SharePoint 2010 Migration Overview

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# Summary:

The changes and additions to SharePoint 2010 are significant and have the potential to improve the existing business processes that depend on the SharePoint architecture. The enhanced workflows, integration of Performance Point, list validation, external BLOB storage, refined Search, new InfoPath features, and improved records management features are of particular interest in regards to our current usage of SharePoint.

The downside to all of these improvements is that our heavily customized current environment cannot be simply upgraded to 2010. The changes to themes and to data views (which are used extensively to surface and format data) will require significant changes to be made before the content can be moved to 2010.

The recommendation at this time is to stagger the use of 2010, bringing over existing sites and solutions one by one as needed rather than an all at once upgrade. We could then use 2010 for newer projects where the new functionality would be an asset, and can then continue to use the existing 2007 farm, bringing sites over as they are converted. Some sites and applications will require far more reconfiguring than others and testing will need to be done to ensure that they still work as required, in particular solutions such as AFT that use SP 2007 form libraries and workflows and InfoPath 2007.

The farm architecture must also be carefully designed, as the services are all now independent and considerations must be made as to how to best separate the farm functions. Decisions need to be made in regards as to whether or not to utilize the new remote BLOB functionality-this new feature alone could greatly enhance the speed of accessing data on the farm, particularly with the recent move of file share documents into SharePoint. Whether or not to purchase a license for the FAST Search also needs to be decided.

In regards to the newly-released Department Sites that Corporate is using, the user interface is considerably different from the existing 2007 interface and users will need to be retrained in order to use 2010.

# 2010 Migration Plan:

A: Farm:  
Create plan for new 2010 farm; implement scalable farm.

*Farm details go here…….*

B: 2010 Testing & Evaluation:  
Learn new features of 2010 in dev environment. Migrate SEnet as a test and catalog issues; create plan to address issues

## C: Migration:

### 1: Project Server

Move old Project sites into new SharePoint 2010 sites

Why?

The existing project server is riddled with errors that cannot be compensated for, reducing the overall functionality of the server and its usefulness to users.

Affect to 2007 Farm

The existing server can be retired.

Estimated Timeline

May 2011

### 2: Department Sites

Move existing department sites and their content into new 2010 sites.

Why?

The existing department sites have a corrupted template that affects some of the functionality. Also, there is no way to reuse workflows in the 2007, therefore there are over 30 custom workflows that have to be maintained. In 2010, workflows can be reused, reducing the production time and streamlining maintenance.

Improvements in how SharePoint handles large document libraries in 2010 increase the usefulness of the department sites for all users.

Affect to 2007 Farm

Once moved, a great deal of server resources will be freed up on the 2007 farm.

Estimated Timeline

July 2011

### 3: Best in Class site

Migrate existing BIC site; upgrade some of the functionality with new 2010 features.

Why?

The RVP’s are invested in making the BIC site as useful as possible for the Company. The new collaboration features in 2010 will make it much easier for locations to collaborate and share ideas.

Affect to 2007 Farm

Negligible effect.

Estimated Timeline

September 2011

### 4: Regional Sites

Migrate regional sites to 2010.

Why?

New collaboration features and enhanced document management features in 2010 will make the regional sites easier to use and maintain.

Affect to 2007 Farm

Moving the sites will free up space on the 2007 farm.

Estimated Timeline

October 2011

### 5: SEnet 3.0/My Sites

Create upgraded version of SEnet, utilizing the best new features of SharePoint 2010.

Why?

SEnet will have an updated visual design and will have new functionality added, based off of user surveys and research (NNG Intranet Annuals). The eventual goal is to allow more users to add and maintain content on SEnet, increasing the speed that content can be added and enhancing stakeholder buy-in to SEnet and the SharePoint platform.

Affect to 2007 Farm

Once SEnet is moved, most of the 2007 farm can be retired or reallocated. Only AFT will remain.

