IBM Lotusphere Comes to You 2009

Building Customer-facing Web Sites with IBM® WebSphere Portal® and Lotus Web Content Management® (LWCM)

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Agenda

- Differences between Internal and External sites

- Best practices for leveraging WebSphere Portal

- Content-centric site design

- Web 2.0

- UI frameworks

- Self service and personalization

- Search

- Site analytics

- Mobile device support

Notice

Some of the material in this presentation is directional in nature and does not imply any product plan commitment on the part of IBM.

Some of the ideas presented here may be delivered in future version of WebSphere Portal, but some will not.

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A typical internal site

Site level navigation

General and personalized content

Search

Log in and self care

Common links

External content integration

A typical external site

Key differentiator - Competition

✔ *Intranet sites have captive audiences*

  ➔ *Information is more important than presentation*

✔ *Internet sites need to attract an audience, and keep them*

  ➔ *Presentation is as important as the information*

✔ *Beyond that, not much is different*

  ➔ *Certain features become more important, though*

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Best practices for leveraging WebSphere Portal

IBM

- **Leverage WebSphere Portal Server as a "Platform"**
  - Consider pilot applications rather than going big bang implementation; as good portal implementation can last up to one year with custom applications
  - Find a solution that is available "**out of the box**" and "**easily customizable**" rather than building your own
- **Look out for the standards**
- **IBM is listening to what the customers are saying**
  - Many custom developed solutions for older version of WebSphere Portal Server are now provided as a part of Portal Server
  - Collaborate with IBM to make the products **RICH** and your investment future proof

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Using WebSphere Portal for external sites

- **Challenge**: how to make a portal-based Internet site not look like a portal
  - Compelling design and integration of "flashy" graphic elements
  - High-fidelity controls and interaction (Web 2.0)
  - Drop the grid-based layout pattern
- **Leverage portal features** to improve competitiveness
  - Content oriented - content authors control site navigation and composition
  - Site analytics – how effective is the site?
  - Search – extend the reach of the site's effectiveness
  - Self service - end user targeted content and capability

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How customers are using IBM WCM today

IBM

Types Of Websites

Internet
- Corporate Information
- eCommerce
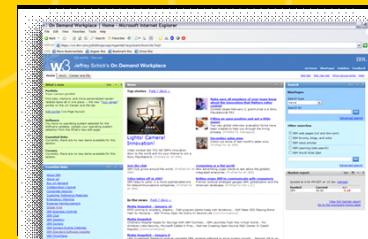- Customer Self Service

Intranet
- Employee HR Portal
- LOB/Departmental Team Website
- Employee Directory
- WIKIs/ Blogs

Extranet
- Crossorganization S&M Collaboration
- Partner Self Service

…and also
- Composite applications
- Information workspaces
- Collaborative document management
- ECM platform integration
- Social networks

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Delivering the Content with IBM WCM

- Out-of-the-box portlets for administrators and business users

- Content is separated from presentation so that the same content can be displayed in different formats in many places on the portal

- Integration with the portal's user management creates a consistent approach for access control to pages, portlets and content items

- Portal search only returns content that users have permission to see

- Integration with the portal Personalization Engine (PZN) allows business users to to target audiences based on business rules

- Syndication of content in geographically distributed environments

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IBM Lotus WCM provides an end-to-end content management technology solution that also drives real business value

End-to-End Web Content Management
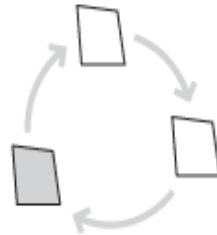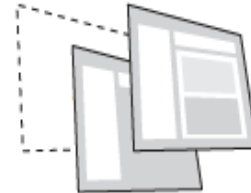
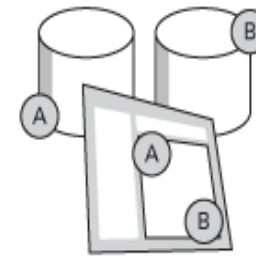| 1 AUTHORING	2 WORKFLOW	3 MANAGEMENT	4 INTEGRATION	5 DELIVERY
Content creators are guided through the authoring process - using familiar applications - without having to learn new technical skills.	The accuracy, relevancy and recency of content is assured by automating the content lifecycle - from creation through approval and delivery to review and archival.	Content becomes an asset again, as control of the site is placed back in the hands of the users who understand the subject and customers best.	Aggregation, transactional integration and performance enhancing caching enrich the user experience.	Content is dynamically generated and presented, allowing the appropriate delivery of relevant and personalized content to users.

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Some Public Web Sites running on IBM WCM

- **NJE Corporate Portal**

  - Communication and collaboration across all departments: Includes

  - NJE-branded home page

  - corporate news

  - job postings

  - department pages

  - document access

Some Public Web Sites running on IBM WCM

DLF

- **<u>The Client Need :</u>**

- The client has existing Websphere Portal & Web content management Infrastructure used for Internet & Intranet purpose . Customer wanted to develop B2B & B2C site for their existing & and forthcoming Shopping Malls wherein they can market these sites on-line and have more footfalls in case of B2C and manage their retailers in better way for B2B operations . Initially customer was aligned with a local vendor for doing the static website on freeware . Team IBM started interacting with business users at customer end and highlighted the benefits of developing these sites as an extension of the existing Infrastructure

- Completely Dynamic Environment

- More Interactive in case of B2B sites.

