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Performance is based on measurements and projections using standard IBM benchmarks in a controlled environment. The actual throughput or performance that any user will experience will vary depending upon many factors, including considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve results similar to those stated here.

The MOST Fundamental Integration Approaches

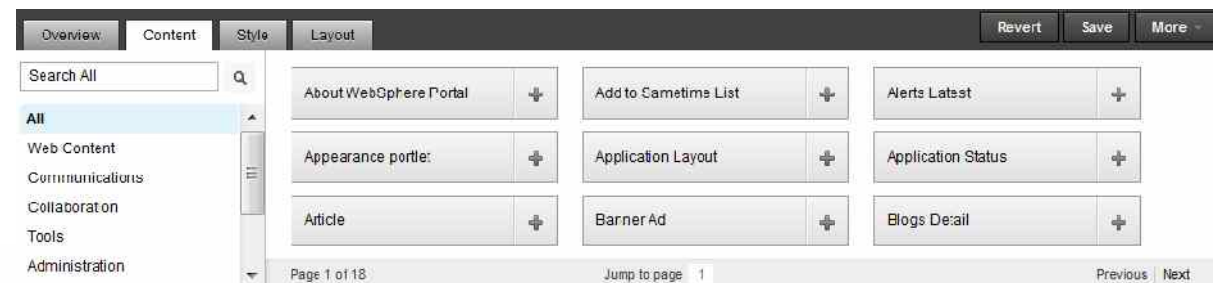
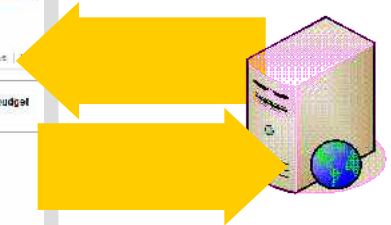


Integrating your IT: Reusable Building Bricks

- Reusable **Building Bricks**, which communicate to any backend system
 - JSR 286 Portlets
 - Others (iWidgets, ...)
- Implementation Options
 - Consume available building bricks:
 - IBM Connections Portlets,
 - Industry templates
 - Unified Task List, ...
 - Custom J2EE Development with Rational Application Developer
 - Custom code generation based on Web Experience Factory (use „Builders“ to easily connect to 300+ backend systems),
 - XML, JDBC,
 - SAP, Siebel, ...



JSR 362
is coming up



Web Experience Factory

Builder

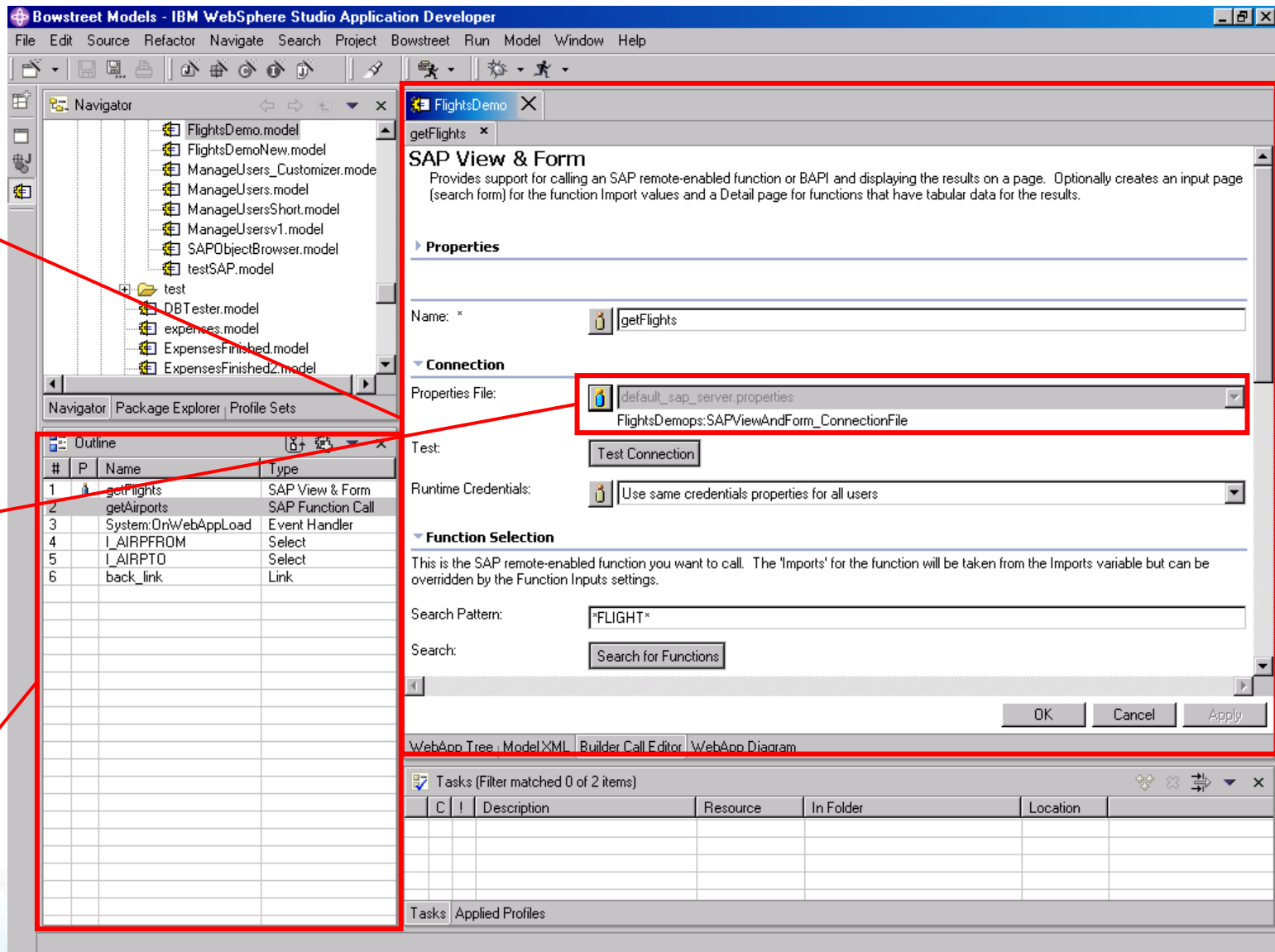
A reusable component that generates Java, XML and JSP for specific portlet functionality

Profile

A set of parameters that vary Builder inputs to dynamically generate unique versions of the portlet

Model

A container of Builders



Forms Experience Builder

Easy-to-use **web based design tooling** delivers powerful fill and submit experiences.

- **Complete tooling**

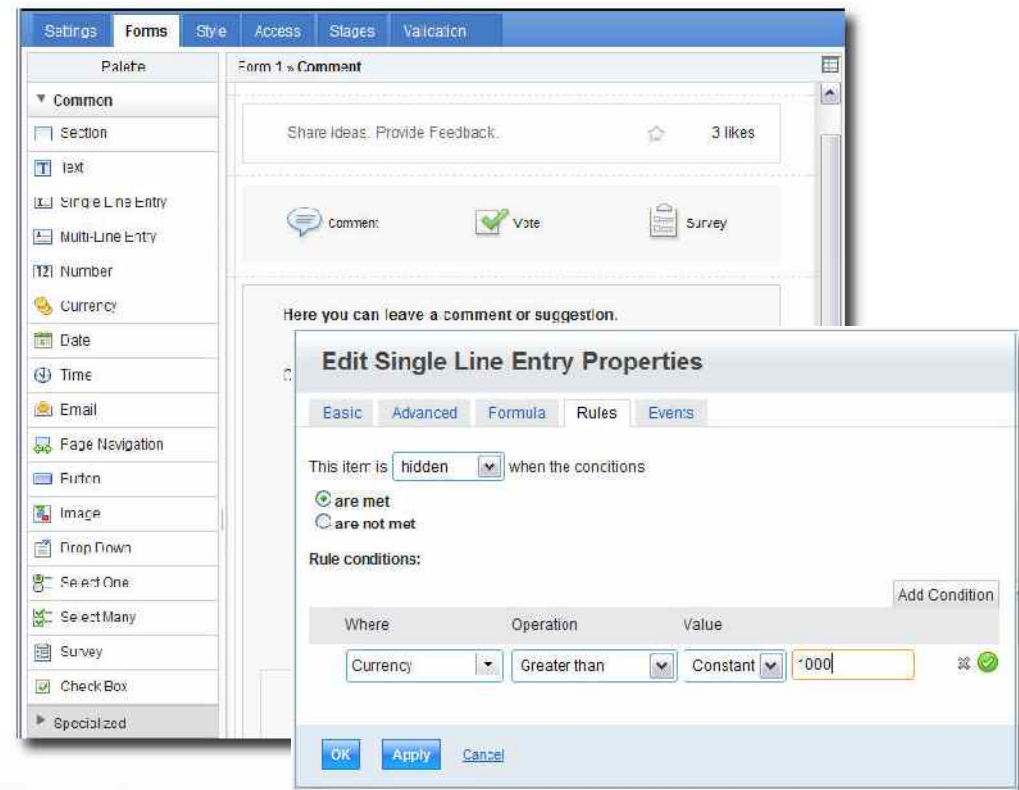
- Full set of web data capture items
- Flexible layout using grids & sections
- Graphical rules & formula editor
- Routing editor

- **Rapid development**

- Preassembled items with default values
- Automatic binding to data records
- Apply advance features quickly

- **Familiar techniques**

- Drag & drop design experience
- Easy discovery of item properties



Full data capture solution – **simple** to construct, **easy** to change, and **quick** to deploy.

Javascript Programming Portlet

Gold Card ▼ All Categories ▼ Last 30 Days ▼

Filter items...