Estimated Timeline

December 2011 –April 2012

### 6: AFT

Move AFT to 2010; update InfoPath forms to make use of new 2010 functionality.

Why?

The goal is to eventually have AFT moved from the 2007 far into the 2010 farm so that the 2007 farm can be taken offline. This will be a massive effort, involving many different stakeholders, and may not be feasible for the foreseeable future.

Affect to 2007 Farm

Once AFT migrated, 2007 farm can be taken offline.

Estimated Timeline

TBD

# Overview of SharePoint 2010 Changes and New Functionality

# Architecture and Farm Changes

## WSS🡪SharePoint Foundation 2010

* Component of Server 2008
* Provides core collaboration services
  + Team sites, work spaces, blogs, and wikis
* Based on .NET 2.0 and .NET 3.5 framework

## MOSS🡪SharePoint Server 2010

* Two versions:
  + Standard
  + Enterprise
* MySites only work on Server, not Foundation
* **Standard**:
  + Builds on top of Foundation
  + Portal, Enterprise Search, social computing, enterprise content management features
* **Enterprise**:
  + Builds on top of Standard
  + InfoPath, Excel Services, Visio Services, Word Services, Access Services and performance Point Services
  + Internet License
    - MSP Server 2010 for Internet Sites
      * Standard and Enterprise version
    - Cloud-Based Version
      * SharePoint Online

## SSP 🡪 Independent Services

* Service apps in 2010 are independent services that can be shared across web applications and farms
* Examples:
  + Business Data Connectivity Service
  + Managed Metadata Service
  + Search Service
* There are more than a dozen out of the box services that come with 2010
* They can be shared across multiple servers, making it easier to scale the implementation

## Enterprise Search

* Now a service application
* Redundant index functionality
* Content sources can be divided among multiple partitions
  + Allows for greater load to be distributed between servers
* Improved search relevancy
* **FAST search is also available**
  + Add-on to existing search
  + Has all the features of Enterprise search plus:
    - Adds thumbnail previews
    - Click through relevance
    - Auto metadata tagging
      * FAST can extract useful data from items and can create structure from this data, which increases findability
    - Faceted Search
      * Similar to the drill-down refiners in Ebay
      * Ability to further refine a search
  + API extensible by developers
  + Extreme scalability and performance
    - Can support billions of documents and thousands of queries per second.

## Power Shell

* Used as a SP admin tool
* Allows for automation of manual tasks, scripted installations, and remote administration support
* Allows for backup and restore the farm , site collections, subsites and lists.
* Over 500 MS-created commandlets for SharePoint

## Remote BLOB Storage Capability

* Can natively support storage of database BLOBS (the actual documents within the content database)
* 80% of the content within a SharePoint content database is BLOB; by moving those files out of the content database you free up most of your storage and improve performance.

## Backup and Restore

* Progress bar indicators
* Granular site recovery options
* Capability to recover data out of unattached content databases
* Not a substitute for a comprehensive enterprise backup and restore utility

## Antivirus

* SP 2010 contains no integrated anti-virus scanning options
* Includes access to Antivirus Application Programming Interface (API) that enables 3rd party products to integrate directly with SharePoint to provide antivirus protection for SharePoint content
* MS Forefront Protection for SharePoint 2010 is an optional product

## Read-Only Databases

* Ability to set up read-only databases
  + Users still able to access and view content during server maintenance
  + Results in less down-time for farm

## System Requirements

* Only available as 64 bit and requires Windows Server 2008 as base OS
* 64 bit edition of SQL Server

## Other Architecture Changes

* Large lists pose less of an issue as they can contain millions of items
* Admin can control number of items returned in a search so SP is not slowed down due to a large number of files
* 100gb recommended size for content database no longer an issue

# End User Changes and Additions to 2010

## Deprecated Site Templates

The following templates are deprecated in 2010, though they can be created programmatically if needed:

* Wiki
* Site Directory
* Report Center
* Search Center with Tabs
* Search Center
* Collaboration Portal
* News Site

## New Templates in 2010

* Assets Web Database
  + Used to keep track of assets and owners
* Group Worksite
  + Site for groups to collaborate together
  + Same format as our existing custom Department Sites
* Visio Process Repository
* Assets Web Database
* Contacts & Issues Database
* Business Intelligence Center
  + Site for presenting BI data.
  + Provides document libraries, and lists for linking to content in Performance Point Services
* Enterprise Search Center
  + Includes tabs for searching content and people
  + Ability to add custom tabs and scopes
* Basic Search Center
* FAST Search Center
* Enterprise Wiki
  + Site used to capture knowledge and to share it across the enterprise
* Contacts Web Database
  + Used to manage information about people your team works with, such as customers and partners
* Document Center
  + Site used to centrally manage documents
* Document Workspace
  + Site used for collaboration on a document
* Issues Web Database
  + Used to manage a set of issues or problems
  + Can assign, prioritize, and follow the progress of issues from start to finish
* MS Project Site
  + Site that supports team collaboration on projects
  + Can be linked to tasks within Project Server 2010
* Projects Web Database
  + Project tracking database to track multiple projects and assign tasks to people

## Saving Sites as Templates

* Content limit has been increased to 419mb, allowing full sites with content to be saved and used in different site collections.

## Content Types

* Automatically available to all sites in the farm, whereas in 2007 a content type only applied to a specific site collection.

## Interface Changes

* Contextual Office ribbon replaces standard toolbars
* Css, compliant code vs. table-based layout
* Real dialog boxes (Javascript/AJAX based) rather than page redirects
* Ability to change colors either through the interface or by creating a theme in Power Point and uploading to site (these are not full themes as they are in 2007, merely color “skins”)
* Live Preview capability

## List Changes

* New additions for custom coding with lists
* Ability to check user permissions for a list
  + Select a file, select “Check Permissions”, enter a user name or group, feature will show what access the user or group has to the item and through what security groups
* Items in a list support list and item level validation
* **External Lists:**
  + Content not stored within these lists
  + Is a view of an external data source
  + Is an advanced feature of SP Server
  + Looks/acts like a standard list
* **Coauthoring**
  + Multiple people can edit the same document at the same time.

## Workflows

* Can be created in Visio 2010
* Workflows can now be reused!
  + Can be exported from one site collection to another
* Site Workflows
  + Are associated with a site rather than a list
* Ability to edit OTB workflows

## MySites

* Completely revamped for 2010
* Allows users to rate content, add notes and tags to content
* New features:
  + My Newsfeed
  + My Content
* Greater social collaborations features and connectivity to the whole of SharePoint

## Development

* Developers can use SharePoint Designer 2010 and Visual Studio 2010
* Sand-boxed solutions
  + Allows developers to add solutions to a SharePoint site through code access security (CAS), which allows devs to test solutions without worrying about their code interfering with existing code.

## Office Web Apps

* Provides browser-based viewing and editing for SP 2010 users who need to collaborate on Office files
* Provides a subset of the functionality of the full client application.

## Visio Integration

* Can now publish Visio diagrams directly to SP with the backend connection intact
* A license for Visio is not required for a user to view a Visio file uploaded to SP.

## MS Access Services

* You can now create, edit, and update Access 2010 databases within SharePoint through a browser.