- Concept of Mall Management and extending entire services (**i.e. On-line Payment Facilities , Integrated Service desk for Complain Management , MIS Detail to Tenants pertaining to account details and lease Management etc)** to its retailers incl **Mall Layouts, Services pertaining to food court & Movies** (On line Table/Movie Ticket Booking) to end customers .

- Secured & Role Based access to their Retailers., User friendly Content Management with strong search capabilities, Last but not the least leveraging on Investment already made for existing Internet & Intranet environment.

- **<u>The IBM Solution:</u>** IBM team proposed the solution based on Websphere Portal & Web content Management . Client saw enormous value in the End to End Integrated solution and can leverage existing deployment, which help DLF Technically and Commercially. Regular Interaction over last four to five months helped us to win this deal against freeware and local vendor.
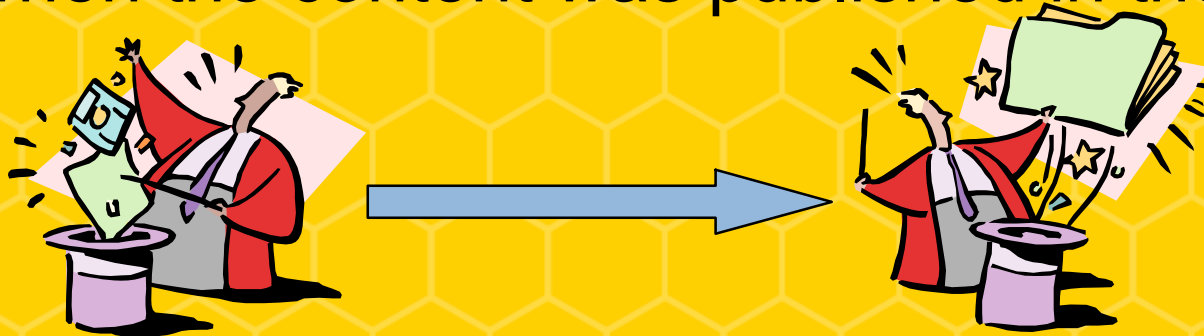
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Twist in the tale: Bridging the Content Gap with IBM Web Content Integrator (WCI)

- What if we use IBM WCM just to deliver content to the portal?

- Content owners continue to use their existing content management system (CMS) to author and publish content

- Then, when the content was published in the CMS...

- The content would be magically transferred into the IBM WCM repository for presentation on the portal

A content portal page
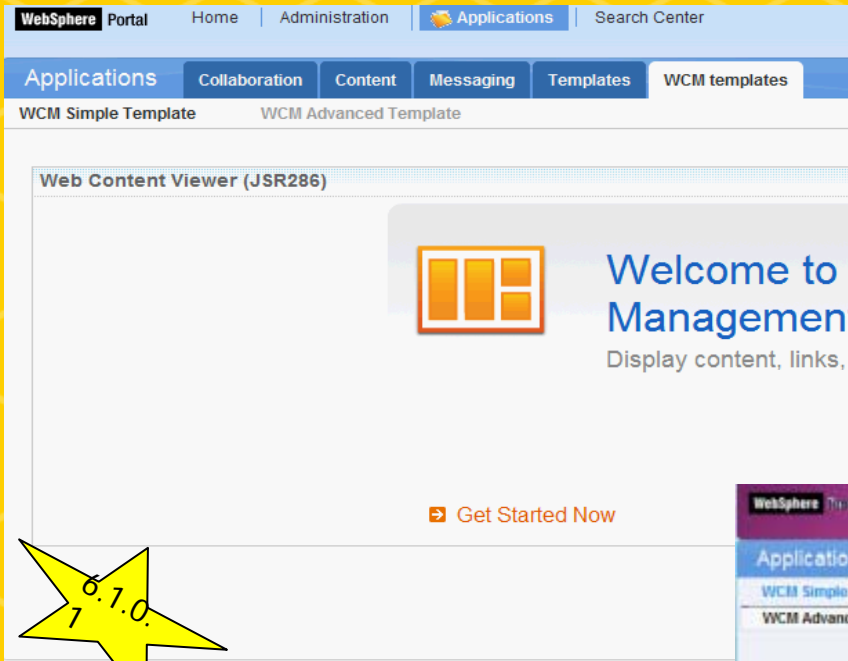
6.1.0.1

New page type for content.

Assign a site area to provide content for this page.

Select a portal page as the layout template.