November 20, 2012

Category is Restaurant

CHEESE CAKE FACTORY

21.55

Category is Restaurant

MCDONALDS

3.23

Category is Restaurant

BURGER KING

6.18

November 21, 2012

Category is Retail

GAMESTOP

Script Portlet Editor

script portlet content

Last modified Dec 21, 2013 12:41:54 PM GMT 05:30 by wpsadmin | Created by wpsadmin

Script Portlet Editor

script portlet content

Last modified Dec 21, 2013 12:41:54 PM GMT 05:30 by wpsadmin | Created by wpsadmin

Save

```

1 <title id='Description'>jQuery Chart Sample</title>
2 <link rel="stylesheet" href="http://www.jqwidgets.com/jquery-widgets-
  documentation/jqwidgets/styles/jqx.base.css" type="text/css" />
  style="background:white;">
  <div id='chartContainer' style="width:600px; height: 400px"/>

```

```

1
2
3 $(document).ready(function () {
4
5     // prepare chart data
6     var sampleData = [
7         { Day:'Monday', Books:30, Toys:15, Apparels: 25},
8         { Day:'Tuesday', Books:25, Toys:25, Apparels:
9           30},
10        { Day:'Wednesday', Books:30, Toys:20, Apparels: 25},
11        { Day:'Thursday', Books:35, Toys:25, Apparels: 45},
12        { Day:'Friday', Books:20, Toys:20, Apparels: 25},
13        { Day:'Saturday', Books:20, Toys:20, Apparels: 20}

```

Access to

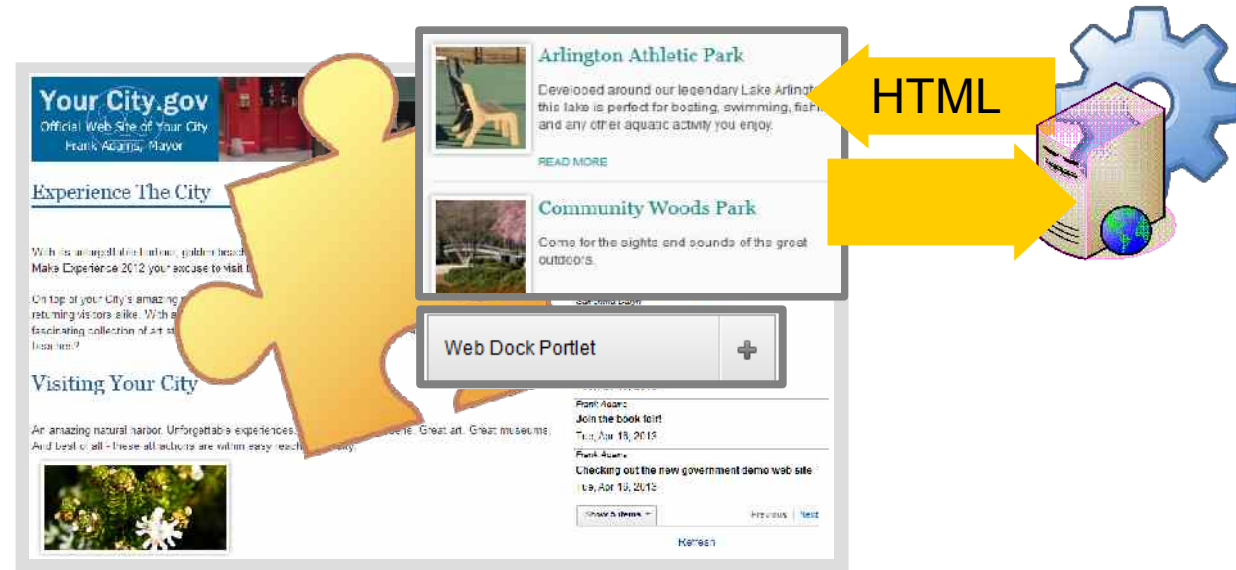
- Shared render parms
- Portlet preferences
- Portal AJAX proxy
- Script snippets
- Portal Styles
- etc

Managed by WCM

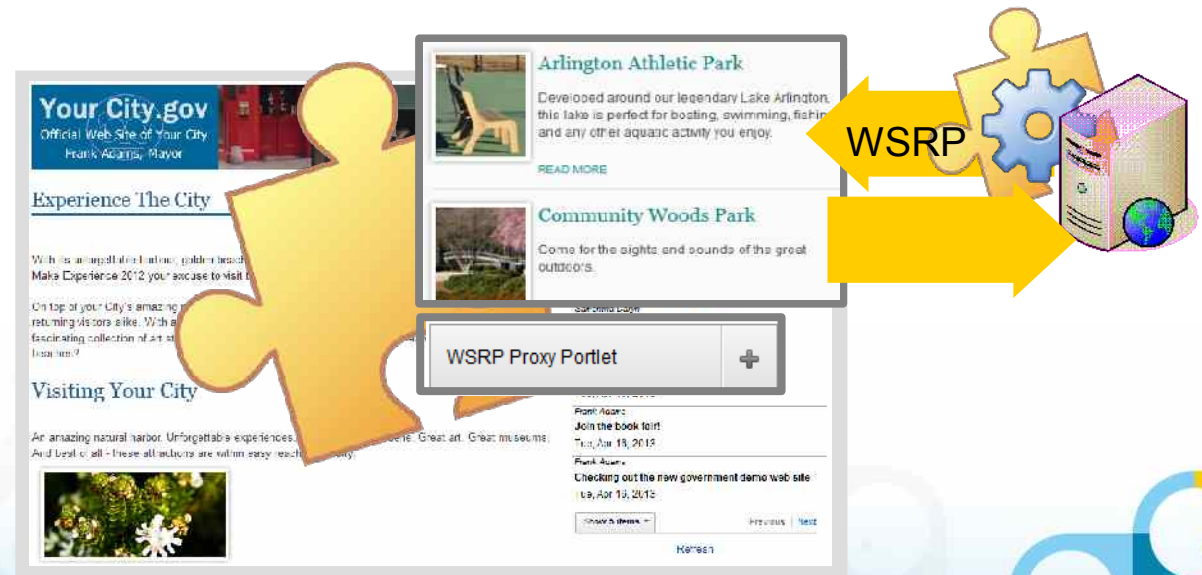
- Updates can be made in a project, previewed in isolation, approved, etc
- Changes can be published without an IT help

Integrating your IT: Generic Building Bricks (no coding!)

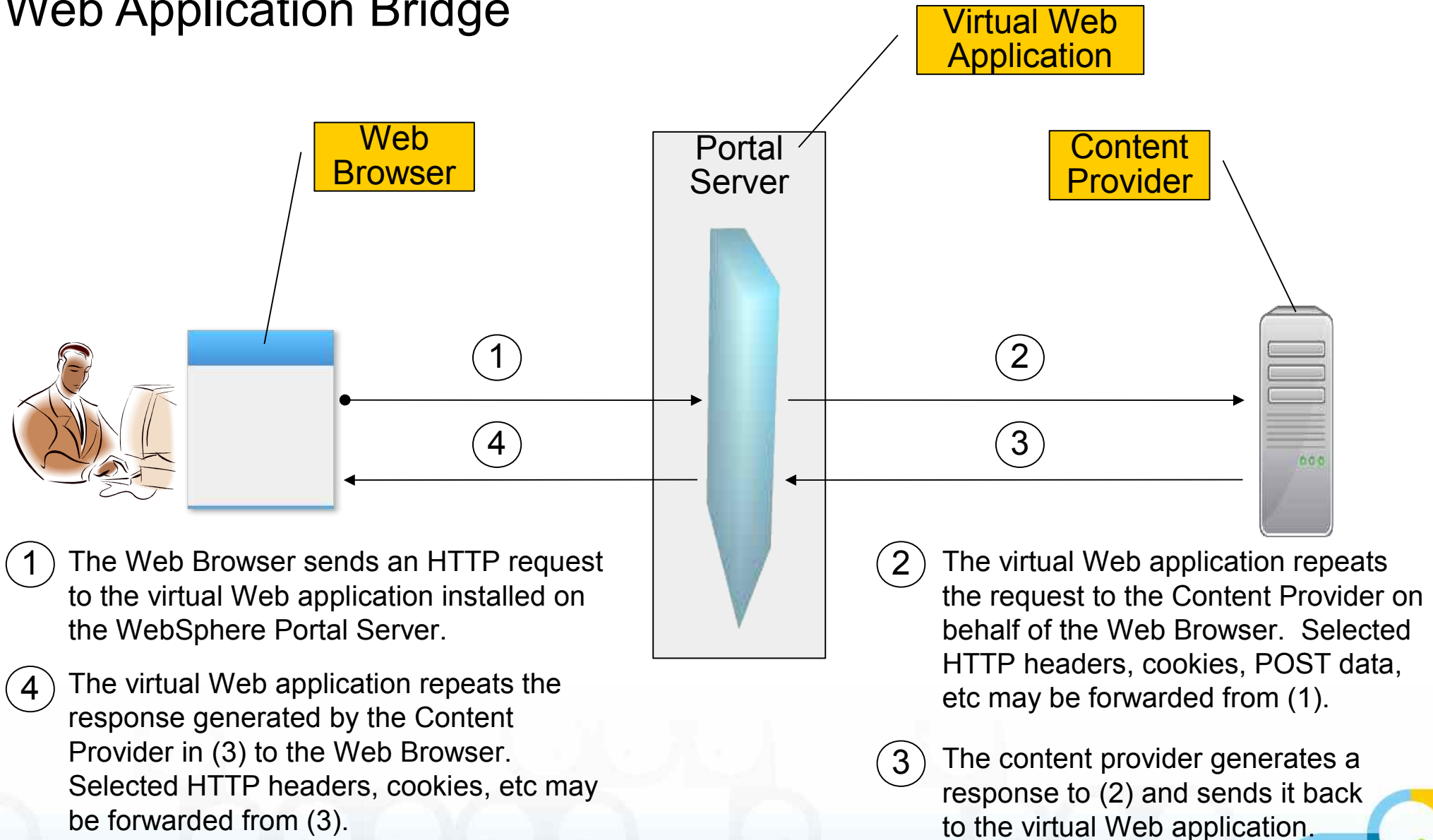
- Generic Building Brick to integrate external **markup** and presentation information
 - Web Application Bridge (Webdock portlet)
 - Setup: Configure proxy connection to existing legacy web application
 - Example: Sharepoint, SAP, ...



