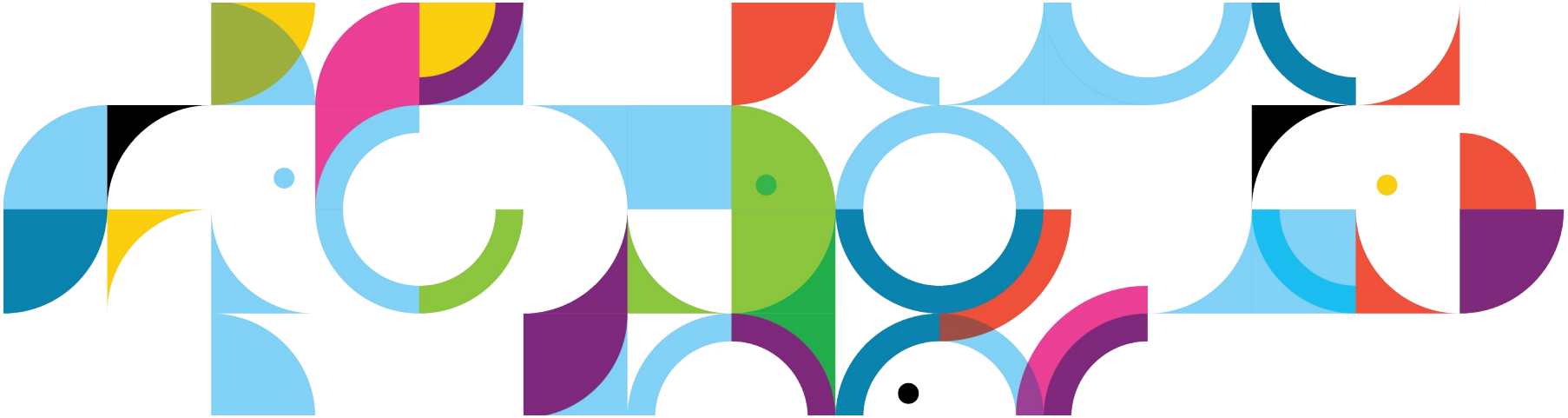
Migration best practices and post migration considerations for WebSphere Portal and WCM 8.0

Open Mic Webcast
IBM Support and Development

June 12, 2013



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Agenda

- Kick-off - Joseph John (Migration Development lead)
- WebSphere Content Manager Migration best practices - Chet Tuttle (WCM Level 3 Support lead)
- Exploiting Modular Themes, with demo - David Nixon (Chief Programmer, WebSphere Portal)
- Managed Pages and Migration - Hendrik Haddorp (WebSphere Portal development)
- Portal Page Migration Tool - Joseph John
- Q&A

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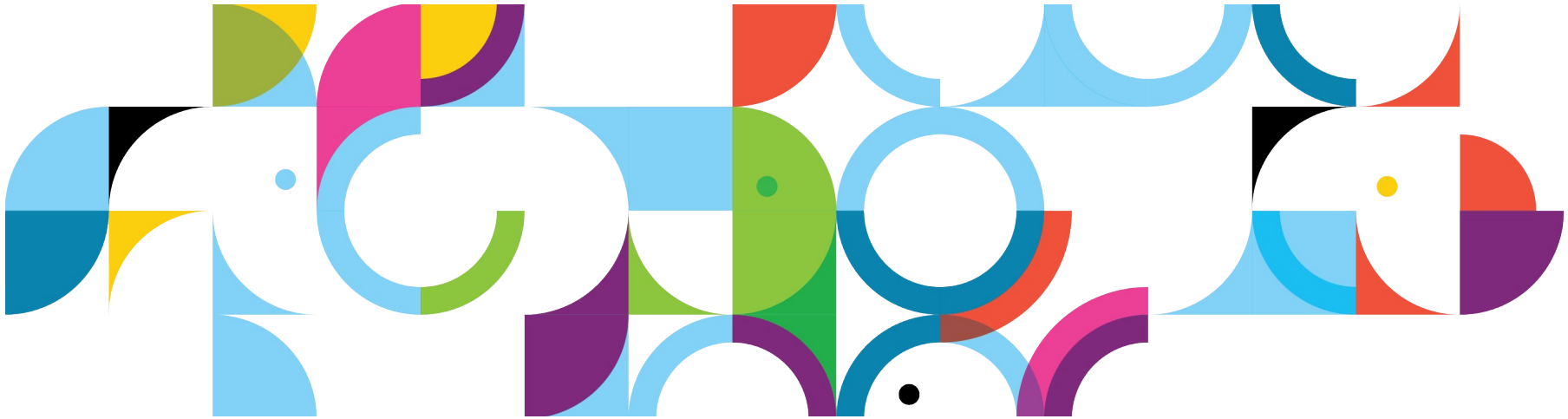
IBM Web Content Manager Migration Best Practices

Chet Tuttle | IBM Web Content Manager Development



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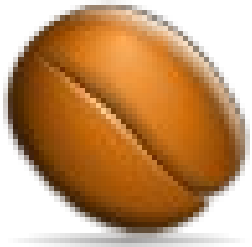
IBM Web Content Manager (WCM) Migration

- WCM plugs into the Portal migration.
  - Uses a set of Ant scripts, enterprise Java Beans, scripts.
  - There is no change in the process itself.
- Version 8 WCM Migration from version 6.1 or 7.0 to version 8.
- There is no supported content only migration path.

Ant



EJB

Scripts

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Before you begin WCM Migration

- Disable JCR text search indexing.
- ** Before migrating, remove any locks on web content items.
- Update the getNlsStrings.js file in Web Content Manager to work correctly the new version of portal (6.1.5).
- ** If the name of a web content library is the same as the URL context of a virtual portal, you can experience incorrect rendering behavior on v8. To prevent this issue, rename the library prior to migration.
- When migrating from version 7.0 to version 8.0, you must install the multilingual solution on your version 8.0 server prior to migrating.

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WCM Migration

- WCM node types are updated during the migration.
- Migration resumes where it left off in case of failure.
- WCM data can be remigrated
  See wiki article: Updating web content after migration

  http://www-10.lotus.com/ldd/portalwiki.nsf/xpDocViewer.xsp?lookupName=IBM+WebSphere+Portal+8+Product+Documentation#action=openDocument&res_title=Updating_data_after_migration_wp8&content=pdcontent

  - When you perform a post migration data update you will lose any changes you have made to the previously migrated content.
  - You should complete all post migration data updates prior to enabling managed pages.
    - When managed pages is enabled virtual portals lose access to the default portal libraries.

