Authoring Guide

Contents

Introduction ***1***

Authoring Overview ***2***

Upgrade Considerations 2

New Authoring Capabilities 3

Authoring Process ***6***

SharePoint Server 2010 Workflow Support 7

Content Storage ***8***

What Are Content Types? 8

How Is Content Stored and Presented in Pages? 8

What Is Managed Metadata? 10

How Is Managed Metadata Best Utilized for WCM? 10

References ***12***

Introduction

Welcome to the *Authoring Guide*. This guide covers authoring (the process of creating and contributing content to a publishing site), the authoring process (managing content from creation to archiving to ultimately purging that content), and content storage (including content types and managed metadata) upgrade considerations, deployment considerations, and new authoring capabilities are also discussed. Additional references for authoring are provided at the end of the document.

Information in this guide applies to Microsoft® SharePoint® Server 2010 and Microsoft® SharePoint® Foundation 2010 and may not necessarily apply to earlier or later versions. The guide is organized as follows:

- Authoring Overview. An overview of how authoring operates with SharePoint Server 2010, upgrade, and deployment considerations, and new authoring capabilities.
- Authoring Process. An overview of the authoring process and how it works with the latest SharePoint Server 2010 workflows.
- Content Storage. An overview of how content is stored, how data is leverages and presented in pages, managed metadata defined, and how managed metadata is best utilized for Web Content Management (WCM).
- References. Further references for authoring.

Authoring Overview

Authoring is the process of creating and contributing content to a publishing site, editing that content, creating content pages, translating variations for multilingual sites, approving content through workflows, and authoring user interface (UI). SharePoint Server 2010 provides a rich editing environment that supports editing toolbars, rich editing controls, the Microsoft® Office Ribbon found in the Microsoft® Office system, and familiar Web 2.0 page styles. Authoring should be designed within the constraints and requirements defined within the governance and information architecture guidelines for the project.

The SharePoint Server 2010 authoring platform provides robust functionality out of the box and is satisfactory for content creation in most cases. However, the platform is extensible and supports additional authoring capabilities where necessary. For example, Microsoft® Office 2010 client applications can be used to edit pages rather than the SharePoint Server 2010 editing pages. This allows authors to leverage a familiar and rich editing environment.

SharePoint Server 2010 also supports offline content creation with document converters.

Upgrade Considerations

There are specific issues regarding the authoring process and authored content that need to be considered before upgrading a publishing site. Table 1 lists upgrade considerations specific to authoring deployment.

Table 1: Authoring Deployment Upgrade Considerations

SharePoint Capability	Upgrade Considerations
Feature deployment	Typical changes for feature deployment include: • Custom features validated as part of the dry-run upgrade process. • Resolution of deprecated Microsoft® Office SharePoint® Server 2007 object model calls and repackaging Office SharePoint Server 2007 custom features by using Microsoft® Visual Studio® 2010. • Requires Windows® SharePoint® Services Solution Package files (.wsp files) for content types, list definitions, list instances, and page layouts. • May include custom workflows (to support approval requirements) and custom document converters. • Using Windows PowerShell™ for deployment scripts. • Using sandbox-based solutions where appropriate. • Using the SharePoint Server 2010 feature upgrade process.
Authoring UI	• All page edits need to be migrated to the new page formats (for example, content placeholders, cascading style sheets (CSS) references, script references, and Office Ribbon support).

Note: For more information on upgrading, see the *Web Content Management Upgrade Guide* in the Web Content Management for SharePoint Server 2010 offering documentation.

New Authoring Capabilities

There are many new capabilities for authoring in SharePoint Server 2010. Table 2 is a list of new authoring capabilities for SharePoint Server 2010.

Table 2: New Authoring Capabilities

Capability	New for SharePoint Server 2010
Data technologies	Improvements that are ideal for content authoring to validation include: • List look-ups supporting one-to-one or one-to-many relationships. • Triggers for cascading deletes or restricted deleted. • List validation via list or column formulas or by marking a column unique. • Performance and scalability improvements provided by support for large lists.