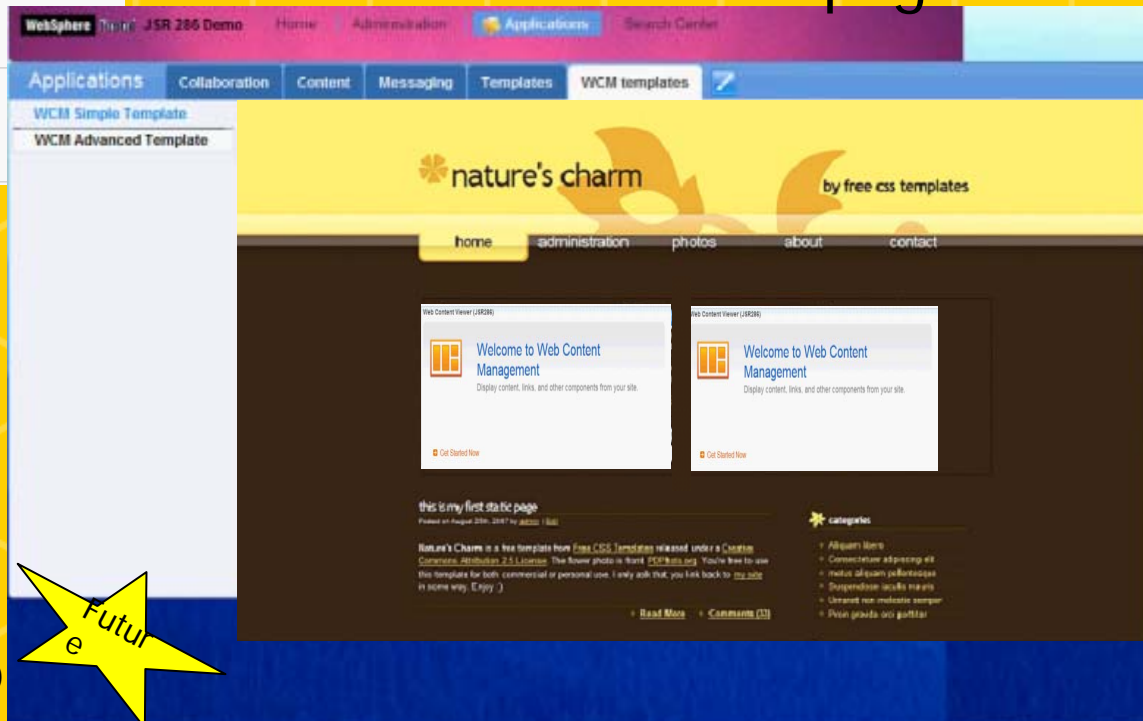Lotus software

Content portal page templates

Page template with one rendering portlet

Page template based on a static HTML page.

6.1.0.7

Portal pages can serve as templates for rendering Web Content Manager® content and are stored in a specific location in the navigation hierarchy.

Future

Content and page correlation

- Links to other site areas automatically change to the page configured to render that site area.

- The page automatically displays the selected content.

- Facilitated using JSR 286 public render parameters and a custom state preprocessor.
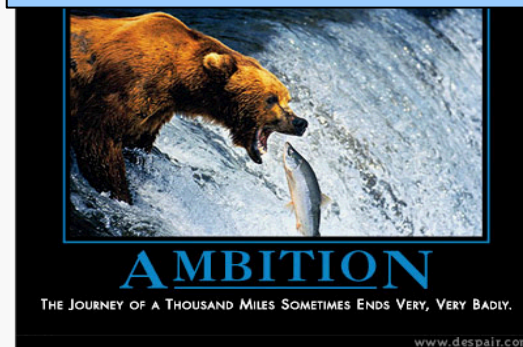
Highly responsive and engaging UIs

- **A slow external site will lose customers**
- **Cannot afford to wait for full page refreshes for simple actions**
  - Must strike a balance between client-side versus server-side logic
    - Especially for searchability reasons
- **Web 2.0 features are a must**
  - AJAX-based updates of the current page
  - End-user contributed content (feedback, tagging, rating)
  - More efficient in bandwidth constrained networks
- **Leverage the latest in UI frameworks**
- **Enablement through comprehensive tooling support**

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Client-side programming

Shift more work to the browser and off the server!

- **Leverage JSR 286 for resource serving**
  - Until V6.1, AJAX usage required an XML utility servlet
  - Now AJAX and View handling encapsulated in one portlet
- **Leave full page refreshes for page changes**
- **Portal tooling enables AJAX**
  - Both Rational® Application Developer® and Rational Portlet Factory®
- **Build composite applications on the glass**

  - "Live Text" enables sharing of data between portlets and other services in the browser context