- Generic **WSRP Consumer** to integrate external markup based on WSRP 2.0 spec
 - WSRP Proxy Portlet (WSRP Consumer)
 - Setup: Configure proxy connection to existing WSRP producer service

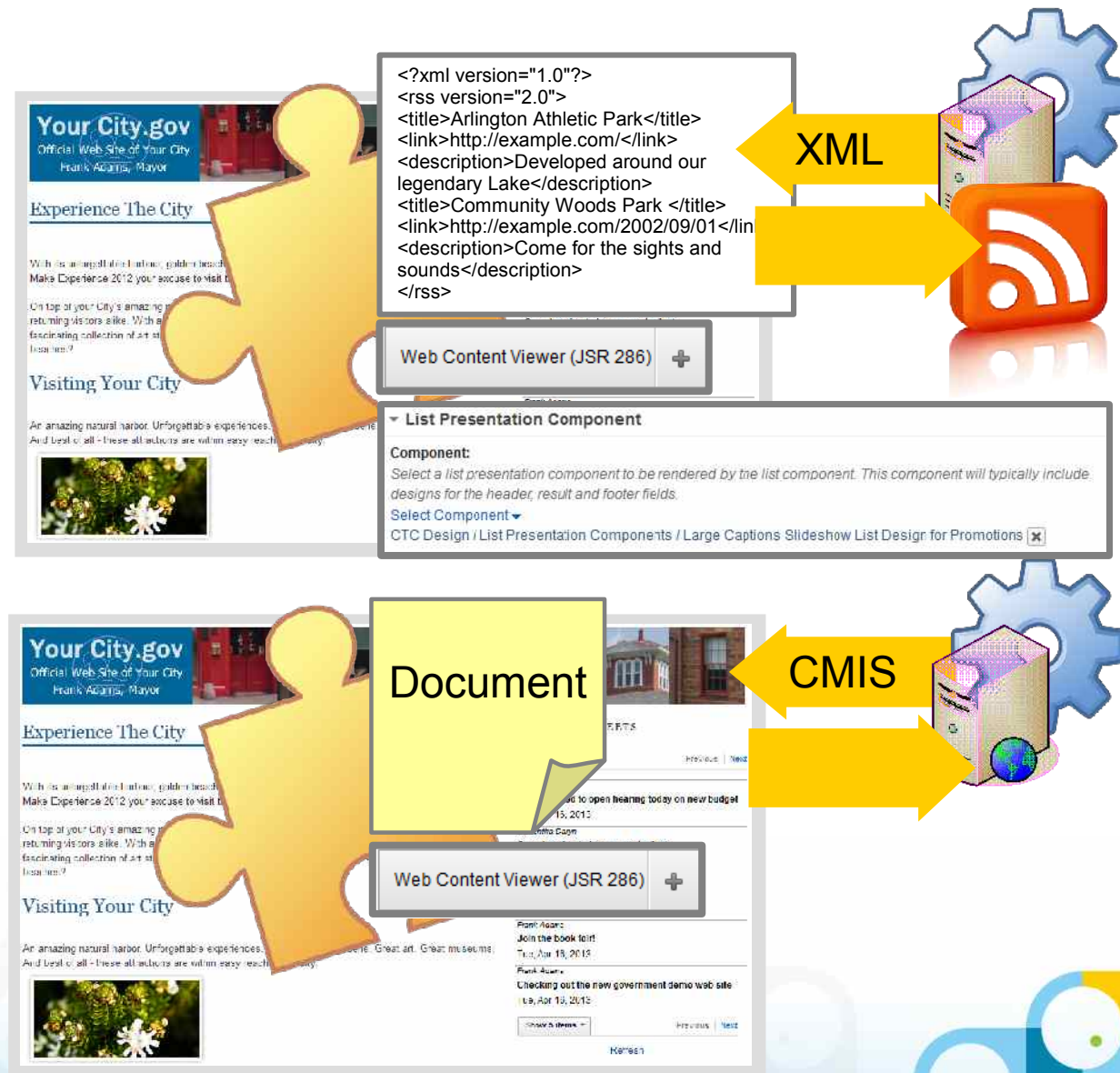


Web Application Bridge

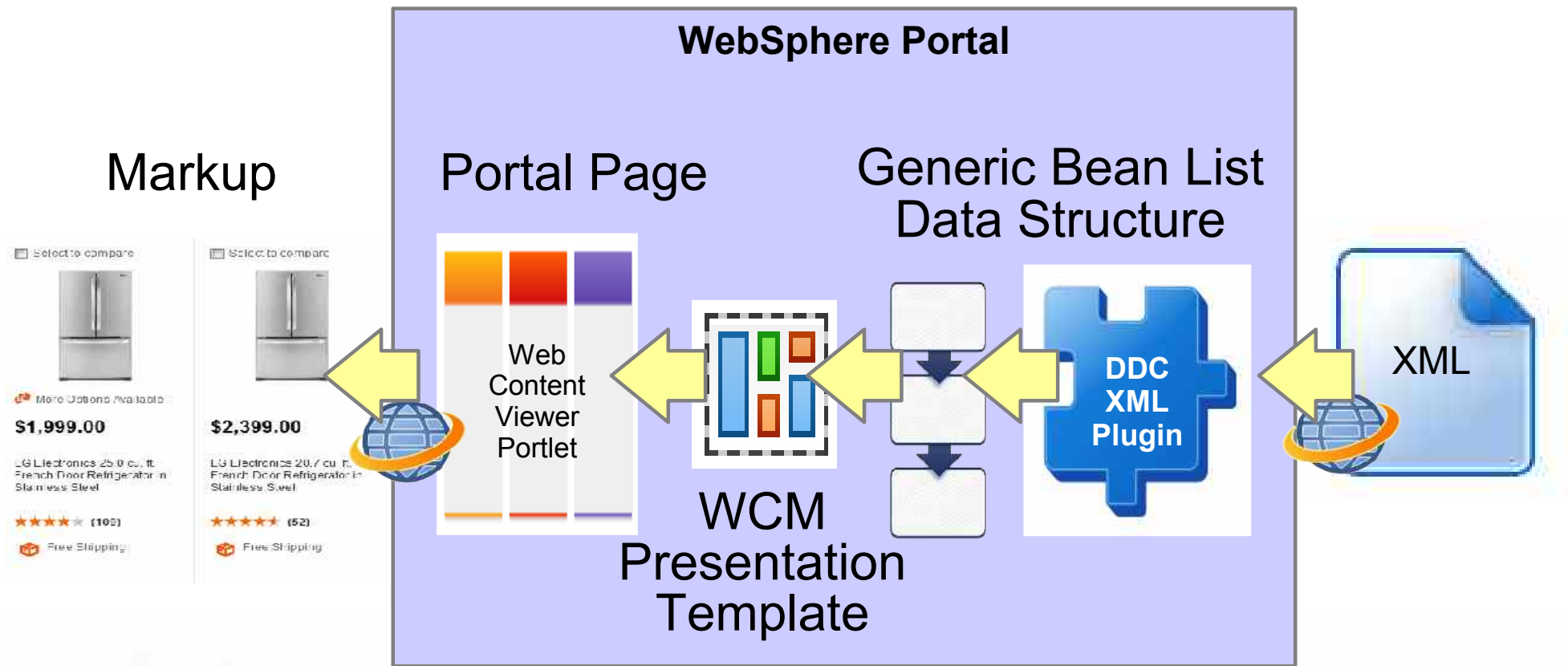


Integrating your IT: Generic Building Bricks (no coding!) *cont'd*

- **Digital Data Connector:**
Generic Building Brick to integrate external **data** and feeds
 - Generic Rendering Portlet
 - Setup: configure mapping of XML data to WCM presentation template
 - Example: IBM Connections, Vivisimo, Omnifind, Commerce, any news feeds, any RSS/ATOM data from external systems
- Generic Building Brick to integrate **external documents** based on the CMIS Spec
 - Generic Rendering Portlet
 - Setup: configure reference to document or folder
 - Example: Sharepoint, filenet



Digital Data Connector (DDC): Concept




Digital Data Connector (DDC): Examples

SPIEGEL ONLINE - Schlagzeilen

Dec 13, 2013 12:05:01 PM CET
Deutschlands führende Nachrichtenseite. Alles Wichtige aus Politik, Wirtschaft, Sport, Kultur, Wissenschaft, Technik und mehr.

Fallschirmhunde im Zweiten Weltkrieg

Dec 13, 2013 9:43:22 AM CET




Luftsprung, La...
Deutschland s...
auf eine ungev...
verführerische...
Helden nicht i...

Weiterlesen auf Spiegel Online...

Geheimaktion: Beyoncé veröffentlicht ihr neues Album

Dec 13, 2013 9:35:00 AM CET



Marketingcoup...
veröffentlichte die R&B-Sängerin Beyoncé ihre neue Platte exklusiv auf iTunes - ganz ohne Vorankündigung. Das Album sei fertig, jetzt wolle sie es ihren Fans direkt zukommen lassen.

Weiterlesen auf Spiegel Online...

Fußball-WM in Brasilien: DFB baut sich eigenes Quartier

BBC News - Business

...s from the Business section of the BBC News web

...es fall 16% as chief quits

...SA Insurance Group fall 16% after the firm's chief executive, Sir...
...s amid deepening problems at its Irish unit.

