

Implementing Multilingual Solutions with SharePoint 2010

DEV111

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About Spencer



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- General SharePoint Dogsbody
- Microsoft Certified Master | SharePoint 2007
- Microsoft Certified Master | SharePoint Instructor & Author
- Most Valuable Professional | SharePoint Server
- SharePoint Patterns & Practices Advisory Board Member
- 16 years in Enterprise IT
- ISPA Vice President
- Enterprise Architect working with Microsoft's largest customers deploying SharePoint Server.
- Works with SharePoint Product Group on 2010 Readiness
- Author for MSDN & TechNet

Agenda

- ▶ Problem Space
- ▶ Multi-Lingual User Interface
- ▶ Variations
 - Planning, Feature Capability, Common Practices
 - Improvements in SharePoint Server 2010
- ▶ Recommendations

Multi-lingual, Multi-channel & Country sites

- ▶ Multi-lingual User Interfaces
 - UI (language) changes / Same content
- ▶ Multi-lingual Sites
 - Each site has its own language and its own translated content
- ▶ Country sites for international companies
 - Content localized
 - Content in local language
 - Localized sites
 - Site and content in local language

▶ SharePoint Server 2010

MULTI-LINGUAL USER INTERFACE (MUI)

Multi-Lingual User Interface (MUI)

- ▶ Sites can now have Alternate Languages
- ▶ “Chrome” switchable based on user preference
 - e.g. Ribbon, Navigation, Branding
- ▶ Per User setting
- ▶ Enabled once Language Packs are installed
 - Site Settings > Language Settings
- ▶ Site (Web) scoped

Multi-Lingual User Interface (MUI)

- ▶ Available for developers to leverage
- ▶ Changes in Default Language can be configured to overwrite Alternate Languages
- ▶ Not all Site Templates support MUI
 - E.g. Blog, Meeting Workspace
 - IsMultiLingual = False
 - Resource ID in URLs
- ▶ Enabling across Site Collection
 - PowerShell

MUI with Managed Metadata

- ▶ Example of how to leverage
- ▶ Terms can have Alternate Languages
- ▶ Editable via Term Store Management
- ▶ Import is Primary Language Only
 - PowerShell / Object Model

Demo

MULTI-LINGUAL USER INTERFACE

MUI Support

Type of Content	Examples	Supported?
Settings & Help	<ol style="list-style-type: none">1. Settings Pages (_layouts, _admin)2. Help3. Images	Supported
Application Content	<ol style="list-style-type: none">1. Menus2. Controls3. Custom Actions4. Web (Title, Description, Icon Description)5. List (Title, Description)6. Top Link bar (Links)7. Quick Launch (Links, Headings)8. Global Breadcrumb9. Local Breadcrumb10. Managed Metadata (Taxonomy)11. Site Content Types (Name, Description, Groups)12. List Content Types (Name, Description)13. Site Columns (Name, Description, Groups)14. List Columns (Name, Description)	Supported
Developer Content	<ol style="list-style-type: none">1. Features2. Solutions	Supported
User Content	<ol style="list-style-type: none">1. List Item Data2. Permission Levels (Name, Description)3. Groups (Name, About Me)4. Views (Name)5. OOB Web Parts6. OOB Properties (Appearance, Title, etc)7. Custom Properties	Not Supported

▶ SharePoint Server 2010

VARIATIONS

Core Concepts

Variations Feature and Related Aspects

- ▶ Role of Language Packs
- ▶ Variation Home Site
- ▶ Site Collection Variations Settings
- ▶ Variation Labels
- ▶ Variation Hierarchy
- ▶ Translatable Columns

Variations are simply an infrastructure plumbing feature to enable multi-lingual sites, nothing more.

Planning Considerations

Easily the most important part of Variations

- ▶ Language Pack Requirements
- ▶ Implementing after the fact
 - Extremely difficult and architecturally unsound
- ▶ Information Architecture
 - Storage Design (follow SQL best practices)
- ▶ Hierarchy Creation
- ▶ Navigation
- ▶ Redirection Logic
- ▶ Client Language Selection
- ▶ Translation Processes

Information Architecture

- ▶ Variations should not be bolted on afterwards
 - Immediate impact
- ▶ Design for upfront
 - Storage Design
 - Navigation
 - Security
 - Performance
 - And yes, Farm Topology

Language Packs

- ▶ Provide Localised Site Templates
- ▶ **Not** a requirement for Variations
 - Scenario Specific: Assess content author/editor requirements
 - Improves with MUI
- ▶ Additional installation and patching burden
 - Complex Character Sets require Windows Language Pack
 - Installers for SharePoint Foundation and SharePoint Server (SharePoint Server Language Pack includes Office Web Apps)
 - Then run SharePoint Configuration Wizard
 - Don't run PSConfig(UI) after every one!
 - Disk Space

Language Packs

- ▶ Packs Available at Beta 2:
 - English, French, German, Spanish, Russian, Japanese, Chinese
- ▶ Packs Available at RTM:
 - “Tiered” releases
 - Wave 1:
 - English, French, Spanish, German, Dutch, Russian, Japanese, Chinese