REST-accessible Markup Fragments Portlets or other

Atom / RSS Feeds

Gadgets / Widgets

Portal and Portlet data
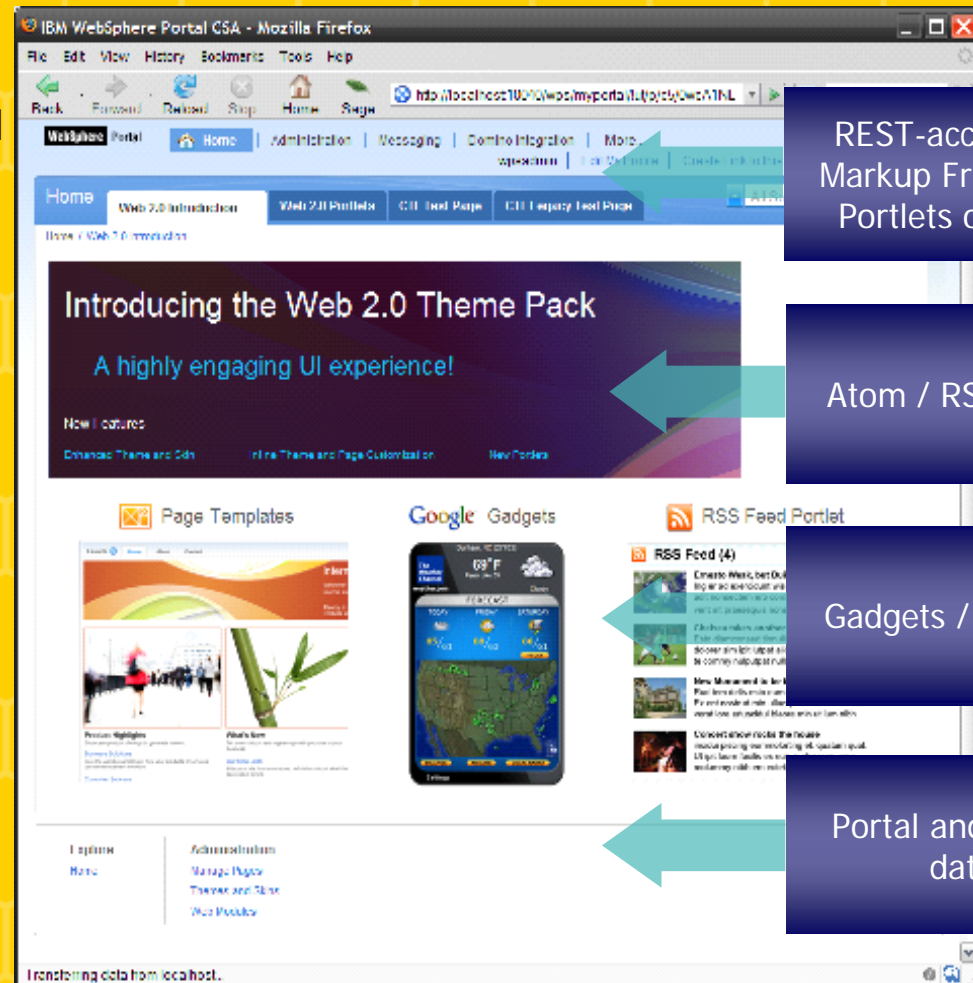
"Live text"

- **Provides an interactive user experience**
  - With no page refresh

- **Integrates applications and services on the glass**
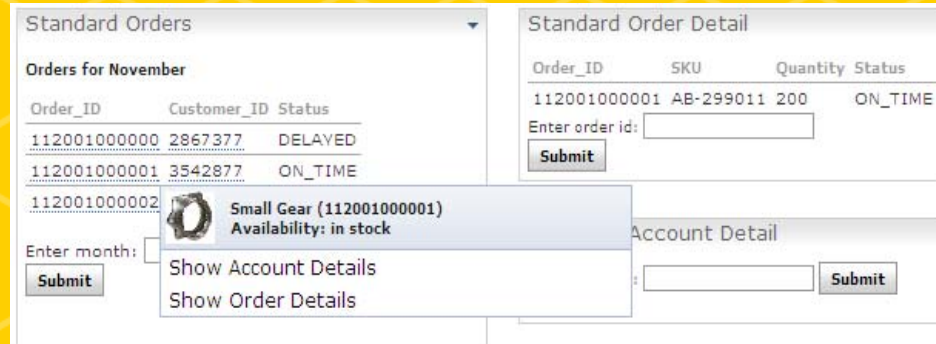 - All client-side

- **No programming needed**
  - Simply tag the markup using microformatting

- **Integrates seamlessly with JSR 286 portlet events**

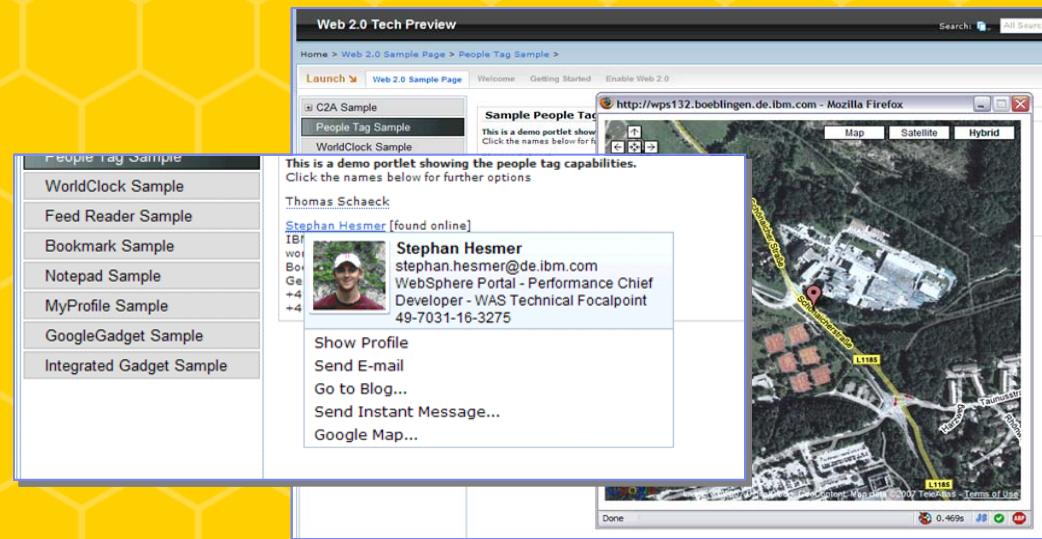- **Real world examples**
  - Select a context-sensitive term and issue a search based on it
  - View market info on a catalog item