Capability	New for SharePoint Server 2010
Rich authoring	The following improve productivity for content authors and designers through an easier and more intuitive UI in SharePoint Server 2010: • New Web 2.0 look (such as div pop-ups and screen flow) is more intuitive. • Page creation is simplified. • Easier to set the default page layout. • Easier to select the page layout. • Retains rich formatting when copying formatted content and pasting into SharePoint Server 2010 controls. • Web Part improvements for the Content Query Web Part and the addition of new controls (such as the rating control feature) enhance functionality on pages. The platform is now more extensible with better support for workflow development and integration with external systems via Microsoft Business Connectivity Services (BCS): • Workflow enhancements with Microsoft® Visio® Professional 2010 and Microsoft® Visio® Standard 2010, Microsoft® SharePoint® Designer 2010, reusable workloads, and out-of-the-box customizations simplify workload customization. • Simplified integration with back-end systems.
Document management	New capabilities in managed metadata services provide a mechanism to apply a more robust information architecture taxonomy. This is important in order to appropriately tag content for search or for personalization. The following are all new within WCM: • Managed metadata services. • Term Store Manager and the support for term sets. • Managed metadata data types for fields. • Managed keywords. • Content Organizer is available to handle large amounts of content.

Capability	New for SharePoint Server 2010

Language support	• Multilingual support is improved:
	  ○ Each site has its own language and its own translated content.
	  ○ Chrome is switchable based on user preference.
	• Variations support is improved:
	  ○ More reliable with all operations running within the timer service.
	  ○ Manageability with the variationsfixuptool. For more information, see the Microsoft TechNet article Variationsfixuptool: Stsadm operation (Office SharePoint Server) (http://technet.microsoft.com/en-us/library/dd789658.aspx).
	  ○ Using less server memory resources and can pause and resume timer jobs.

The new capabilities in SharePoint Server 2010 enable additional scenarios and enhance productivity. The capabilities have not yet been validated in real-world, large scale WCM deployments. Most WCM solutions demand fast, reliable responses. Leveraging caching techniques where appropriate is suggested. The impacts on reliability, performance, and caching will be discovered as SharePoint Server 2010 is implemented going forward. Through these implementations, best practices for these new features will be derived and propagated accordingly.

Authoring Process

The authoring process is the process of managing content, from creation to archiving to ultimately purging that content (a complete end-to-end perspective). All activities related to creating, updating, and eventually rendering content to end users makes up the authoring (and publishing) process. The end-to-end steps involved with content publishing include:

1. Initial content editing.
2. Publishing content (both major and minor) versions.
3. Content deployment (if necessary).
4. Content goes live based on content scheduling.
5. Content expires based on content scheduling.
6. Content is updated (the process begins again at Step 2).
7. Content is eventually purged or archived as necessary.

For more information about publishing, see the *Publishing Guide* in the Web Content Management for SharePoint Server 2010 offering documentation.

A prerequisite for defining the authoring process is defining the governance model. Governance applies to the entire WCM implementation, but also has specific effects on authoring. For example, governance should define security access, check-in and check-out policies, when to publish a minor or major version (as well as why), and how workflow processes work to approve content before making the content available to the public. For more information on governance, see the *Governance Guide* in the Platform Services for SharePoint Server 2010 offering.

In most cases, you need to define the authoring process, configure security (and other related settings), and then implement the publishing process. In other words, the SharePoint Server 2010 platform is ideal for supporting simple-to-moderate publishing processes with minimal customization, although configuration is required. Additionally, the extensible capabilities of the platform enable customizations to support complex scenarios as well.

After content is approved it must be copied to the production farm. (If edits are made in the production farm, then this step is not necessary. However, if edits are made in a separate staging environment the content must be copied to the production farm via the content deployment feature.) Once the content is available in the production farm, the availability of the content for end users is governed by the publishing and expiration dates for the content item.