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WCM Migration (Multilingual System)

- When migrating from version 7.0 to version 8.0, you must install the multilingual solution on your version 8.0 server prior to migrating.
  - Customer's using ISSL multilingual solutions should discuss migration options with their local ISSL representative.
- You must also run the register-wcm-mls and deploy-wcm-mls configuration tasks after migration

See wiki article: Migrating from a previous multilingual system
http://www-10.lotus.com/ldd/portalwiki.nsf/xpDocViewer.xsp?lookupName=Documentation+for+Solutions+Catalog+for+V8#action=openDocument&res_title=Migrating_from_a_previous_multilingual_system_V8&content=pdcontent

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WCM Migration Content Template Catalog (CTC)

- When migrating from WebSphere Portal 7 to 8, content and pages created with CTC are migrated to WebSphere Portal 8 automatically.
  - Move the CTC 3 theme to the Portal 8 server to preserve the designs.
    See wiki article: Upgrading the Content Template Catalog 3 theme to IBM WebSphere Portal 8
    http://www-10.lotus.com/ldd/portalwiki.nsf/xpDocViewer.xsp?lookupName=Documentation+for+Solutions+Catalog+for+V8#action=openDocument&res_title=Upgrading_the_Content_Template_Catalog_3_theme_to_IBM_WebSphere_Portal_8_V8&content=pdcontent
- Install CTC on 8.x after migration is complete.
  - If you have modified items in the CTC Demo or the CTC Process libraries, install and then reapply your changes.
- If also upgrading to a more recent version of CTC, additional steps are required.
  - To migrate pages created with CTC 3 or 3.1 to work with style changes delivered in CTC 4.0, you must update the page layout.
    See wiki article: Preserving theme changes after upgrading Content Template Catalog
    http://www-10.lotus.com/ldd/portalwiki.nsf/xpDocViewer.xsp?lookupName=Documentation+for+Solutions+Catalog+for+V8#action=openDocument&res_title=Preserving_theme_changes_after_upgrading_Content_Template_Catalog_V8&content=pdcontent

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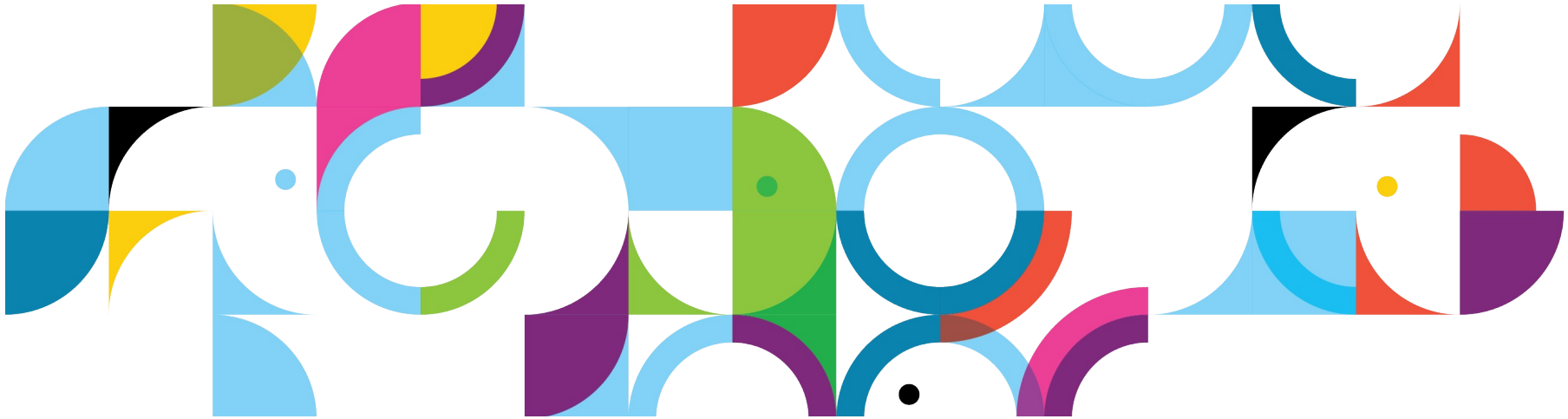
Exploiting Modular Themes

David Nixon | Chief Programmer WebSphere Portal 8.0.0.1



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6.x/7.x Toleration

- Current 6.1.x/7.x themes work great in 8
  - Older themes do not have 8.0.0.1 features
- Dojo – context root
  - Moved from /portal_dojo to /wps/portal_dojo
- Legacy layout vs new layout
  - New layouts required to exploit some new features
- Please contribute:
  - For Q&A portion – what pain points have you found in migrating your old themes
  - No new features – just get old theme working on new Portal?

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Exploitation - Add 8.0.0.1 Features - 6.1.x/7.x Theme

- Leverage new features
  - Add the Portal 8 shelf/toolbar
  - Manage pages
  - Impersonate
  - Analytics
- Better performance
  - Select only the features you need
  - Combine js and css
- Best Practice for Exploitation - Start with Portal 8.0.0.1 theme
  - Already modular
  - Restyle to your theme
  - Retro fit navigation and layouts

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Steps for Page Builder 1

- Copy 8.0.0.1 theme – see doc
- Copy your custom css to webdav
- Dissect your Default.jsp into sections
  - Use sections as new dynamic spots
  - Example: Find the section for top nav and create new dynamic spot for this
  - Reuse the 8.0.0.1 navigation.jsp as much as possible
  - **Keep** toolbar/shelf from 8.0.0.1
  - **Keep** the newer search widget from 8.0.0.1
  - **Keep** newer dojo level (1.7) from 8.0.0.1 – do not use your older dojo
- Move any inline css js to modules
- Recreate custom layout and add to webdav
- Changes
  - 1 new profile, 1 new module, 1 changed css, 5 new/copied css, 4 new/copied js, 4 new jsp, 2 changed jsp