...e calls to helplines to end

...o complain about faulty goods will no lon...
...overnment has announced

...ber pick-up

...stry rose by 2.2% in October, fuelled by a...
...fice for National Statistics says.

...share sale

...ll more than 11% after General Motors se...
...ker that it bought last year.

...m funding

...ple trade Bitcoins, raises \$25m (£15m) i...

1 | 2 | 3 | ... Previous

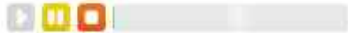
British Broadcasting Corporation, see
...oo.uk/2/hi/help/rss/4498287.stm for terms and conditions of reuse.

CNN Radio News

CNN Radio brings you an in-depth update on the news every Monday-Friday evening. Posted at 4:30pm eastern this podcast gives you personal stories you won't get anywhere else, as well as catching you up on some of the headlines of the day. (15-20 minutes)

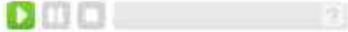
CNN Radio News Day: June 25, 2013

26 Jun 2013 | Category: News & Politics | duration: 25:01



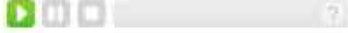
CNN Radio News Day: June 24, 2013

24 Jun 2013 | Category: News & Politics | duration: 21:10



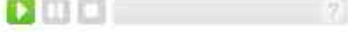
CNN Radio News Day: June 21, 2013

21 Jun 2013 | Category: News & Politics | duration: 25:51



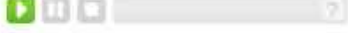
CNN Radio News Day: June 20, 2013

20 Jun 2013 | Category: News & Politics | duration: 29:22



CNN Radio News Day: June 19, 2013

19 Jun 2013 | Category: News & Politics | duration: 31:00



1 - 5 of ... 1 | 2 | 3 Previous Next

2013 Cable News Network LP, LLLP. A Time Warner Company. All Rights Reserved.

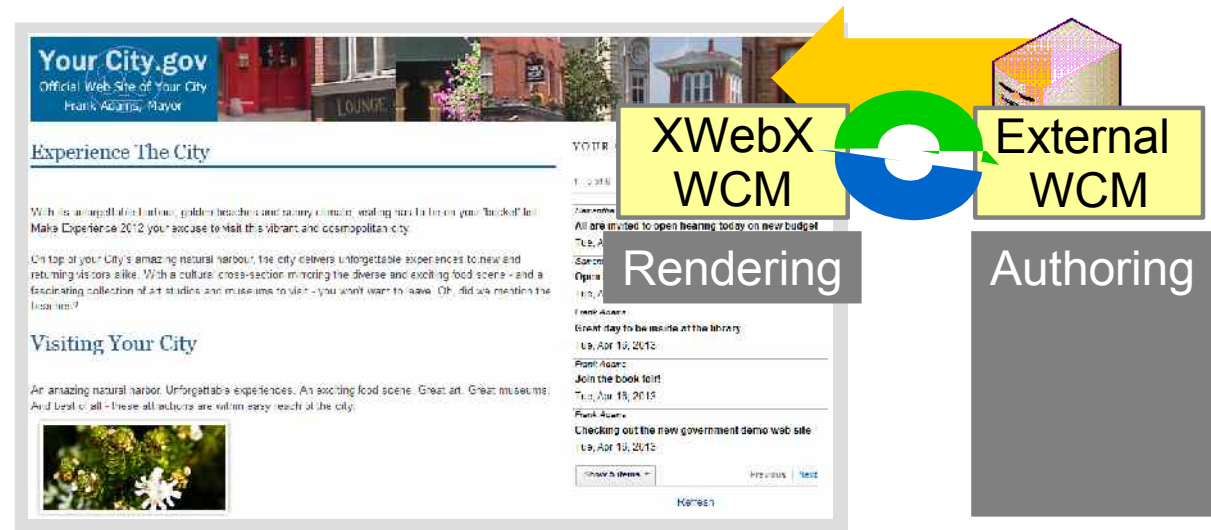
Local Files

Current Folder: /opt/WebSphere/wp_profile/ConfigEngine

- ..
- config
- log
- properties
- uninstall
- base_dynamic.xml (75159 bytes)
- ConfigEngine.bat (1161 bytes)
- ConfigEngine.sh (978 bytes)
- registry.xml (170057 bytes)

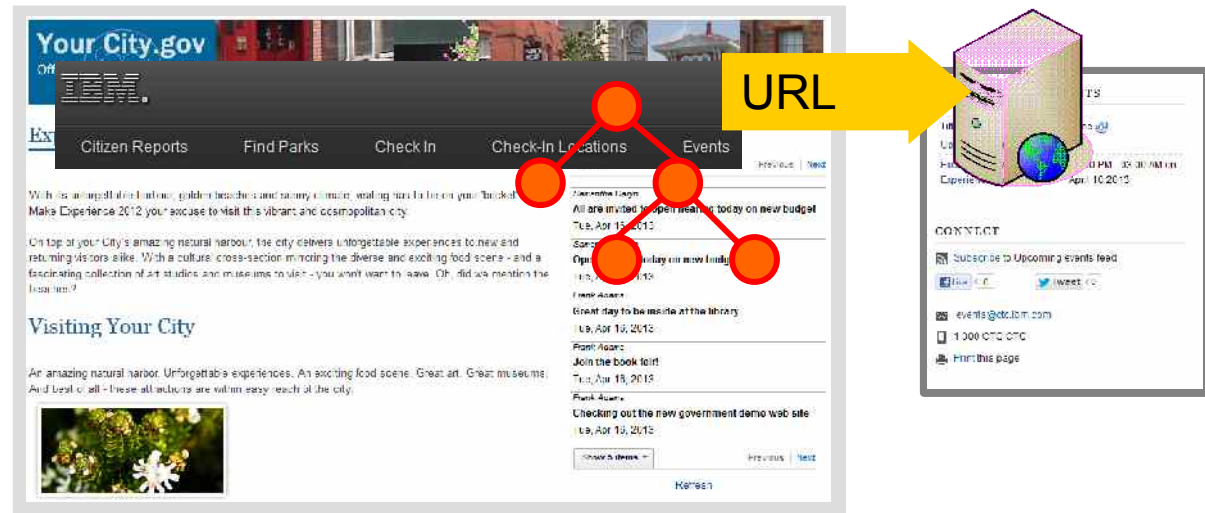
Integrating your IT: External Web Content Management Systems

- Web Content Integrator
 - Synchronize content authored by external web content management systems into XwebX WCM for personalized in-context rendering
 - Examples:

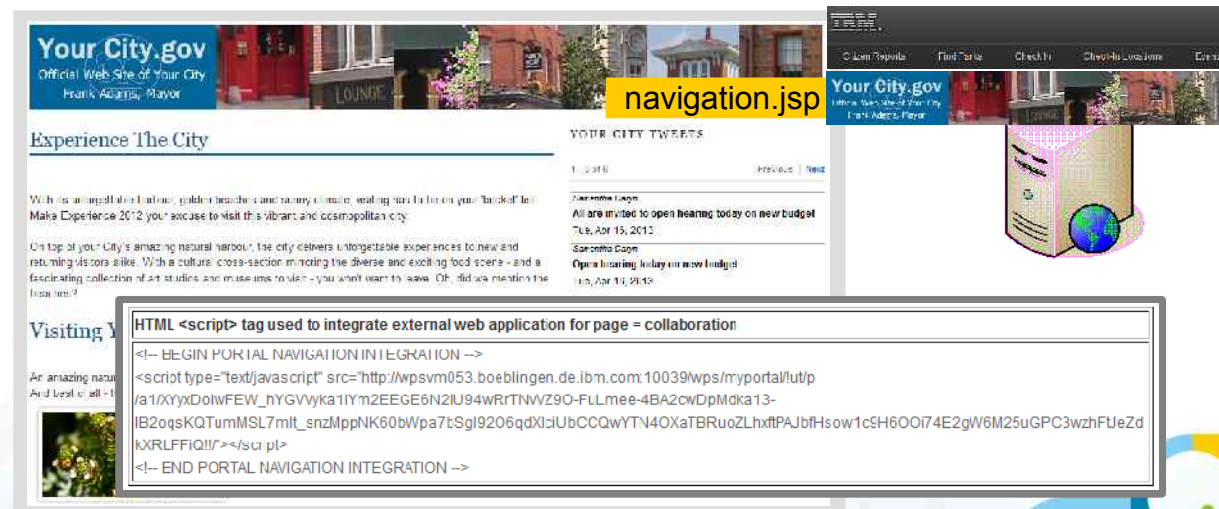


Integrating your IT: Federation

- Federated Navigation
 - Setup: Add external url pages into page hierarchy & Navigation which point to other web sites
 - Example: IBM Connections, WebSphere Commerce



- Web Application Integrator (WAI)
 - Share a common theme and navigation with other web sites
 - Setup: Add navigation.jsp to other web sites
 - Example: IBM Connections, WebSphere Commerce



