other workbooks).
- Workbooks saved in formula view.
- XML expansion packs.
- XML maps.
- Data validation.
- Query tables, SharePoint lists, Web queries, and text queries.
- Workbooks that reference add-ins.
- Workbooks that use the **RTD()** function.
- Workbooks that use workbook and worksheet protection.
- Embedded pictures or clip art.
- Cell and sheet background pictures.
- AutoShapes and WordArt.
- Ink annotations.
- Organization charts and diagrams.
- DDE links.

Workbooks that will not render

- Split and frozen panes
- Headers and footers
- Page layout view
- Cell patterns
- Zoom
- Microsoft SQL Server Analysis Services' member properties in ScreenTips
- Some cell formatting, such as diagonal borders and border types not supported by HTML

Excel Web Access Web Part

- Web Part to view Excel workbooks on a page
 - Entire Workbook
 - Specified range of cells
 - Named Item



Snap Shot

- Allows for the limited viewing of a workbook from Excel Services
- Items such as private information, formulas, and hidden data are removed



Summary

- Excel Services Architecture
- Configuring Trusted Locations
- Publishing spreadsheets that render as HTML
- Using Data Connections



**Creating Dashboards
with Report Center**

Building BI Solutions with SharePoint Server

Agenda

- The Report Center site template
- Creating Dashboards
- Key Performance Indicators (KPIs)
- Filters

Report Center

- With Office 2007, SharePoint Server become the hub for BI on the server
 - Excel Services and Reporting Services in the portal
 - Out-of-the-box BI portal experience
 - Dashboards, KPIs, and Report Libraries
 - Integrated with Portal, Collaboration, Enterprise Content Management and Workflow functionality

SQL Server Reporting Services

- Integrated with WSS to enable publishing, viewing, and management of reports
- Microsoft Office SharePoint Server light up
 - Report library integration
 - Dashboards and filter Web Parts
- Integration is interesting because...
 - New capabilities for Reporting Services users
 - Great example of deep integration for ISVs

Storing Reports

- Reports have more specific needs than documents
 - History is very important
 - Many instances of the same report can exist
- Therefore, Office Server adds a Report Library template
 - Displays current spreadsheet / report by default
 - History available via search and list views
 - Custom profile page
 - Can be part of Report Center
 - A list template that can be used anywhere



Key Performance Indicators

- Goals
 - KPIs can be an important instrument in the organization, so let's make it easier to create them
 - And let's use the environment we already know – the portal and team sites
 - Support KPI types from simple to enterprise class
- Types
 - Manually entered
 - SharePoint list
 - Excel workbook
 - SQL Server Analysis Services
- Technologies
 - KPI web part & list
 - Customizable KPI profile page
 - Dashboard template focused on KPIs

KPI Web Parts

Key Performance Indicators

Show Only Problems

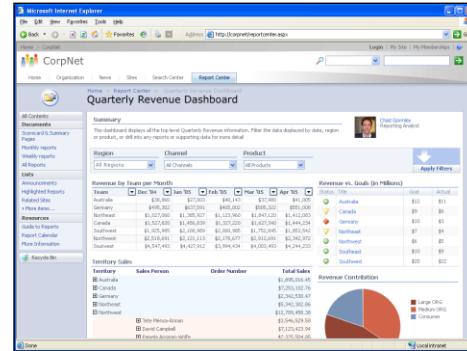
Indicator	Goal	Value	Status
Sales For Month	10	8	
Week 2 Sales	50	33	

KPI Details

	Title Description Comments Value Goal Warning Workbook Value Cell	Sales For Month This is the detail for the month of May in Denver Keep in mind there was a rough a month 8 10 5 SampleWorkbook.xlsx '1!C4
--	--	--

Dashboards

- Dashboards are SharePoint pages
- Dashboard pages are in same document library as spreadsheets and reports
- Types
 - Generic dashboard
 - KPI focused



Filtering

- Filtering is the natural next step after building a dashboard
- Filter for eastern region, last quarter
- Automatically show just *your* customers when you load page
- Accept values from query string
 - <http://server/dashboard.aspx?Product=452>

Filtering Web Parts

Display options

- Type in value
- Pick from list
- Tree view
- Hidden

Extensibility

- Custom providers & consumers
- Standard interfaces that ship in WSS

Filter value sources

- User entered value
- Manual list
- SharePoint list
- Analysis Services
- Bus. Data Catalog
- SharePoint profile
- Query string

Summary

- The Report Center site template
- Creating Dashboards
- Key Performance Indicators (KPIs)
- Filters