## Excel Services

* You can load, calculate, and display Excel workbooks using Excel Services
* You can share one workbook within multiple sites and can create dashboards

## Performance Point Services

* Ability to create scorecards that bring together data from multiple sources both inside of and outside of SharePoint
* Can produce interactive, context-driven dashboards to track the KPIs of the company

## Content/Records Management

* Managed metadata
* **Unique document IDs**
  + If a file is moved it can still be located by ID
* Search by metadata tags
* Per Item Audit Reports
* Records are tied to content types, which makes discovery of documents for legal purposes easier
* In-place records management rather than a central repository
  + Documents stay in current location and are classified as records
* Records can be managed in an archive or in the same library or list
* Compliance Details
  + Every document has an option to review the settings that have been applied to the record.
* **Document Hold**
  + You can search for documents by a keyword and then hold them
    - Held documents are locked down to changes
    - Used for discovery in litigation and audit
    - Holds can be put into place across the whole farm
  + We currently have no OTB way to accomplish a hold in SP 2007
* **Multi-Stage Retention**
  + Retention policies can have multiple stages, allowing you to specify the entire document lifecycle as one policy (e.g. review Contracts every year, and delete after 7 years)
* Auto tagging
  + You can set a folder to automatically tag all contents within it with the same tags
* **Document Sets**
  + Allow multiple content items to be organized and managed together as a single item
  + Example would be a contract with associated emails and related files. These can be grouped together as a document set
* **Expiration Policy**
  + Can set an expiration date for an item, after which workflows can be run to have the item reviewed and then disposed of or moved into an archive
  + Currently, we use a custom solution to perform this function on the Department Sites

## Site Analytics

* Improved site analytics
* Ability to set custom dates; not limited to past 30 days (as 2007 is)
* Can set up workflow alerts for different criteria, such as
  + If there are no clickthroughs on search queries (indicates failed searches)
  + If total number of daily visitors is less/more than a specified number
* Trending
  + % change over time
* Search analytics
  + Top queries, failed queries, Best Bet usage, keywords
* Not a substitute for comprehensive site analytics software

## Groove 🡪 SharePoint Workspace

* Add-on that installs on a user’s computer
* Allows end user to connect to a SP site, get a local copy of selected libraries and lists, and add or modify this content within a private SharePoint Workspace
* Content auto syncs with the associated SP site when users are on their network.
* No browser access is needed

## New Webparts

This is not a complete list; there are quite a few new additions to the OTB webpart list in 2010.

* **Picture Library Slideshow**
  + Create a Picture Library, connect it to this webpart, and it will display thumbnails of the images in a small slideshow wherever it is placed on the page.
* **Media**
  + Ability to upload audio and video and include it directly into the page.
* **InfoPath Form webpart**
  + Allows the hosting of an InfoPath form directly in the webpart on a SP page
* **Web Analytics webpart**
  + Displays the most viewed content or most searched for content; continuously refreshed as data changes

## InfoPath 2010

* New user interface (called Fluent UI) uses the Office ribbon
* Client and browser forms are now closer in functionality
* Signature line
  + Allows users to digitally sign forms
* Images can be used as buttons
* Date and time picker
* Person/Group pickers
* New OTB rules for validation
* Single-click form publishing
* **Create form pages for SharePoint lists**
  + Extend and enhance forms used for creating, editing and viewing items in a SP list
* **Applications can be created on top of SharePoint**
  + Includes form-based applications, document workflows and Business Connectivity Services
* **New InfoPath Webpart**
  + Allows InfoPath forms to be hosted in a SP page
  + InfoPath forms hosted on a page can also connect to other web parts on the page to send or receive data

# Upgrade Issues

* SP 2007 List Templates do not work in 2010
* Data view Web parts DVWP have been replaced by List View web parts in 2010
  + Use XSLT instead of CAML
* SP 2007 custom themes do not work in 2010 and must be redone
* Many of the site templates used currently are deprecated in 2010, such as Search Center, Report Center and News Site
* New Ribbon interface replaces existing toolbars; this affects training as users have been trained to use the existing interface.
* Explorer View goes away; Open with Explorer still works but the list view for Explorer is gone
* **Browser Issues**:
  + On 64 bit systems, use IE8 32 bit. The 64 bit version has a number of known issues
  + IE7 32 bit OK
  + All other browsers have at least some known issues in regards to SharePoint 2010
  + IE 6 is NOT supported