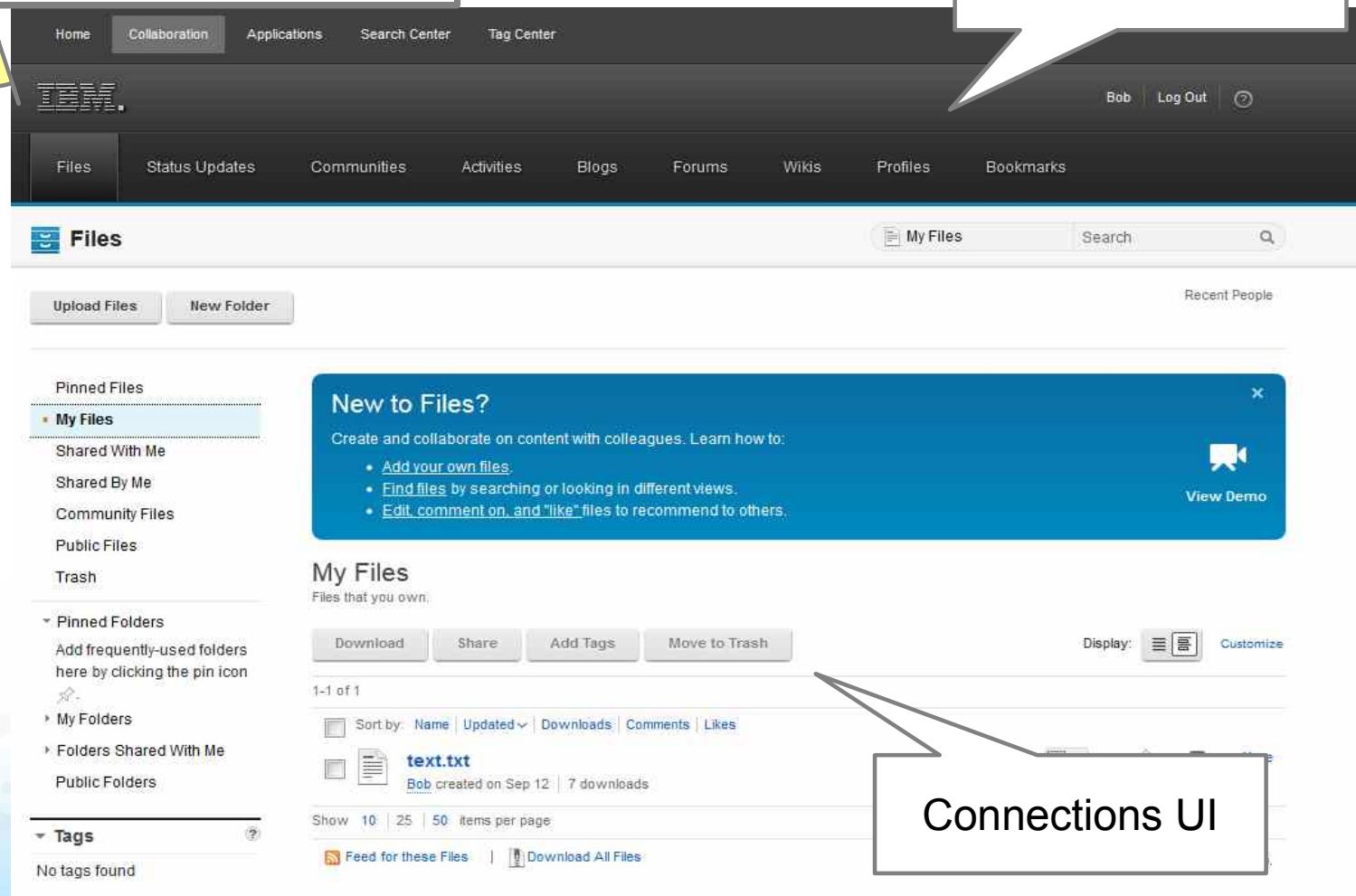
Web Application Integrator (WAI) Example

IBM Connections gets the Portal navigation on top

HTML `<script>` tag used to integrate external web application for page = collaboration

```
<!-- BEGIN PORTAL NAVIGATION INTEGRATION -->
<script type="text/javascript" src="http://wpsvm053.boeblingen.de.ibm.com:10039/wps/myportal/tut/p
/a1/XyxDolwFEW_hYGVyKa1iYm2EEGE6N2IU94wRrTNvVZ9O-Ful...ee-4BA2cwDpMdkaf3-
IR2nq&KOTumMSl_7mll_snzMppNK60hWpa7hSgl92D6qdXicU...VTN4OXaTRRuo7l_hxtPAIhHsow1c3H6OOi74F2gW6M25uGPC3wzhFLa7d
kXRLFFIQU!!/"></script>
<!-- END PORTAL NAVIGATION INTEGRATION -->
```

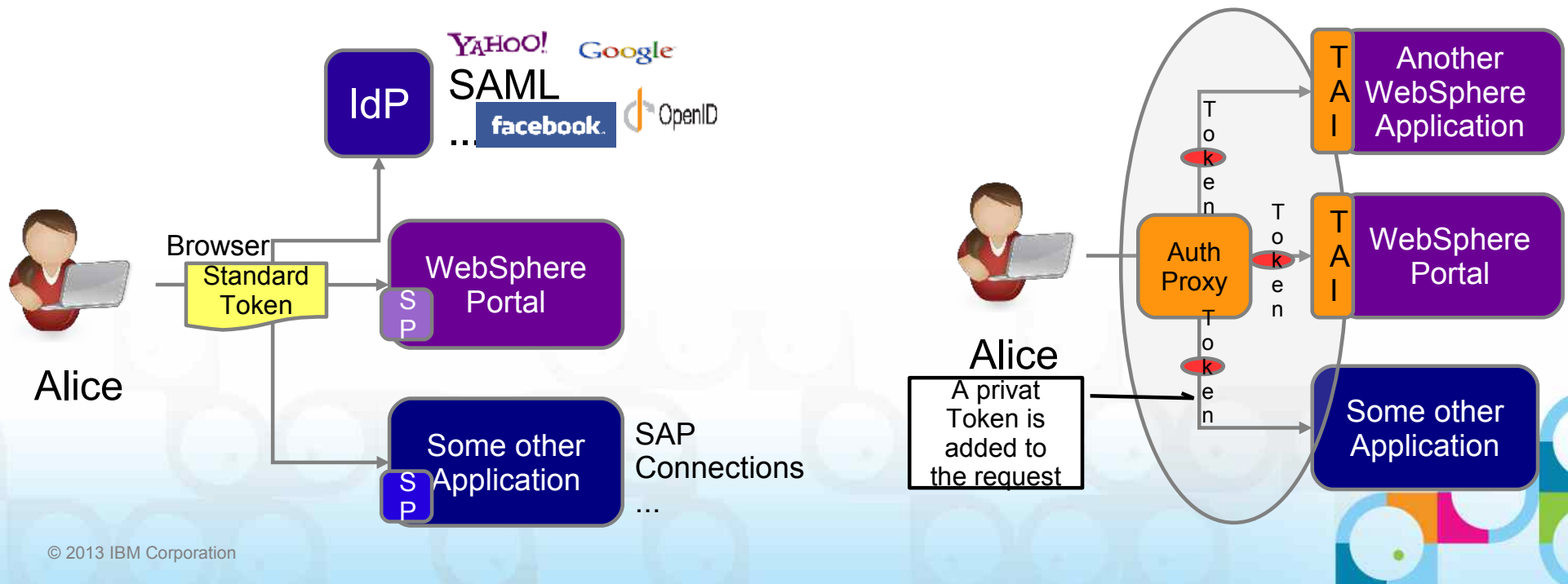
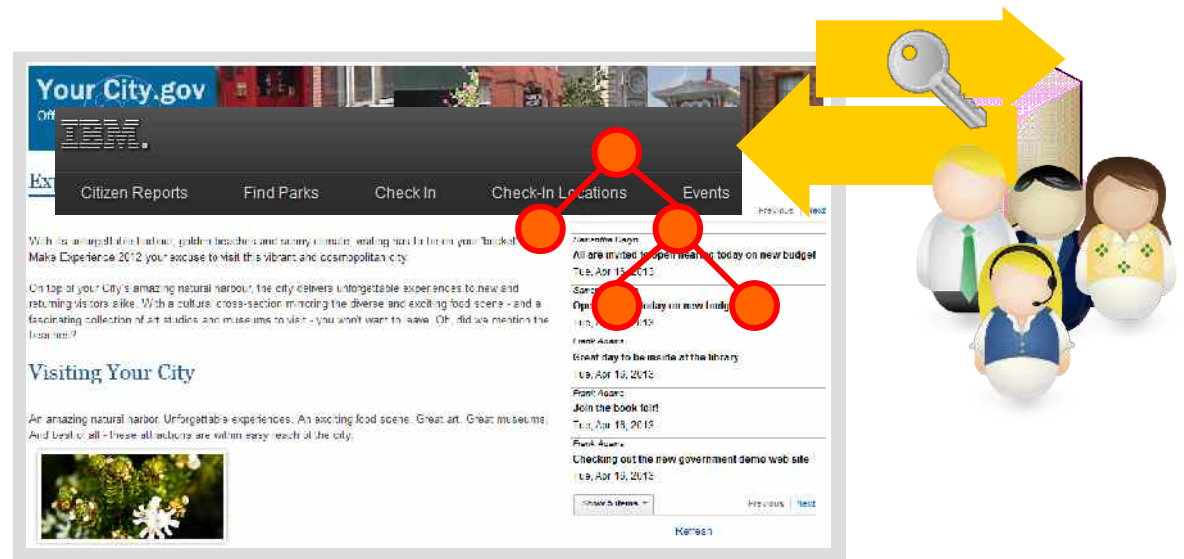
Portal Navigation



The screenshot displays the IBM Connections user interface. At the top, a dark navigation bar contains the IBM logo and links for Home, Collaboration, Applications, Search Center, and Tag Center. Below this, a secondary navigation bar lists various features: Files, Status Updates, Communities, Activities, Blogs, Forums, Wikis, Profiles, and Bookmarks. The main content area is titled "Files" and includes a search bar, "Upload Files", and "New Folder" buttons. A sidebar on the left shows "Pinned Files" (My Files, Shared With Me, Shared By Me, Community Files, Public Files, Trash) and "Pinned Folders" (My Folders, Folders Shared With Me, Public Folders). A "Tags" section at the bottom of the sidebar indicates "No tags found". A blue banner titled "New to Files?" provides guidance on creating and collaborating on content, with links to "Add your own files", "Find files", and "Edit, comment on, and 'like' files". Below the banner, the "My Files" section shows a list of files, currently displaying "text.txt" created by Bob on Sep 12 with 7 downloads. Action buttons for Download, Share, Add Tags, and Move to Trash are visible. A "Display" dropdown and a "Customize" link are also present. A yellow arrow points from the code block to the "Files" link in the navigation bar. A speech bubble labeled "Connections UI" points to the main content area.