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Variations Terminology

▶ Variation Home

- Location where Variations will be created
- Will include that site and all sub-sites
- Welcome Page replaced with VariationRoot.aspx when hierarchy created

▶ Variation Labels

- Name given to each Variation Site

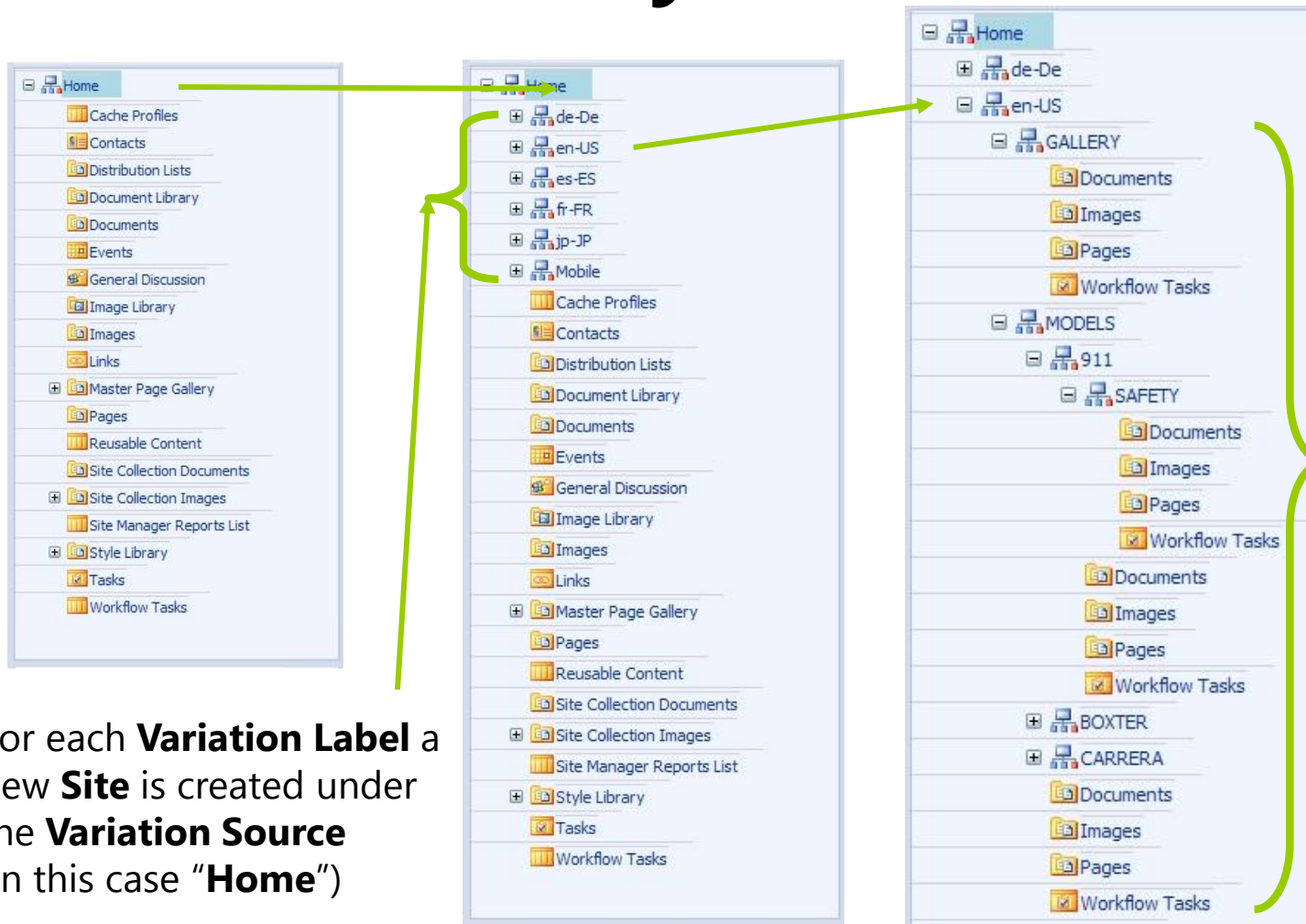
▶ Variation Source (a.k.a. Root)

- Location where content is originated
- Default Location in case of no browser match

▶ Variation Sites (a.k.a. Peers)

- All other Variations

Site Hierarchy



For each **Variation Label** a new **Site** is created under the **Variation Source** (in this case "**Home**")

Each **Variation Site** (Label) contains the content for that **Variation**.

Variation Labels

Use this page to configure variation labels.