It is also important to note that variations are supported within publishing. Publishing supports multiple versions of the same content to enable the usage of multiple branding designs, multiple languages, and multiple target devices simultaneously. Variations and multilingual capabilities are extremely powerful features in SharePoint Server 2010 that require extensive training and practical experience. It is an essential piece of the WCM solution for complex engagements. The guidance provided as part of the WCM for SharePoint Server 2010 offering will provide a moderate level of understanding about variations and multilingual capabilities in SharePoint Server 2010. For more information about

multilingual and variations capabilities, see the *Multilingual Capabilities and Variations Guide* in the Enterprise Portals for SharePoint Server 2010 offering documentation.

SharePoint Server 2010 Workflow Support

SharePoint Server 2010 provides out-of-the-box workflows to support authoring and publishing. For example, authors will typically publish content when the content is complete. This in turn starts a workflow and routes a request to an approver. The approver then reviews the content and either approves it or requests further updates. (It is important to remember that each workflow has a number of potential permutations based on things like the number of resources and types of data.) SharePoint Server 2010 provides a number of improvements to support customization if the situation requires functionality not directly provided in the out-of-the-box workflows.

SharePoint Server 2010 provides more application options to better fit the needs of those people creating and maintaining workflow models. The applications now available for workflow development include Visual Studio 2010, SharePoint Designer 2010, Visio Professional 2010, and Visio Standard 2010.

Improvements include:

- The ability to build workflows in Visual Studio 2010 to simplify .wsp files packaging.
- SharePoint Designer 2010 has a new workflow designer.
- SharePoint Designer 2010 can be used to edit out-of-the-box workflows.
- Workflows can be bound to the site in addition to a list item or document item.
- SharePoint Server 2010 can be used to create reusable declarative workflows.
- The ability to use the **Save as Template** command in SharePoint Designer 2010 to create a .wsp file for reuse on another server or to Visual Studio 2010.
- New event receivers for Starting, Started, Postponed and Completed events.
- New Visio Professional 2010 and Visio Standard 2010 capabilities.
- New Microsoft® InfoPath® 2010 Forms Services enhancements.

For more information on workflow improvements, see the MSDN article Improvements in SharePoint 2010 (http://msdn.microsoft.com/en-us/magazine/ee335710.aspx).

For more information about deploying workflows, see the Microsoft TechNet article Workflow deployment processes (SharePoint Server 2010) (http://technet.microsoft.com/en-us/library/ee662532(office.14).aspx).

Content Storage

Content storage is part of the information architecture planning phase. Content storage impacts many capabilities (like navigation, Search, and data recoverability) through versioning. In addition to where data is stored in the information architecture, it is also important to understand how one defines the storage mechanism in terms of content types (.wsp files and site definitions).

What Are Content Types?

SharePoint Server 2010 enables content authors to maintain content as items in a list or document library throughout the content management lifecycle. It is recommended that these lists or document libraries be defined with content types and corresponding lists or library definitions. The content type definitions should be packaged in .wsp files or within a site definition for easy deployment across farms. For more information, see the *Publishing Guide* in the Web Content Management for SharePoint Server 2010 offering documentation.

Content types provide the taxonomy foundation for content. Content types define the layout of lists, document libraries, page layouts, and ultimately page content. Content types are also leveraged by Search, helping to define search-related data through scopes and managed properties.

How Is Content Stored and Presented in Pages?

Developers and designers create page templates for content owners to provide rendering options for content pages on the site. These templates, known as page layouts, contain two types of controls that allow content owners to edit and manage the content on the page: Web Parts and field controls. There are advantages and disadvantages to using each approach.

SharePoint Server 2010 pages support Web Parts and Web Part zones. Developers can add Web Parts directly to the page layout, or add Web Part zones to give the designer or author flexibility, allowing them to add Web Parts at design time.

Field controls are bound to fields inside each page and the list that corresponds to it. Field controls are bound to the site column in the content type that is associated with the page layout. Content owners can manage data within the field control, but cannot remove or change the field control. The field control also inherits a number of potential constraints (like data type and format).