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Demo

- Compare Page Builder theme from Portal 6.1.5 to Modular version

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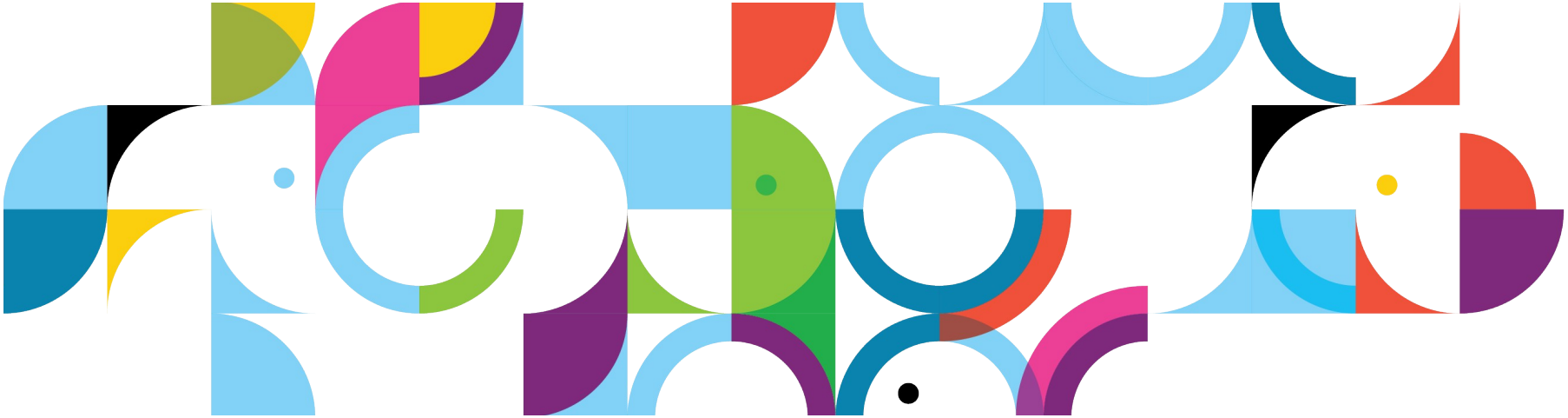
Managed Pages and Migration

June 12, 2013

Hendrik Haddorp | Portal Development



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What are managed pages?

- Pages can be managed in the Web Content Manager system
  - you can choose to not enable this feature and have the V7 behavior of portal and WCM
- Portal pages can be treated like any content
  - you can create drafts of them
  - you can preview them in a project together with other content
  - you can workflow and approve them (requires WCM license)
  - you can version them (requires WCM license)
  - you can syndicate them to the upstream systems
  - you can create content directly under a portal page
- This allows business users to take full control over the management and publication of pages

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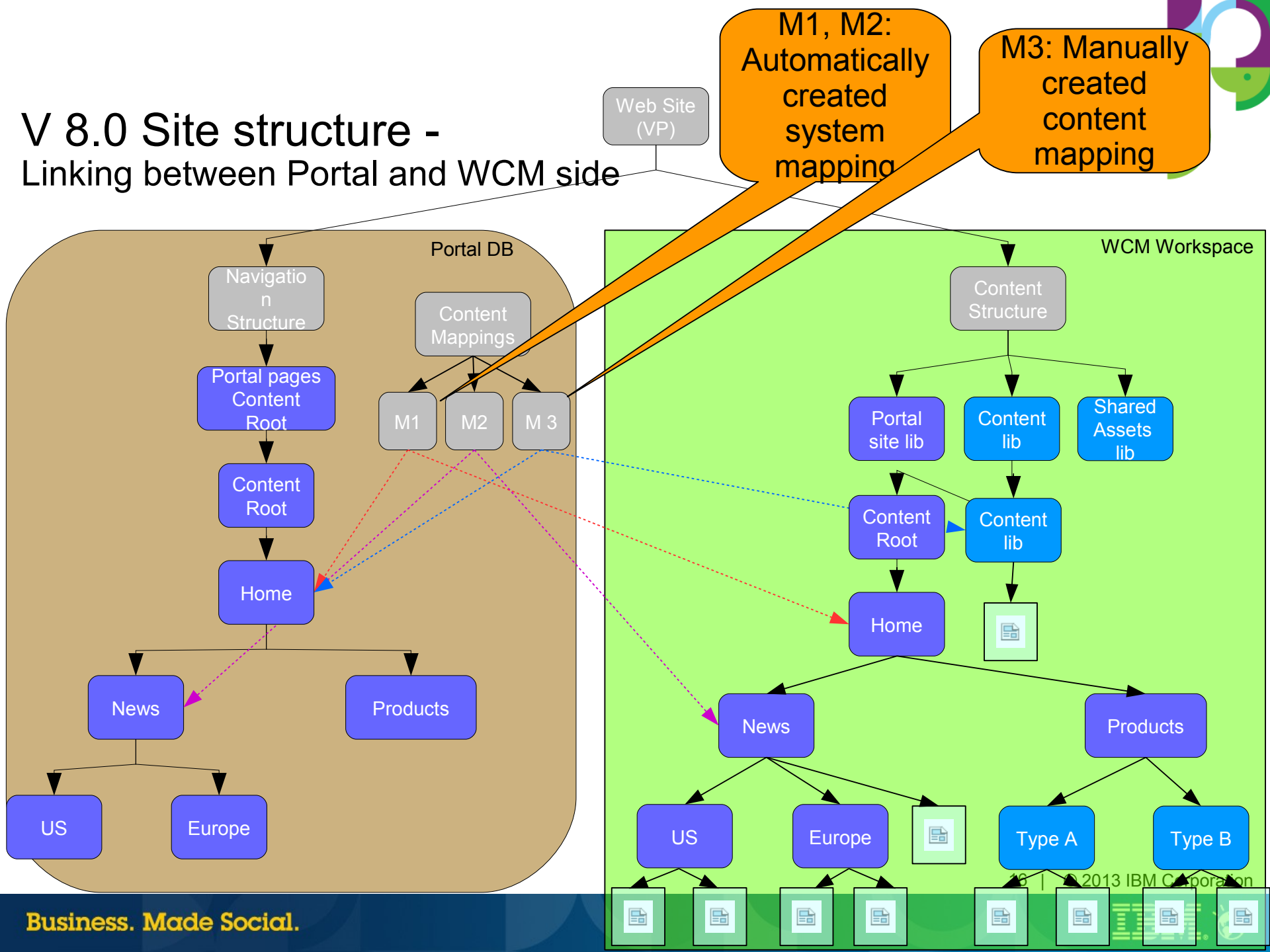
V 8.0 Site structure -
Linking between Portal and WCM side



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Prerequisites of managed pages

- When migrating managed pages is turned off
  - to enable it see http://www-10.lotus.com/ldd/portalwiki.nsf/xpDocViewer.xsp?lookupName=IBM+WebSphere+Portal+8+Product+Documentation#action=openDocument&res_title=Enabling_managed_pages_wp8&content=pdcontent
- The managed pages UI is tied to the new V8 theme
  - if you don't want to migrate to the V8 theme you need to add your own managed pages support to the theme
  - the new V8 theme only allows editing of static pages
  - there is a page migration tool available
    - https://greenhouse.lotus.com/plugins/plugincatalog.nsf/assetDetails.xsp?action=editDocument&documentId=5190EB71148A2EC485257B2400510466
- Managed pages itself does also work with dynamic pages, but those need to be updated via the portal admin UI

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Excluding pages from being managed

- Only manage the pages that you want to have syndicated to your downstream environments in WCM, exclude the branches, like Admin, that should not be syndicated
- Should only be used on toplevel nodes, like Search or Applications
- Per default there are copies of all pages in WCM except the Administration pages
- Only pages in the release domain are managed in WCM
- Managed pages should not have references to not managed pages
- When a page is created or imported it is checked if the parent is managed in WCM, if yes, the new page will also get managed in WCM
- Via xmlaccess it is possible to create unmanaged pages below a managed page
  - content-mapping-info element has a new flag: has-system-mapping = false
- Note: there is no indication in the UI if a page is managed in WCM or not. Thus excluding parts of a site may lead to a very confusing end user experience. Ideally all pages that can be edited by non admin users should be managed.