Variation Labels

[New Label](#) | [Create Hierarchies](#)

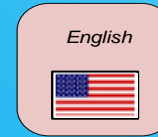
Label	Language	Locale	Is Source	Description
de-De	English (United States)	German (Germany)	No	
jp-JP	Japanese (Japan)	Japanese (Japan)	No	
en-US	English (United States)	English (United States)	Yes	
es-ES	English (United States)	Spanish (Spain)	No	
fr-FR	English (United States)	French (France)	No	
Mobile	English (United States)	English (United States)	No	

1. Configure Variations Settings
2. Create Variations Labels
 - en-US, es-ES, de-DE
 - fr-FR, jp-JP, mobile
3. Set "en-US" as source
4. Create Variation Hierarchies
 - New Redirect ASPX at Root
 - New Sites and Pages are created
5. Create New Source Page
6. Approve Source page
 - Target pages are created
7. Translate and approve each Target pages

Http://my_site/



Http://my_site/en-US/



Safety.aspx

"Safety"

Http://my_site/de-DE/



Safety.aspx

"Sicherheit"

Translation



Http://my_site/es-ES/



Safety.aspx

"Seguridad"

Translation



Http://my_site/fr-FR/



Safety.aspx

"Sécurité"

Translation



Http://my_site/jp-JP/



Safety.aspx

"安全"

Translation



Http://my_site/Mobile/



Safety.aspx

"Safety"

Hierarchy Creation

in Office SharePoint Server 2007

- ▶ Process of creating Variation target sites
 - Don't forget Master Pages & Page Layouts (& CSS etc)
- ▶ One way operation
- ▶ Extremely expensive and slow
- ▶ Runs in process (W3WP.EXE)
- ▶ Top support issue
- ▶ 2007 SP2 introduced Variationsfixuptool

```
stsadm -o variationsfixuptool  
      -url <source variation site URL>  
      [-scan] [-recurse]  
      [-label] [-fix]
```

Common Practices

- ▶ Use a variation Home outside the Site root
 - Avoids all content being translated
- ▶ Disabling Propagate Pages Job
 - **Workaround** for overwriting translations
 - Especially useful with large sites
 - Propagate based on Metadata
- ▶ Custom User Interfaces
 - For Translation management

Variations Improvements

in SharePoint Server 2010

▶ Server Citizenship

- Operations execute in background
- Within Timer Service
- Managed via Central Administration
- Default frequency of 1Hour (2007: 1 Minute)
- 100 Work Items per Timer Job execution

▶ Reliability

- Automatic Pause/Restart during Timer Service restarts
- Relationships list schema changes

▶ Manageability and Recoverability

- "Fix up" tool

Variations Improvements

in SharePoint Server 2010

- ▶ Version Differencing
 - View Changes button
 - Compares most recent source propagated to most recent source published on target
 - Pop-up Report
- ▶ Flexible Propagation
 - On-demand propagation
 - Avoids “overwriting” of target pages

On demand Propagation

- ▶ Automatic Creation is ignored for pages
- ▶ Site UI for pushing out Variations
- ▶ Enabled via PowerShell / Object model

```
[System.Reflection.Assembly]::LoadWithPartialName("Microsoft.SharePoint")
$site = new-object
Microsoft.SharePoint.SPSite("http://yourserver/sites/abc")
$folder = $site.RootWeb.Lists["Relationships List"].RootFolder
$folder.Properties.Add("DisableAutomaticPropagation", "True")
$folder.Update();
```

Variations Logic

Primarily Redirection

- ▶ VariationRoot.aspx
 - Redirects based on Browser Language
 - Can be (and often is) customised
- ▶ Variations Label Menu Control
 - Allows manual user selection
 - Performance Killer
 - ***Deprecated in SharePoint Server 2010***
- ▶ Master Page Customisation
- ▶ CSS Considerations
- ▶ Performance Considerations

Export/Import Variations

- ▶ Supports out of band translation
- ▶ Uses Content Migration Packages
- ▶ Without Additional Tooling all but useless!

Demo

VARIATIONS

Navigation and Web Parts

- ▶ Common to use Variations for Navigation
 - Strongly consider 3rd Party UI Controls
- ▶ Web Parts
 - "Classic" WSS Localisation
 - GUIDs and context
 - Variations does not update GUID
 - Hence Site Setting
 - Refer to SDK
 - Consider a "term store"

Additional Considerations

- ▶ Avoid at all costs external redirection
 - e.g. IIS, Reverse Proxy
 - Can easily confuse Variations Redirection
- ▶ Client Language Selection
 - Not portable across solutions
- ▶ Human Translation Processes
 - The most important part of any Variations implementation

Be extremely cautious with 3rd Party add-ons for multi-lingual

Search Engine Optimisation (SEO)

- ▶ Ensuring users are provided results from the right Variation Site
- ▶ SiteMaps and IA imperative.
- ▶ SharePoint Server 2010 Welcome Page
 - uses a 301 Redirect

Still Valid with 2010

- ▶ Custom User Interfaces
 - For Translation management
 - For Version Management
- ▶ Metadata driven Propagation

Combining Variations with Content Deployment

- ▶ Valid approach for country sites
- ▶ Useful in very large implementations
- ▶ Expansive Topic worthy of it's own presentation!

- ▶ That's all folks!

WRAP UP

When to use what?

Generalised Guidance

Requirement	Recommendation
Same content localized to different languages	WCM sites with Variations
Country sites with own localized content	WCM Sites
Same content targetted to specific devices	WCM sites with Variations
Same content with different layout/ branding (e.g. X Box)	WCM sites with Variations
Localized collaboration	SharePoint sites with Language Packs & MUI
Alternate languages	SharePoint sites (MUI)

Thank you for attending!



Patrick, we miss you