Integrating your IT: Security

- Single-Sign On & User ID Management
 - LTPA Cookie
 - Credential Vault
 - Identify Providers (SAML, OpenID, ...)



HTTP Outbound Integration...

Single Reverse Proxy

Improved admin UI

- no need to edit files and hope it all works
- Consistent across all outbound connections

WAB
SFP (SS
Mode)

SFP (CS
Mode)

Custom
Portlet

HTTP Outbound

Integration:

API, Servlet

Configuration:

WAB Manager UI

Owner:

WAB team

Ajax Proxy team

Features:

Sun Java engine,

Trust generation,

Trust Association,

SPNEGO,

Plug-in support,

User Impersonation,

HTTPS Tunneling

Services:

WAB Manager UI as Connection Manager

Host + Policy = Application

Connections as a PortletService

Connection Picker Component

Examples



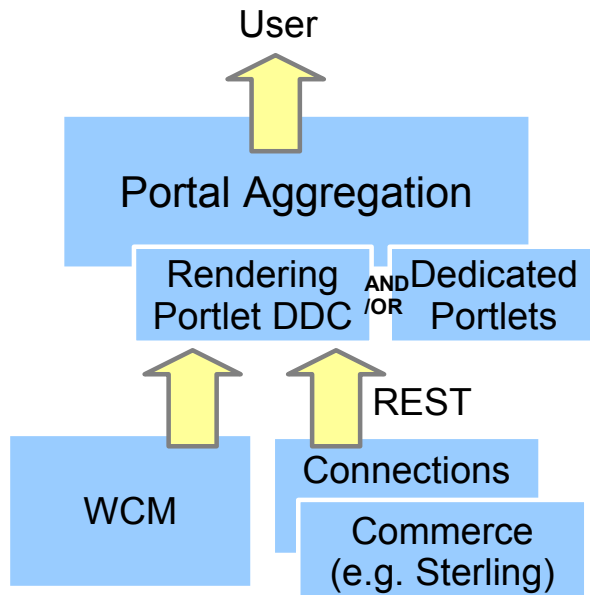
The very best of Integration: Integrate IBM Connections

- Various Options for Deep Integration (depending on intended use cases)
 - Side-by-side (**Federation, WAI**)
 - Preferred Technique: Federated Navigation using external URL pages
 - Pro: access to the full set of features of IBM Connections
 - Con: limited customization of user experience, cannot be embedded into context of a Web site
 - Embedding IBM Connections **User Interfaces (Portlets)**
 - Preferred Technique: Consume production-ready IBM Connections Portlets
 - Pro: Versatile Portlets to combine with other Portlets and to embed into context of a Web site, Community integration
 - Con: Slightly reduced set of features, limited customization of user experience
 - Alternate Option: Develop custom portlets, embedd selected Connection UI via WAB
 - Embedding IBM Connection **data (DDC)**
 - Preferred Technique: Use DDC to display data from IBM Connection within WCM presentation templates
 - Pro: Flexible customization of user experience, embed into context of a Web site/Web content, Community Integration (includes CRUD)
 - Con: Reduced set of features



Integration Smarter Commerce Portfolio

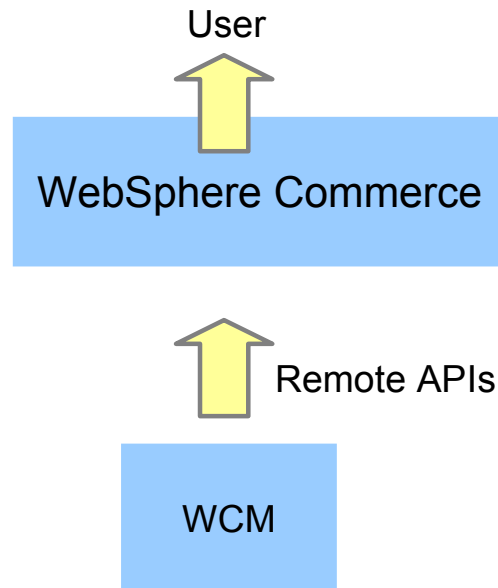
Portal Front-End



- + Leverage Full XwebX Platform
- not yet out-of-the-box functionality

- Page aggregation is done by WebSphere Portal
- Generic Digital Data Connector (DDC) presents data from various sources. Commerce can be one of them.
- Dedicated portlets interact with various sources. Commerce can be one of them.

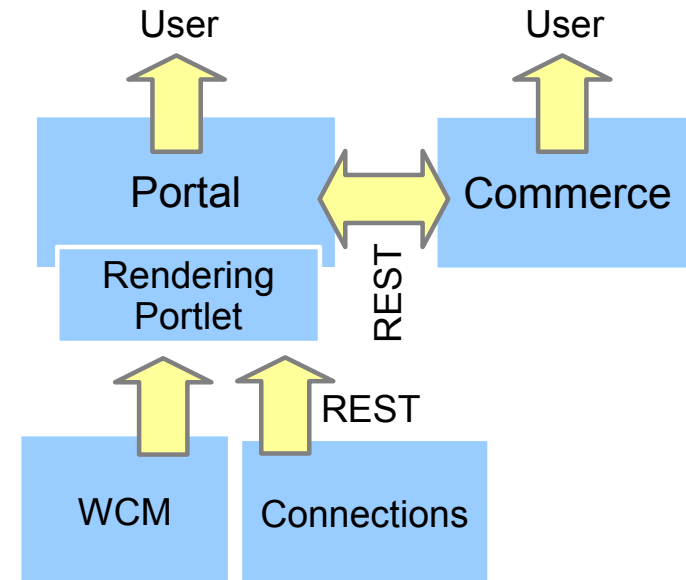
Commerce Front-End



- + simplest integration effort
- Only limited XwebX Platform capabilities

- Page aggregation is done by WebSphere Commerce
- WCM content is injected into Commerce via Remote services
- Support for this scenario is available as a Solution Catalog deliverable

Side-By-Side



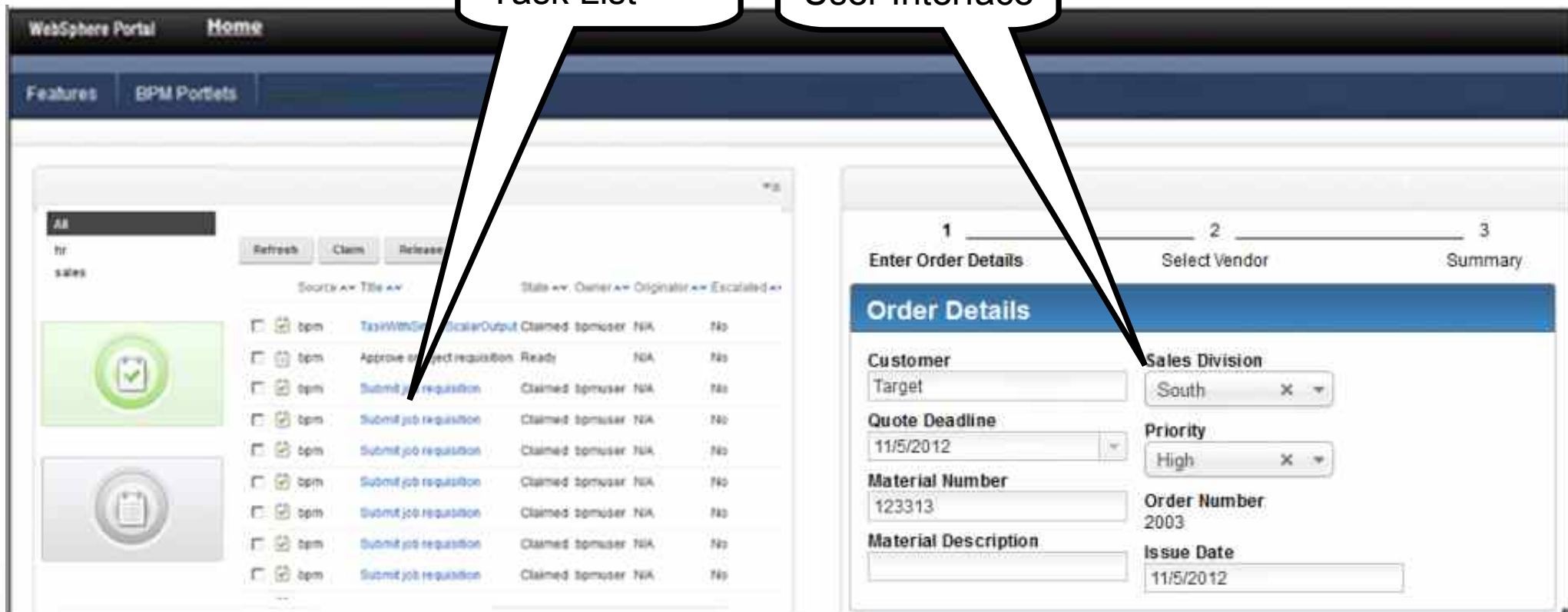
- + minimal product dependencies
- + current best practice

- User accesses either Portal or Commerce, depending which page he is looking at. Portal pages show web content & social, whereas Commerce shows shopping cart and product catalog.
- To some extent commerce information can be displayed on Portal pages and vice versa. The information is exchanged via REST services.