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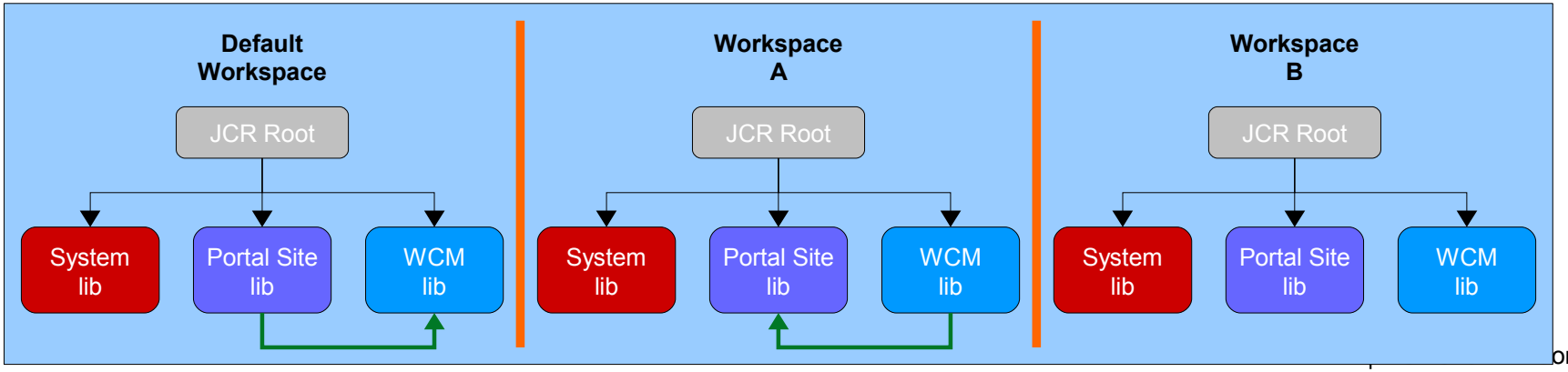
Overall WCM 8.0 Data Model

- New: multiple workspaces
  - Only when Managed Pages is enabled
  - Every Virtual Portal has its own workspace
    - The life cycle of the workspace is connected to the Virtual Portal
    - The mapping can not be changed
  - References can only be within one workspace
    - WCM references can not cross Workspace boundaries
  - Items with the same UUID can exist in every Virtual Portal
- The “set access on root” in the Web Content Library management portlet is scoped to a workspace



orporation

Best practices: managed pages and VPs

- Manage the shared artifacts in the base Portal and production site pages in VPs
- Use syndication to transfer the shared data from one VP to the other
  - this has the advantage of allowing the downstream consumer its own pace of moving to new shared assets
  - If that is not acceptable and the 7.0 experience of sharing libraries across VPs is required you have to disable managed pages. The default workspace will be used for all VPs.
- If you share a lot of data using AC might be better then VPs

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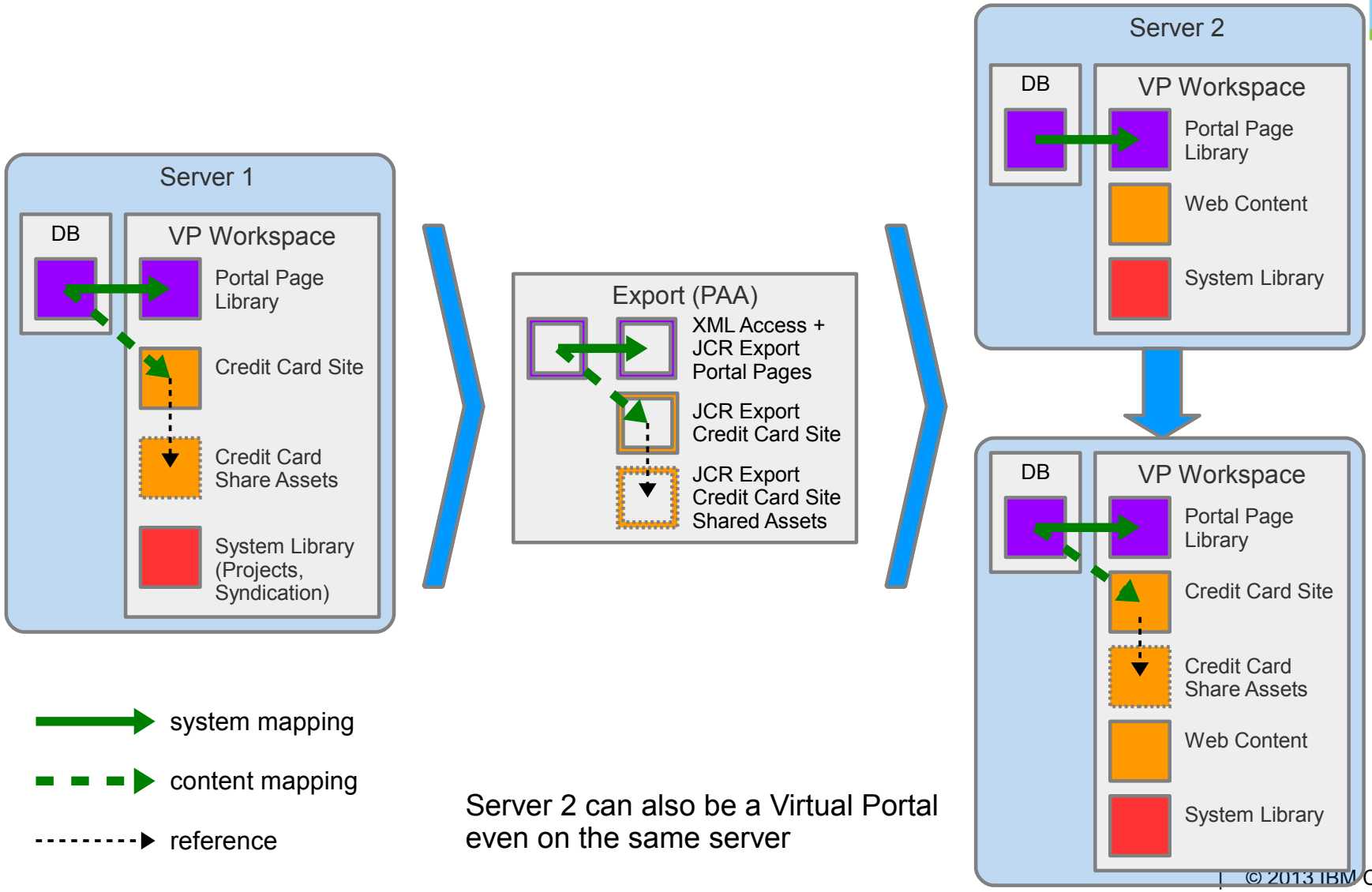
Initial deployment via Portal Application Archive (PAA)