`<span class="OrderItem"> 112001000001 </span>`

`<span class="locality"> Stuttgart </span>`

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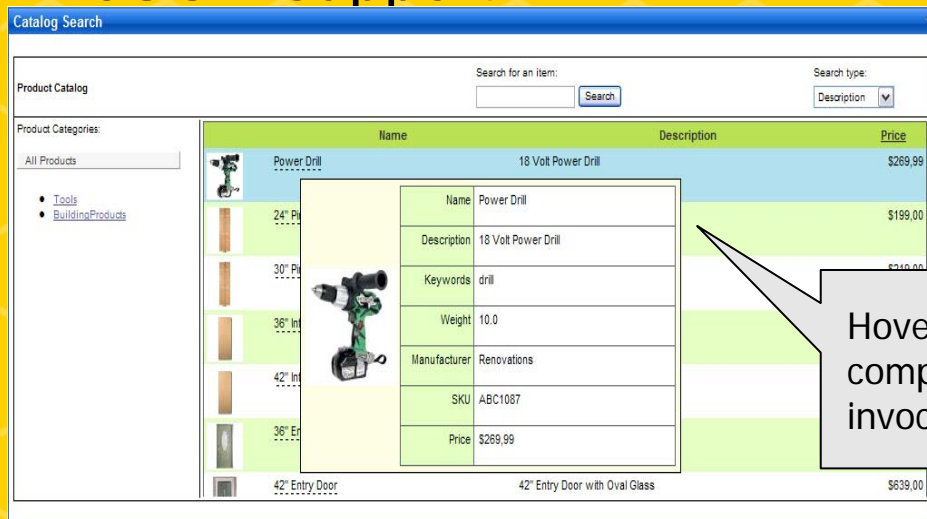
UI frameworks

- **In general, WebSphere Portal is UI framework agnostic**

  - Frameworks claim support for WebSphere Portal, not the other way around

- **Many different frameworks have been used with WebSphere Portal over the years**

  - Struts®, JavaServer Faces™, Spring®, and Adobe Flex® mainly
  - Struts portlet framework initially provided by WebSphere Portal for Struts 1.1, but pushing now to the Apache Struts Portlet Bridge for Struts 1.2 and 2.0

- **Struts and JSF tooling available through Rational Application Developer**

- **Flex integration example available from the WebSphere Portal Wiki** http://www-10.lotus.com/ldd/portalwiki.nsf/dx/17.09.2008050832WEBCQV.htm

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AJAX tooling – Rational Portlet Factory

- Partial-page refresh
- Drag and drop
- In-line editing
- Tool tips
- Type-ahead
- Timed action
- Hover highlighting
- JSON support

Drag and drop

In-line editing

Hover highlighting

Client-side processing

Hover triggered component invocation

AJAX tooling – Rational Application Developer

dojo - Form
- CurrencyTextBox
- RadioButton
- VerticalSlider
- NumberSpinner
- ValidationTextBox
- VerticalRule
- CheckBox
- HorizontalSlider
- ToggleButton
- VerticalRuleLabels
- Button
- DateTextBox
- TimeTextBox
- Textarea
- NumberTextBox
- HorizontalRule
- DropDownButton
- Form
- TextBox
- ComboButton
- ComboBox
- HorizontalRuleLabels
- FilteringSelect

dojo - Other
- ProgressBar
- TooltipDialog
- Target
- Dialog
- MenuSeparator
- Grid
- Source
- ForestStoreModel
- Menu
- PopupMenuItem
- TitlePane
- VirtualGrid
- Editor
- Toolbar
- Tooltip
- InlineEditBox
- MenuItem
- ColorPalette
- TreeStoreModel
- Tree

dojo - Layout
- StackContainer
- LayoutContainer
- TabContainer
- ContentPane
- LinkPane
- SplitContainer
- AccordionContainer

dojo - IBM Extensions
- BarGraph
- AnalogGauge
- FeedViewer
- FeedEntryEditor
- Gradient
- OpenSearchStore
- Indicator
- GradientColor
- FeedEntryViewer
- AppStore
- Range

- RAD 7.0 shipped a Web 2.0 facet for adding Dojo-based and AJAX-enabled controls to Web applications
  - Updated/improved in RAD 7.5

- Can be used for portlet development as well

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Step-up Authentication and "remember me"

Access to sensitive service or operation,...

...requires user authentication...