Field controls differ from Web Parts in two fundamental ways: who ultimately controls the content, and where the content is stored. Table 3 summarizes the previous discussion about differences between field controls and Web Parts.

Table 3: Comparing Field Controls and Web Parts

Area of Comparison	Field Controls	Web Parts
Content storage	Content is stored in fields within the page's list item in the Pages library.	Content is stored within the Web Part data in the page, which is stored separately from the page in the Microsoft® ASP.NET 2.0 personalization data store.
Who has ultimate control?	Page developer or designer controls the placement, settings, and rules on the page. Content owner controls the content.	Page developer or designer controls locations of Web Part zones, but content owners have ultimate control over which Web Parts are in the Web Part zone and what content is within the Web Parts.

Table 4 summarizes a few of the factors to consider and which option is best suited for the specific scenario.

Table 4: When to Use Field Controls or Web Parts in Publishing Sites

Scenario	Field Controls	Web Parts
Centrally controlled site branding and user experience.	X	
Content owner responsible only for content, not presentation.	X	
Content owners need freedom to modify the layout of the page.		X
Versioning of all content in site for historical or regulatory reasons.	X	
Personalization of content.		X
Implementation of functionality (aggregating content from other sites or from same site).		X

If some sort of functionality is required, such as the ability to aggregate content from the same site or from external sites, or to implement something such as a stock ticker, use Web Parts. In this case, there

is no content to save or version as it relates to functionality, only configuration information that the Web Part needs to implement the functionality.

If any of the publishing site's page layouts contain Web Part zones and the Content Editor Web Part is available to content owners, consider implementing a custom ASP.NET 2.0 control adapter to address absolute URLs that the Content Editor Web Part's rich text editor always saves.

Consider removing the Content Editor Web Part from the site collection's Web Part gallery and prohibiting it from running in the Web application by marking it as an unsafe control when a publishing site is using field controls for content, but the page layouts in the site contain some Web Part zones.

For information on discussion of Web Parts and field controls for Office SharePoint Server 2007, see the MSDN article Understanding Field Controls and Web Parts in SharePoint Server 2007 Publishing Sites (http://msdn.microsoft.com/en-us/library/dd571480.aspx).

What Is Managed Metadata?

Enterprise metadata management is a set of features introduced in SharePoint Server 2010 that enable taxonomists, librarians, and administrators to create and manage terms and sets of terms across an enterprise. Managed metadata is a hierarchical collection of centrally managed terms that you can define and then use as attributes for items.

A term is a word or a phrase that can be associated with an item in SharePoint Server 2010. A term set is a collection of related terms. For example, you can specify that a SharePoint Server 2010 column contain a term from a specific term set.

Terms are usually divided into two types:

- Managed terms, which are typically predefined, may only be created by users with the appropriate permissions, and are often organized into a hierarchy.

- Managed keywords, which are words or phrases that have been added to SharePoint Server 2010 items. All managed keywords are part of a single, non-hierarchical term set called the keyword set.

How Is Managed Metadata Best Utilized for WCM?

Managed metadata can be best utilized through the new managed metadata column. When you create and populate a managed metadata column, you are able to specify and control the value persisted in that column in accordance to the term set defined for that column.

This facilitates a more consistent use of terms and managed keywords that are added to SharePoint Server 2010 items when they are tagged with those terms and keywords. You can predefine terms and allow only authorized users to add new terms. You can also prohibit users from adding their own

managed keywords to items and require them to use existing ones. Managed metadata also provides greater accuracy by presenting a specific, controlled list of terms from which users can choose from.

This level of taxonomy and terminology control is a significant improvement for WCM. An example of this is search. Search is typically a high priority feature for WCM, with high expectations for performance, relevance, and user experience. Having more accurate and consistent attributes will help improve overall search accuracy and relevancy. For example, with a strong taxonomy classification, you can begin to surface advanced faceted Search capabilities with Microsoft® FAST™ Search Server 2010 for SharePoint® and the Search feature in SharePoint Server 2010.

References

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