Server 2 can also be a Virtual Portal even on the same server

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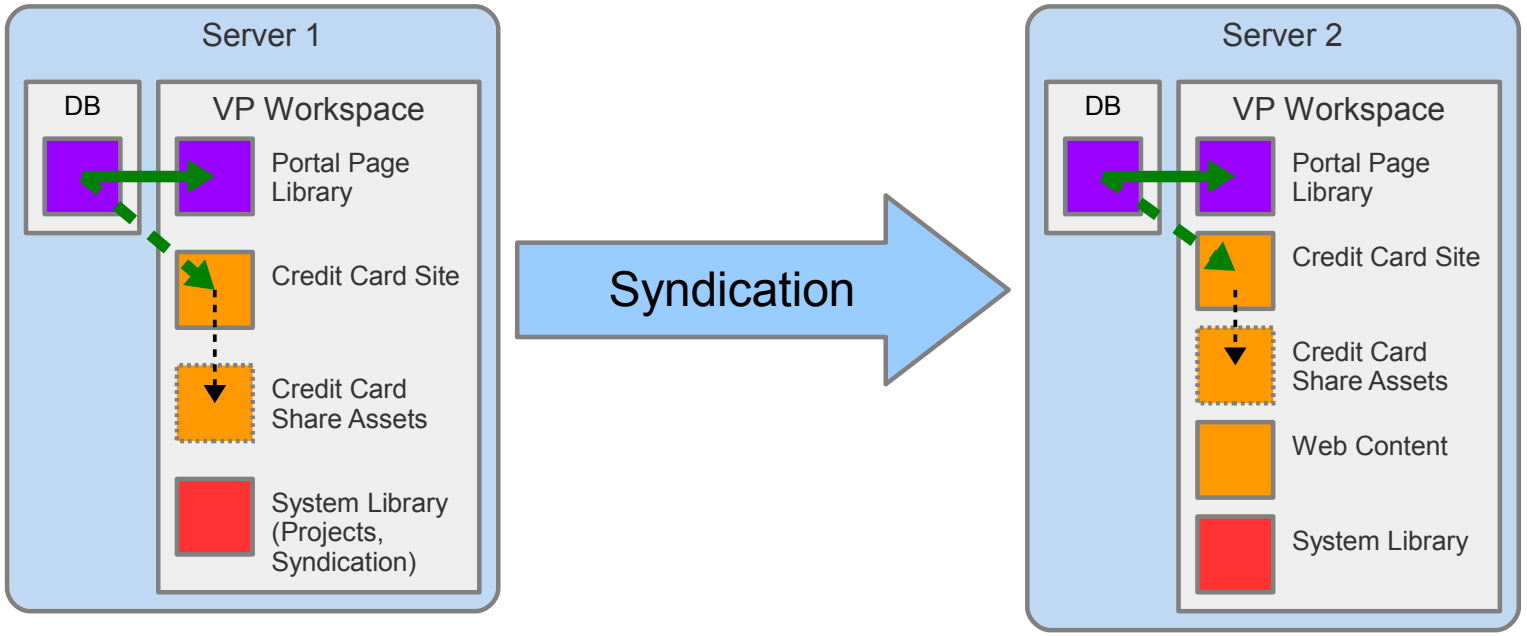
Updates via Syndication



Syndication also causes an update of the DB data

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Best practices

- Minimize conflicts when editing the web site
  - Use separate projects for different parts of the site structure
    - Avoid having two projects update the same page as they may override each others changes. The whole page is one entity.
  - Coordinate changes to a project across users
    - If you have multiple user update the same part of a site have them do it in the same project to see each others changes
  - Coordinate unique names across projects
    - Avoid creating duplicate unique names in separate projects, have a unique naming scheme for the unique names
- Use unique friendly URLs with managed pages
  - ensure that the friendly URLs are unique
- Don't store environment specific info in pages
- Create links in web content to portal pages
  - use WCM links to create links to portal pages. That will add referential integrity to those links.

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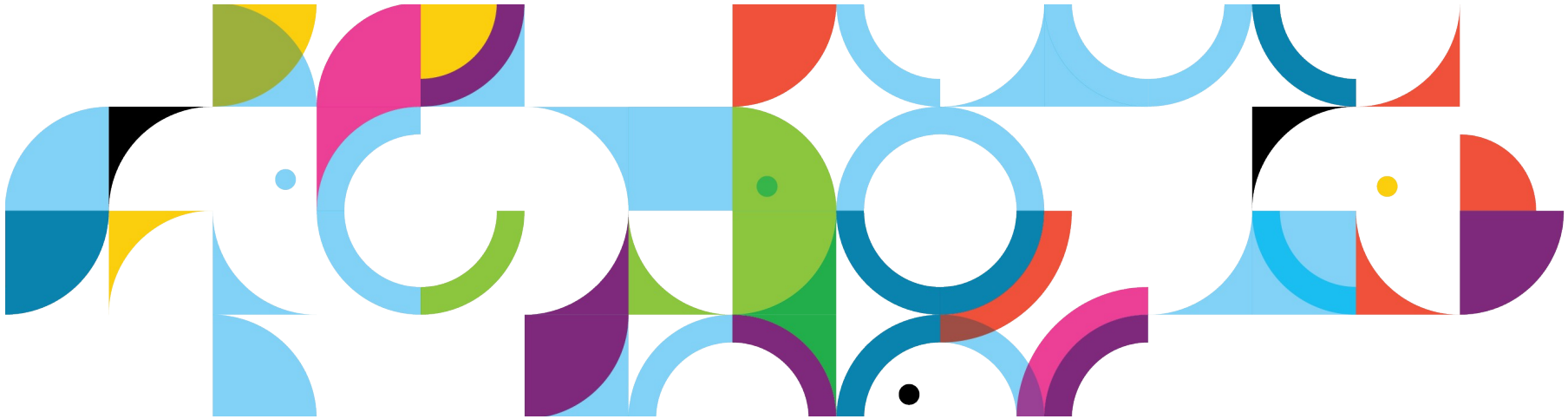
Portal Page Migration Tool
Open Mic
June 12, 2013

Joseph John | Portal Migration Development Lead

IBM Collaboration Solutions



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What are Static Pages?