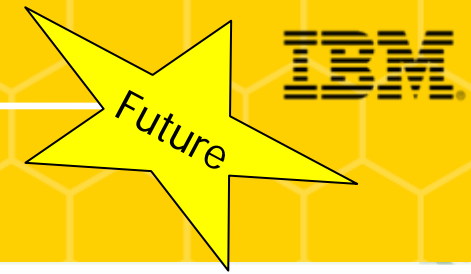**... before access is provided.**

Improve customer loyalty by recognizing them on their return

Control access based on "identified" versus "authenticated"

Automatically authenticate using remember-me cookie, then challenge for additional credentials for more sensitive operations

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Tagging and rating

Future

- **A site's value is determined by its community**
  - In a Web 2.0 world, you know what others are thinking
- **Rating and tagging by both content authors and end users allows users to get to the information they need quickly**
- **The next release of WebSphere Portal will feature the ability to rate and tag authored content**
- **Search on tags and sort on ratings**

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Personalized content delivery

Personalization rules can be used to target content, pages, and portlets.

Personalized application behavior

- Using Rational Portlet Factory, build applications that change personality based on who is using them

- Share common models between different interaction patterns

- Maximize component and pattern reuse

- Enforce coding and data access standards

Healthcare Portal
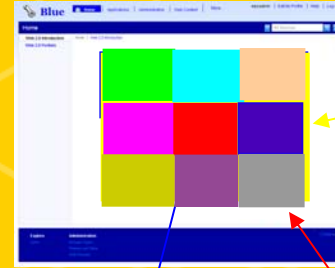
Physician

Patient

Executive

Advanced Self - Registration

Future
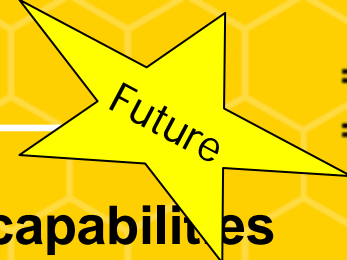
- **New registration capabilities**
  - **Email verification**
  - **Terms and conditions**
  - **Connect to existing profile or record**
- **Self care**
  - **Change/reset password**
  - **Security questions**

Step 1 - Create Login

Basic account information and account security information must be specified on this form. An
use the email to activate your account prior to logging in for the first time. The security question
whenever you need to reset your password. Answers to the security questions must be 4-20 c

Registration Information

User Id for Login: *	robin.whitmore
Re-Enter User Id: *	robin.whitmore
Email Address: *	robin.whitmore@somewhere.com

Recalling Your Password

First Security Question: *	Your favorite restaurant?
Your Answer: *	Moes
Second Security Question: *	What city is your place of birth?
Your Answer: *	Monterey

Step 2 - Validate Identity

For your security, please complete the following information to validate your identit

Registration Information

First name: *	Robin
Last name: *	Whitmore
Birthdate: (mm/dd/yyyy) *	04/01/1984

Enter ONE of the following to confirm your identity

|	
Medical Record Number: -OR-	
Your Health Insurance Member Number from one of your insurance cards: -OR-	
Account/Encounter Number from a recent statement:	4567890051

Thank you for registering for a IBM Healthcare portal Account.

UserID: robin.whitmore

Please activate your account by clicking the following link or past

http://wems22.rtp.raleigh.ibm.com:10040/wps/portal/uxhospital/a

Enter your UserId and choose a password to activate your accou
using your UserId and the password you provided.

If you need further assistance or did not register for a IBM Health
Customer Service support at 1-800-xxx-xxxx and someone will assist you.

Thank you,
IBM Healthcare Customer Service

Forgot your Password

Initiate the reset of your password by entering your U

For your own security, choose a new password that
lowercase and uppercase letters.

Step 1 - Enter Your Userid

User Id :	jerry.whitmore

Continue

IE

Search relevance

- Internet search attracts users to a site

- Site search keeps the user in the site and helps him find relevant information

- WebSphere Portal provides both the ability to be externally searched as well as promote internal search