Integrate Business Processes

Portal Unified
Task List

Human Task
User Interface



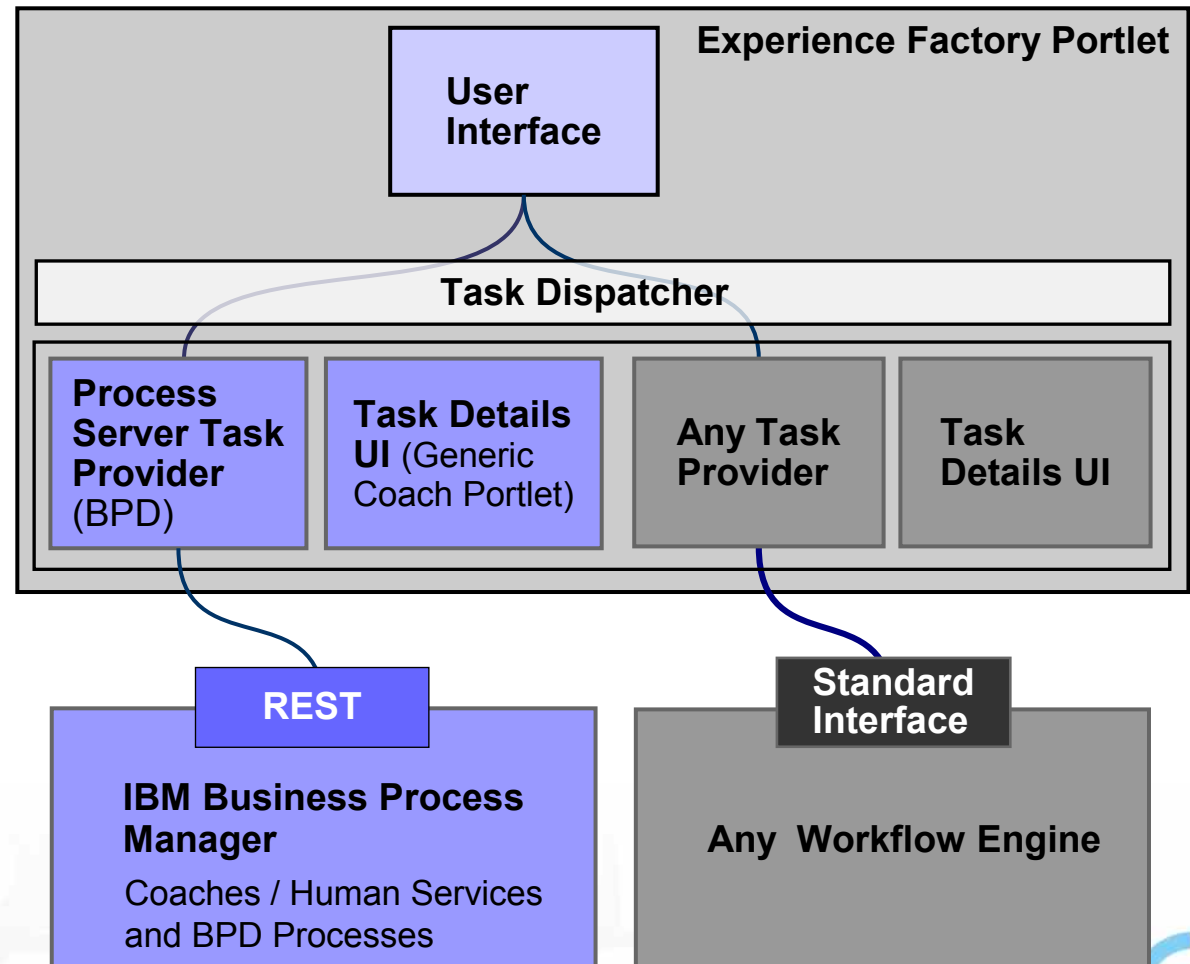
The screenshot displays a WebSphere Portal interface with a dark blue header bar containing 'WebSphere Portal' and 'Home'. Below the header, there are tabs for 'Features' and 'BPM Portlets'. The main content area is divided into two sections. On the left, a 'Portal Unified Task List' is shown, featuring a sidebar with a 'Task List' icon and a table of tasks. The table has columns for 'Task', 'Status', 'Owner', 'Originator', and 'Escalated'. On the right, a 'Human Task User Interface' is displayed, showing a '1 Enter Order Details' step. This section includes a 'Sales Division' dropdown menu set to 'South', a 'Quote Deadline' date field set to '11/5/2012', a 'Priority' dropdown menu set to 'High', a 'Material Number' field set to '123313', and an 'Issue Date' field set to '11/5/2012'. The interface also shows a '2 Select Vendor' step and a '3 Summary' step.

Task	Status	Owner	Originator	Escalated
TaskWithG...calarOutput	Claimed	bpuser	N/A	N/A
Approve project requisition	Ready		N/A	N/A
Submit job requisition	Claimed	bpuser	N/A	N/A
Submit job requisition	Claimed	bpuser	N/A	N/A
Submit job requisition	Claimed	bpuser	N/A	N/A
Submit job requisition	Claimed	bpuser	N/A	N/A
Submit job requisition	Claimed	bpuser	N/A	N/A
Submit job requisition	Claimed	bpuser	N/A	N/A
Submit job requisition	Claimed	bpuser	N/A	N/A
Submit job requisition	Claimed	bpuser	N/A	N/A

Unified Task List:

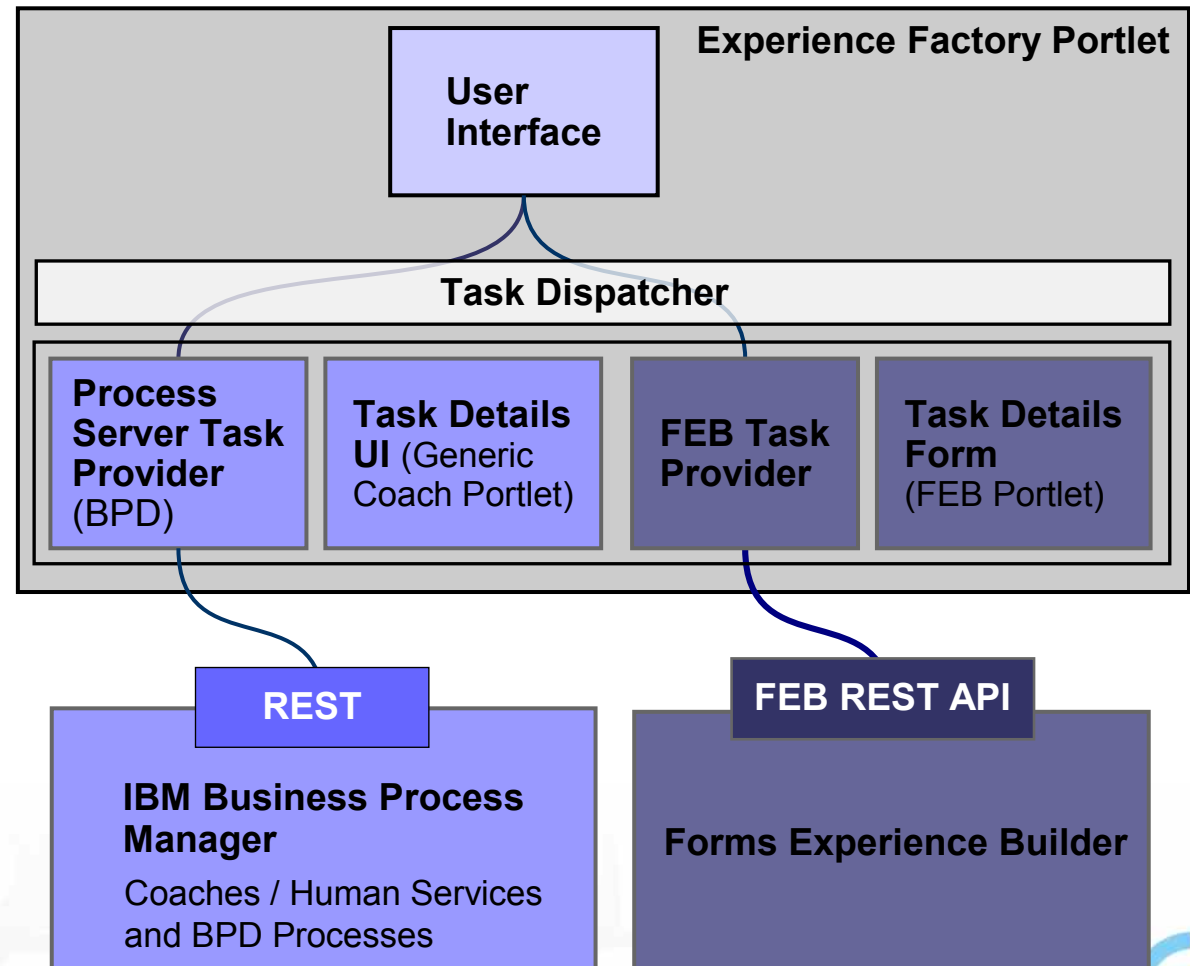
Open, easily extendable and based on a SOA architecture

- The architecture of the UTL separates the user interface from the data access
 - Service Provider Concept
- The UTL includes different Task Providers, which implement the data access to a specific workflow system
- The Task Dispatcher is responsible for aggregating tasks delivered by all task providers configured by the portlet administrator
- It leverages the Service Provider/Service Consumer concept of the Web Experience Factory
- Providing a new Task Provider allows the extension of the UTL to any workflow system using tasks.