- Pages are broken up into named sections
- Each named section is a div that can have its specific styles applied
- Information of the page sections and styles are stored in layouts
- Layout information is stored in the pages
- Static pages can refresh layout changes
- Benefits
  - Fully utilize WCM 8 UI features
  - Portal 8 page workflows
  - Allows responsive web design features
  - Apply specific styles to sections in pages
  - DIVs allow better performance that standard page table structures

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Portal Page Migration Tool

- Staticpages are not required on Portal 8
- Pages should be migrated before generating new static pages
- Converts Standard Portal Pages into Static Pages
- Page Conversion is done using XSLT and Java
- Original exported pages are not modified
- Provides analysis of original pages to determine their layouts
- Displays statistics with a break down of all the layouts, how many pages use each layout, and a list of each of the pages
- Fully automated – except for copying wireframe layouts to the Portal 8 Server
- Creates wireframe layouts that can be used on Portal 8

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Files

- ppm.jar – Contains source code that runs the conversion
- Settings.xml – settings for page conversion
- LayoutTemplates.xml – Portlet Container settings for each Portal 8 layout
- layouts/<LayoutName>.xml - Defines standard layouts that will be used by the ppm tool to the layouts of the standard pages
- wireframes/<layoutName>/ - Wireframe layouts that can be uploaded to Portal 8 Server
- ppm.log

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Usage

- java -jar ppm.jar -setup
- java -jar ppm.jar -analyze <inputPath>
- java -jar ppm.jar -migrate <inputPath>

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Default Settings.xml

```
<?xml version="1.0" encoding="UTF-8"?><settings>
    <variable name="isStrictLayoutMatch" value="false"/>
    <variable name="layoutLocation" value="dav:fs-
type1/themes/Portal8.0/layout-templates/"/>
    <convertLayout from="1Column" to="1Column"/>
    <convertLayout from="2Column" to="2ColumnEqual"/>
    <convertLayout from="3Column" to="3ColumnEqual"/>
    <convertLayout from="Header2Column"
to="TopColumn2ColumnUnequal"/>
    <convertLayout from="Header2ColumnFooter"
to="Header2ColumnFooter" location="dav:fs-type1/wireframe/layout-
templates/" />

</settings>
```

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Additional Settings

```
<convertSkin from="oldSkin" to="newSkin"/>
<convertTheme from="oldTheme" to="newTheme"/>
```

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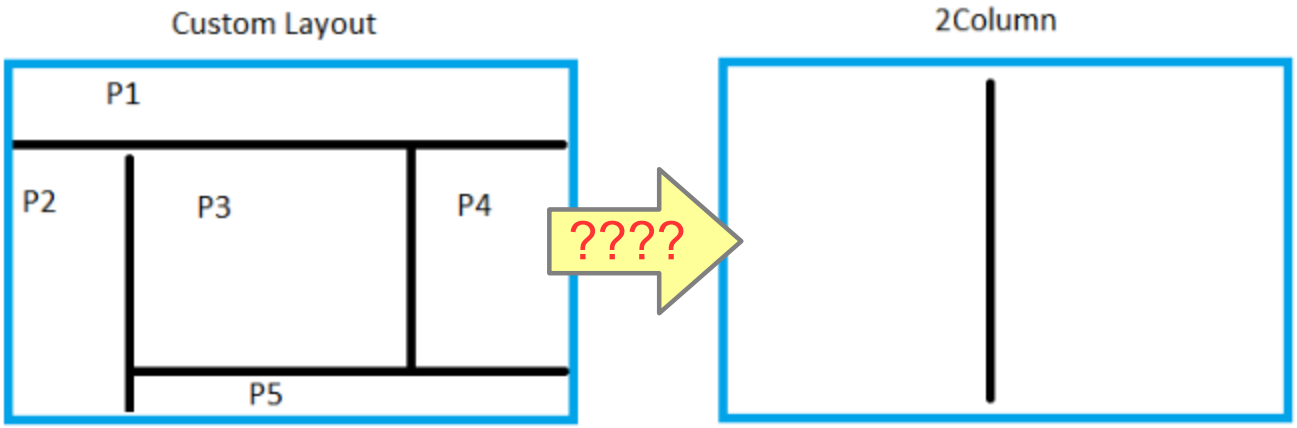
Portal Page Migration

- Layout for the page must exist before the page can be imported
- In PPM V1 – custom layout definitions had to be manually created, as well as the actual layouts for Portal 8 Server, and the settings and LayoutTemplates.xml needed to be manually updated to reflect the custom layouts



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Determining New Layout – PPM V2

- Detect the layout based on component nesting by comparing to defined layouts
  - Strict Mode also validated ordinal values, but is disabled by default

```
- ordinal: 100, orientation: H
  - ordinal: 100, orientation: V
  - ordinal: 200, orientation: V
  - ordinal: 300, orientation: V

Layout was not specified
Detected layout: 3Column
New layout: 3ColumnEqual
```

```
- ordinal: 100, orientation: H
  - ordinal: 100, orientation: V
  - ordinal: 200, orientation: V

Specified layout: 2columnRight
Detected layout: 2Column
New layout: 2ColumnRight
```

- If there is a matching layout conversion rule, use the rule
  - <convertLayout from="3Column" to="3ColumnEqual"/>
  - Note: Case sensitive
- If the layout is unknown,
  - Generate a custom layout definition
  - Cenerate a custom wireframe layout to upload
  - Add rule to Settings.xml for the custom layout
  - Populate custom section names in LayoutTemplate.xml

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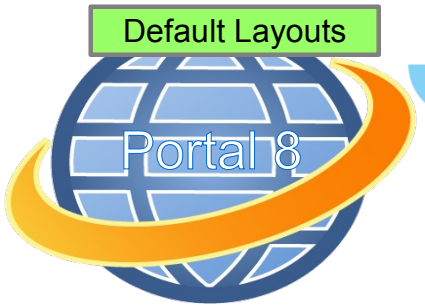
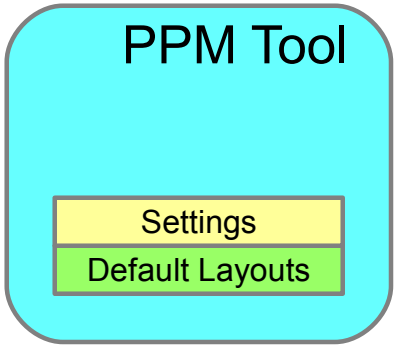
Portal 8 Static Pages

- Export pages
- Run analysis
- Run migration
- Upload Custom layouts
- Import new pages