How Internet search engines used to see a Portal site

*__**Pre 6.0__*

Web crawlers

Search indexes
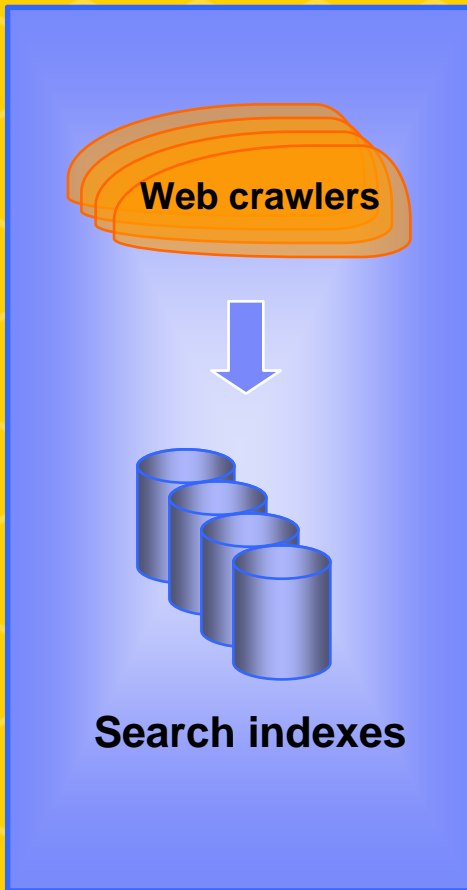
This set of pages represents the structure of the Portal site.
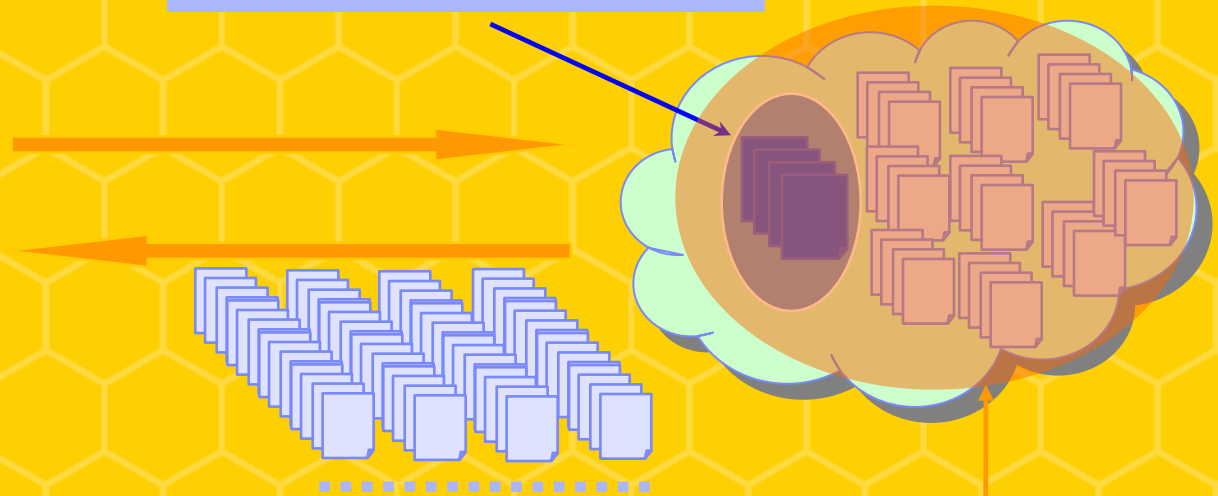
This set of pages the crawler retrieves and assumes to be unique based on the link structure of the site.

Result:
- A few thousand pages will grow into hundred-thousands
- The crawler might have to give-up .. no end of the site seen
- Few or none of the pages will be indexed

WebSphere Portal V6 – crawlability enablement!

Portal Server recognizes the crawler and triggers URLs to be normalized.
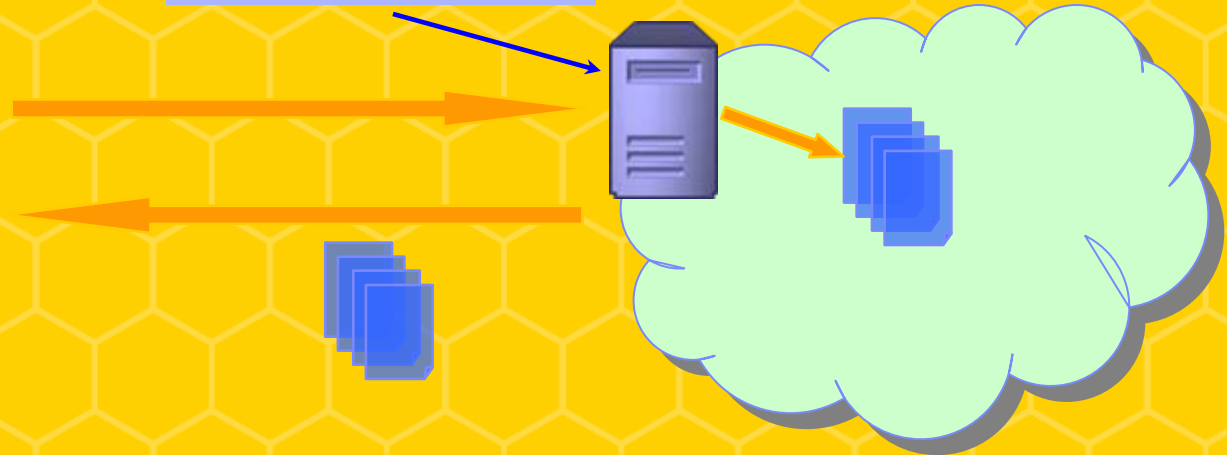
Search indexes

Normalized URL = all navigational state information is discarded from the URL

Result:
• No more 'duplicate' pages
• All linked and public Portal pages are crawled and indexed

Seedlist support

6.1.0.1

- **Web Content Manager content externally searchable through seedlist support**
- **Index content contains special links back to Portal for displaying search results in the context of a Portal page**
- **Seedlists only so far supported by IBM search engines**
  - **Working on broader adoption**