Unified Task List: Leverage Forms Experience Builder as Task Provider

- A Task Provider leverages the Rest API of Forms Experience Builder
- Every FEB Task Provider instance can point to a different FEB server, application and form
- Present Human Tasks as Forms displayed by FEB Portlet
- Comments:
 - No filtering by state because the FEB rest api does not allow to filter by state
 - SSO between Portal and FEB servers is required
 - The UTL admin needs access to FEB server



Integration Approaches

Thomas Stober | STSM, Lead Architect WebSphere Portal Foundation

Meet the Lab
04. - 05. Juni 2014
IBM Labor Boeblingen



Create Screenflows

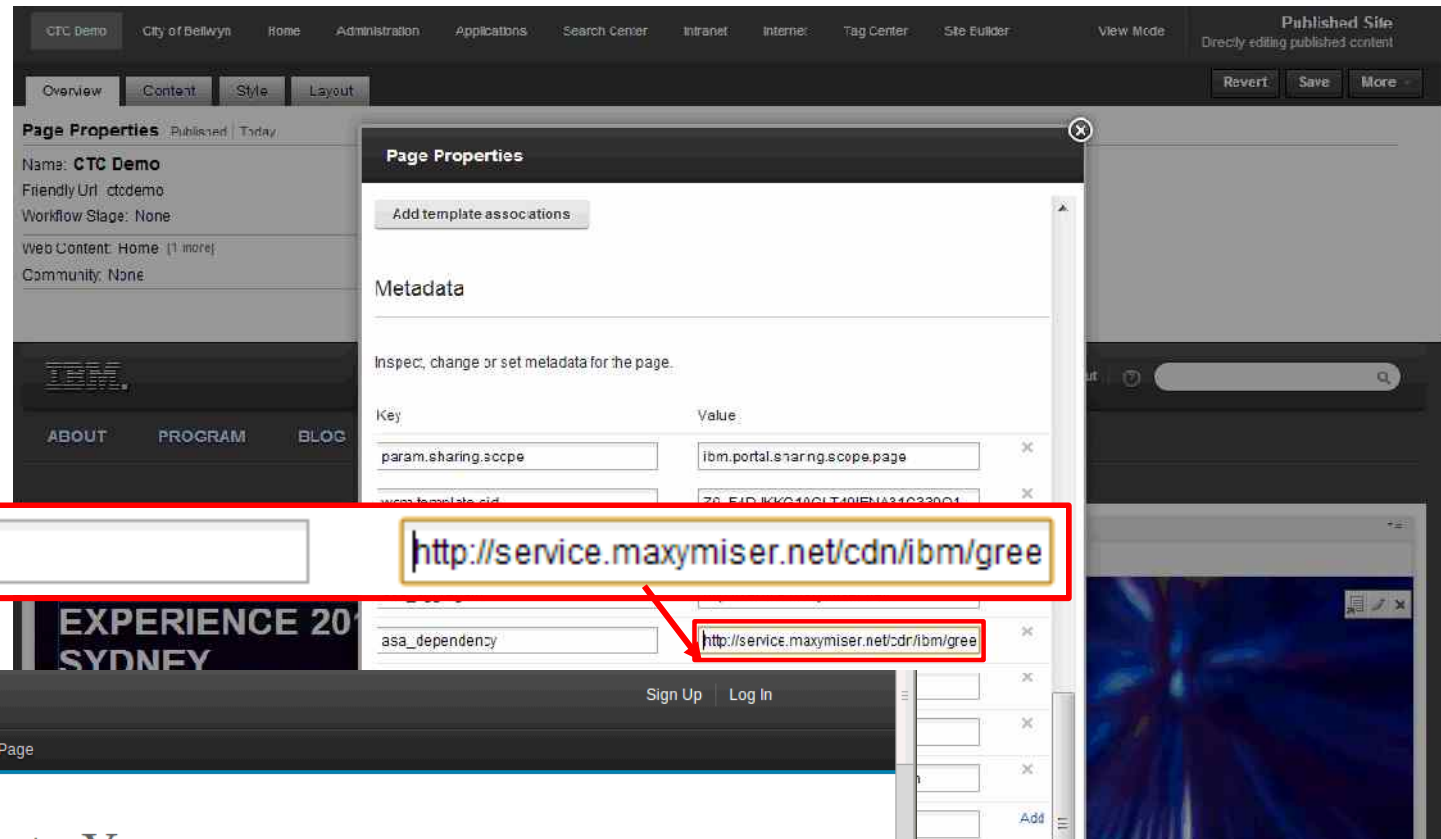
- Customers often want to implement solutions guiding users through a **sequence of screens** just like in a **wizard**
- Screenflows feed into Human Tasks of a Workflow



UX Flow Manager

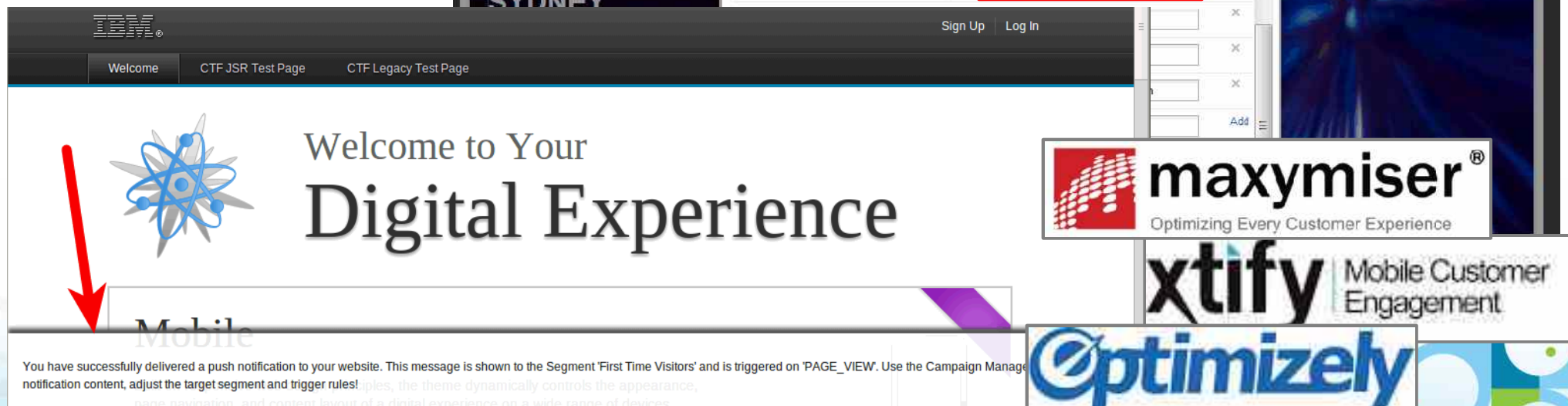
Client-Side Integration Patterns

- Leverage the existing Active Site Analytics capability to inject code
- e.g. include client side libraries to run Maxymizer, Optimizely, or Xtify



The screenshot shows the IBM Site Builder interface. The 'Page Properties' panel is open, displaying metadata for the 'CTC Demo' page. The 'Metadata' section includes a table with 'Key' and 'Value' columns. The 'asa_dependency' key is highlighted with a red box, and its value is 'http://service.maxymiser.net/cdn/ibm/gree'. Another instance of the same URL is also highlighted with a red box. The background shows the site's navigation and content area.

Key	Value
param.sharing.scope	ibm.portal.sharing.scope.page
web.template.sid	70_FID_KKQ14G1T40IEM34C3301
asa_dependency	http://service.maxymiser.net/cdn/ibm/gree



The screenshot shows a digital experience page with the heading 'Welcome to Your Digital Experience'. A red arrow points to a 'Mobile' notification banner at the bottom. The banner contains the text: 'You have successfully delivered a push notification to your website. This message is shown to the Segment 'First Time Visitors' and is triggered on 'PAGE_VIEW'. Use the Campaign Manager notification content, adjust the target segment and trigger rules!'. The page also features overlays for 'maxymiser' (Optimizing Every Customer Experience), 'xtify' (Mobile Customer Engagement), and 'Optimizely'.

Summary



Three Powerful Tools

Javascript Portlet

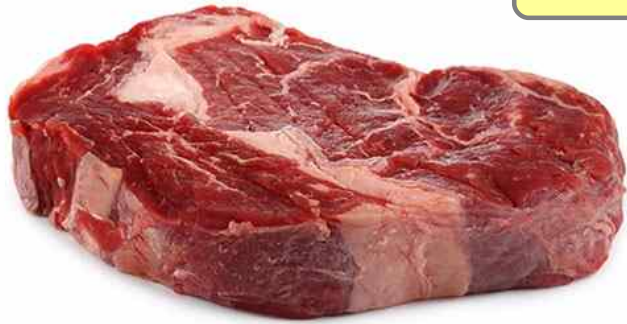


DDC

Web Application Bridge

Why we need two kinds of Programming Approaches

J2EE



Core Functionality:

Essential customer value (“Signature Feature”)

- Main purpose of this web site
- Produced and managed by IT (developed and staged)
- Developed in multiple steps by multiple teams
- Classic Coding, J2EE/JSR286, Eclipse, RAD, WEF
- Quality of Service, certified
- Expensive, but long lasting

*“Cooking” skills needed. Keep in mind:
it takes a while to turn a cow into a steak*

XDX



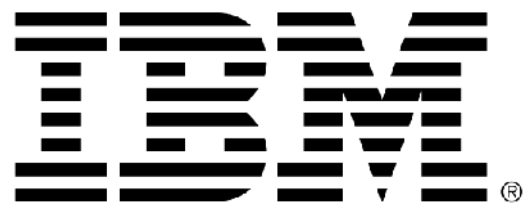
Additional Features:

Key creative value (“Exceptional digital experience”)

- Distinguishing, competitive differentiator
- Created and added on the fly by line of business (authoring)
- Prepared instantly by instantiating IT assets (portlets) and adding self-created add-ons (content, widgets, ...)
- Authoring, Wysiwyg, inline editing, drag&drop, rules, scripting, HTML, FEB, HTML, CSS,
- [DDC](#), [WAB](#), [Javascript Portlet](#), [Rendering Portlet](#)...
- Cost effective, highly dynamic and adaptive
- Easy to change frequently
- Contextual, aggregated, and targeted to individual customer

*Prepared rather than cooked. This is the fine “art”
of fresh and individual composition*





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