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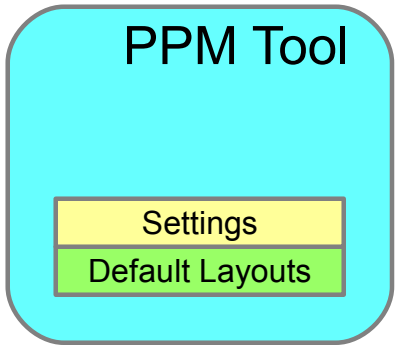

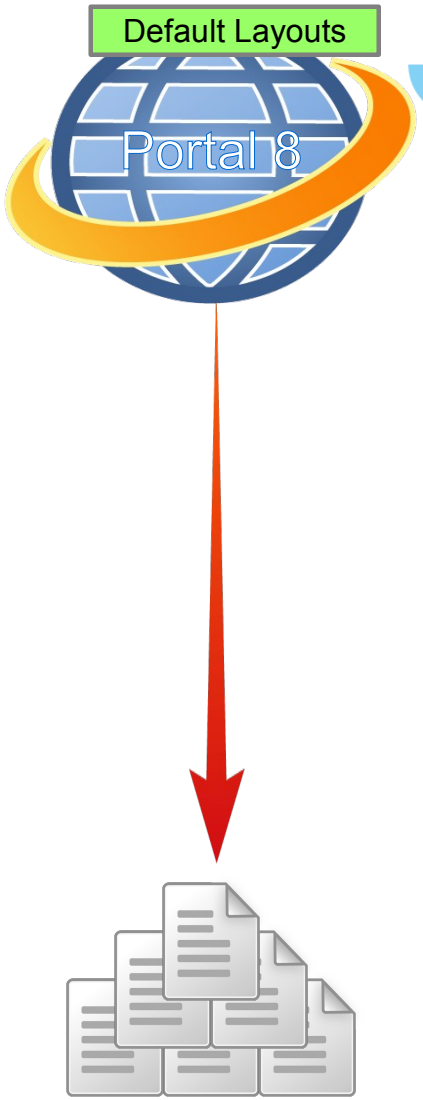

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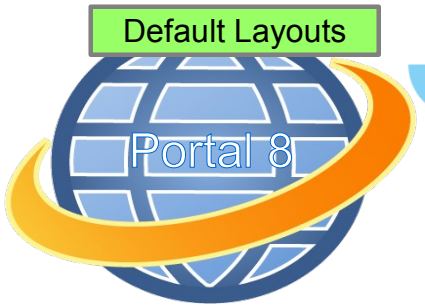

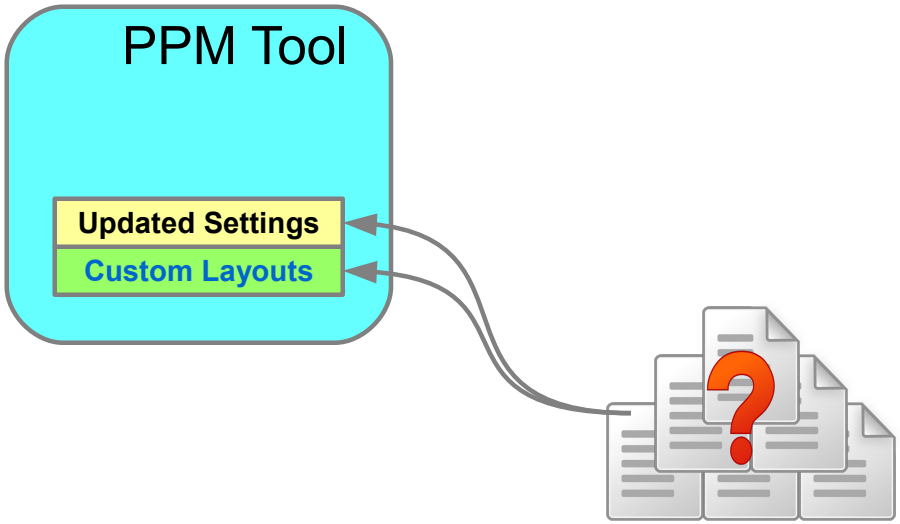

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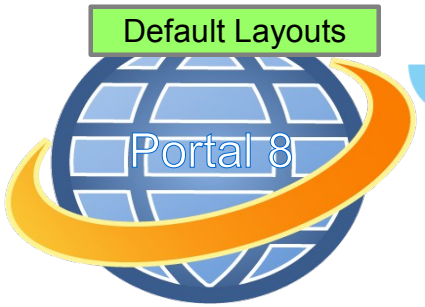

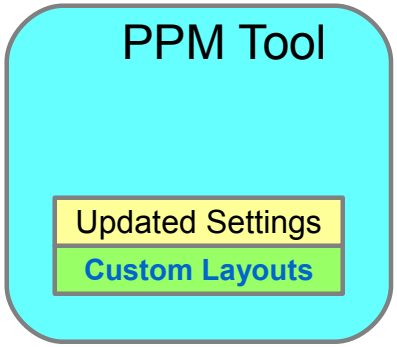

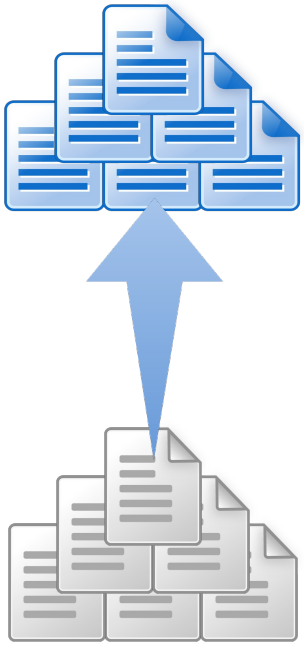

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Portal 8 Static Pages

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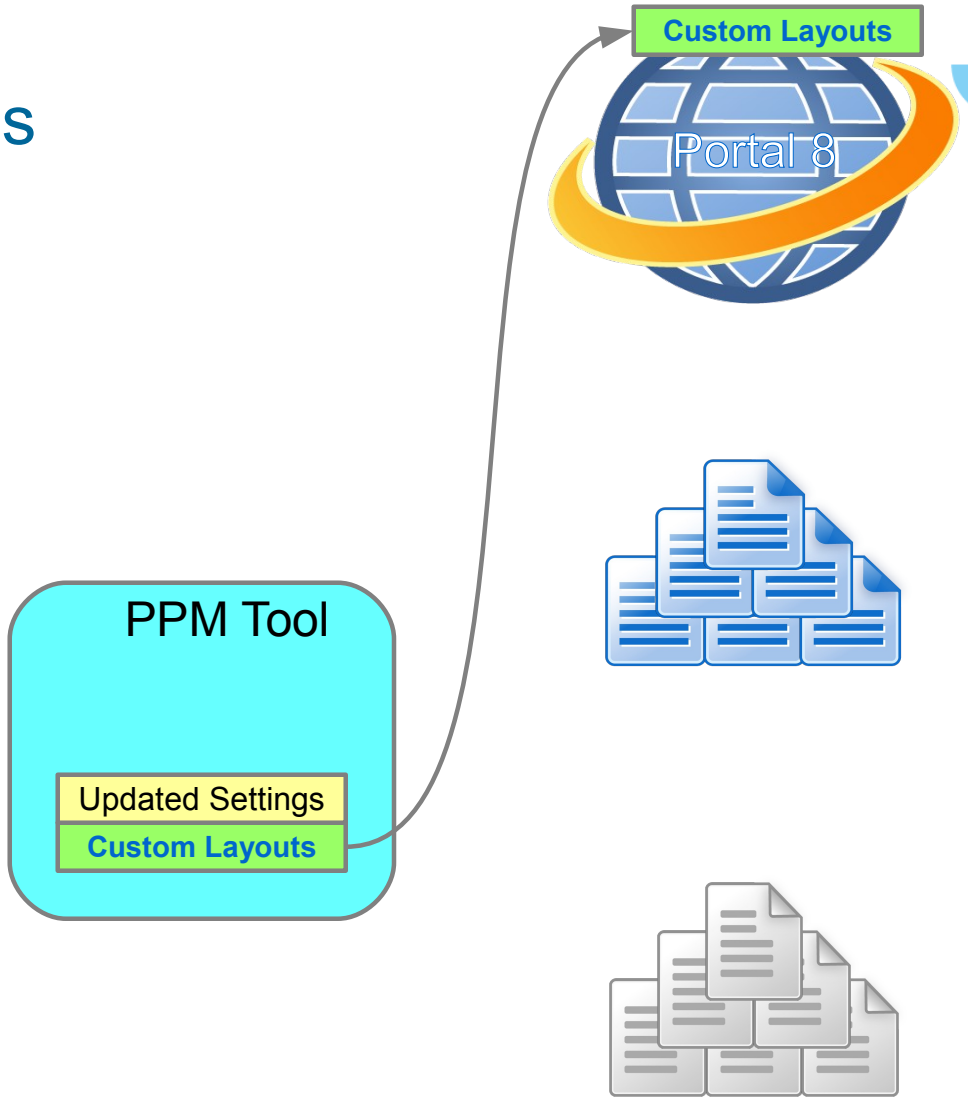

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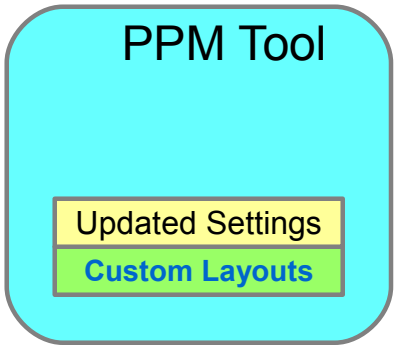
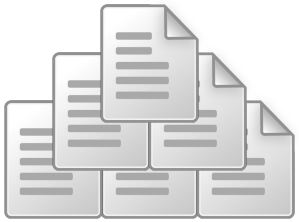
Portal 8 Static Pages

- Export pages
- Run analysis
- Run migration
- Upload custom layouts
- Import new pages
  - Original exported pages not modified





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Additional Tips

- Page migration does the required work to get the standard pages to static page format
- Custom wireframe layouts have generic names and no styling
- Layout location can be specified for each layout
- After Portal 8 theme and layouts are developed, the new layouts can be applied to pages
- Style is ignored in determining page layouts
  - If multiple layouts have similar structure (for example 5 different types of 3 column with different column widths, they are all seen a just 3 column)
- Derived/Shared Pages do not work
- Should not be run on staticpages
- Performance is tied to XML Size
  - Large XML files will increase XML operations such as XPath

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For more information

PPM Tool on Business Solutions Catalog
https://greenhouse.lotus.com/plugins/plugincatalog.nsf/assetDetails.xsp?action=editDocument&documentId=5190EB71148A2EC485257B2400510466

Developing Themes for WebSphere Portal
http://www-10.lotus.com/ldd/portalwiki.nsf/xpViewCategories.xsp?lookupName=Developing%20Themes%20for%20WebSphere%20Portal

IBM Customer and Employee Experience Suite, WebSphere Portal and Web Content Manager Software and Solutions
http://www.ibm.com/software/info/customerexperience/
http://www.ibm.com/software/collaboration/products/employeeexperience/

IBM WebSphere Portal and IBM Web Content Manager product documentation
http://www.ibm.com/developerworks/websphere/zones/portal/proddoc.html

IBM WebSphere Portal and Web Content Manager Version 8 Reviewer's Guide
ftp://ftp.software.ibm.com/common/ssi/ecm/en/lob14007usen/LOB14007USEN.PDF

IBM Web Experience Fast Track Offerings
http://www.ibm.com/software/genservers/portal/fasttrack/

IBM WebSphere Portal and Web Content Manager Business Solutions Catalog
https://greenhouse.lotus.com/catalog/

IBM WebSphere Portal Support page
http://www.ibm.com/support/entry/portal/overview/software/websphere/websphere_portal

IBM Web Content Manager Support page
http://www.ibm.com/support/entry/portal/overview/software/lotus/ibm_web_content_manager

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Press *1 on your telephone to ask a question.

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Addendum

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Portal Application Archive (PAA)

- PAA is the format for composite portal artifacts
  - can be installed via Solution Installer, which is part of V8
  - for V8.0 there is no export support shipped with portal
    - needs to be created “by hand”
    - PAA page exports are standard xmlaccess exports
  - export/import complete portals or sub-strutures down to a single page
- JCR import/export only on library level
- xmlaccess export will add the system web content mappings to the pages
  - it will also include the WCM UUIDs so that the JCR library export will automatically match
- xmlaccess import will re-create the system web content mappings
  - can be explicitly prohibited via the xmlaccess flag
    <content-mapping-info has-system-mapping="false"/>

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Import / Export

- On a managed pages enabled system you can
  - Only import the pages via xmlaccess
    - all content in the Portal Site library will be lost
    - new WCM portal pages nodes are created for the pages with a system mapping
  - Import the pages via xmlaccess and the Portal Site library (and other libs) via JCR import
    - first import libraries, then xmlaccess
    - will result in the same pages and content with the same OID/UUIDs as on the exported system
      - Note: drafts and older versions are not part of a JCR export
  - PAA
    - same as above, just bundled into one package
    - can include additional artifacts needed, like rules, portlets or themes/skins
- To export artifacts that are not managed in WCM you can use the ExportManagedPagesRelease.xml file that exports all portal artifacts except pages and wires.

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