IBM

WebSphere Portal

Portal

WCM

JCR

OmniFind

Search

Crawler

Collection

7.Content in context

6.Select

5.Results

4.Search

2.Index

1.Seed list

3. Collect

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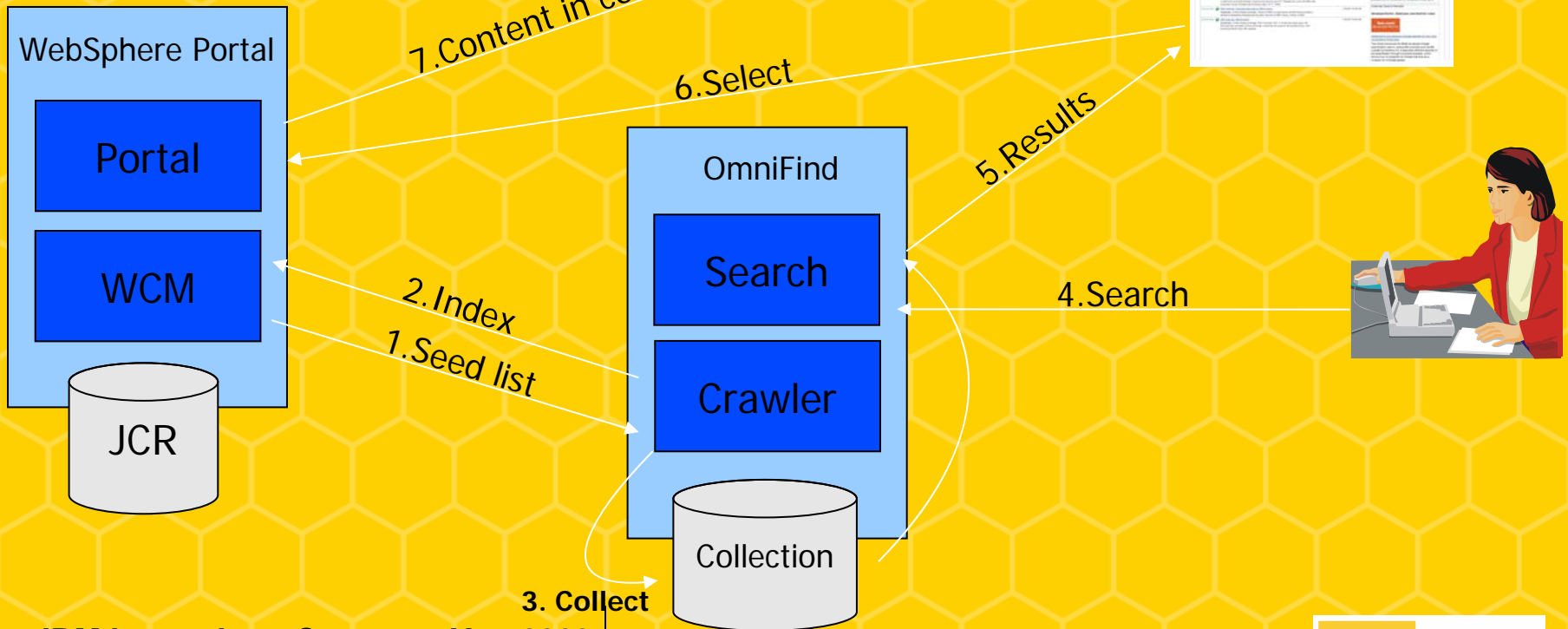
Integration of various search services using the Search Center

Search Center

SOAP   EJB   Local

Remote
Search 1

Remote
Search 2

Websites

WCM
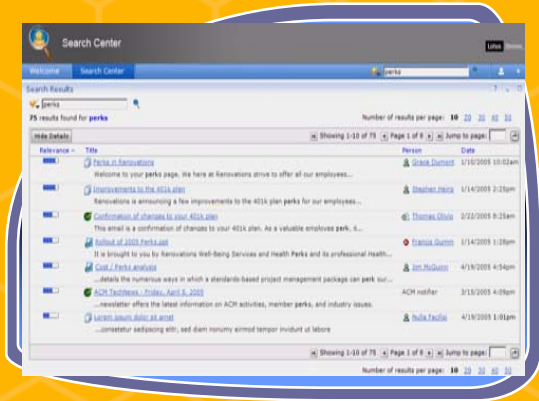
Portal site

IBM Lotus® Quickr®
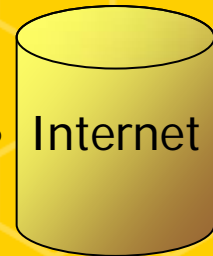
Internet

IBM Lotus
Domino®

IBM OmniFind®
Enterprise Edition

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Portal site analytics

- **Analytics help you understand how your site is being used**
  - **Effectiveness of advertising campaigns**
  - **Page/portlet popularity**
  - **Measuring load**
    - Page views/second
    - Unique logins/hour
  - **Modeling real user behavior for capacity and performance tests**
- **Analytics measured in one of two ways**
  - **Site analytics (SA) logging**
    - Fine-grained resource usage reporting
    - Offline and historical analysis
  - **"Web bugs"**
    - Client side script-based reporting
    - Not Portal-specific
    - Real-time measurement

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Analytics Architecture – Log file based approach
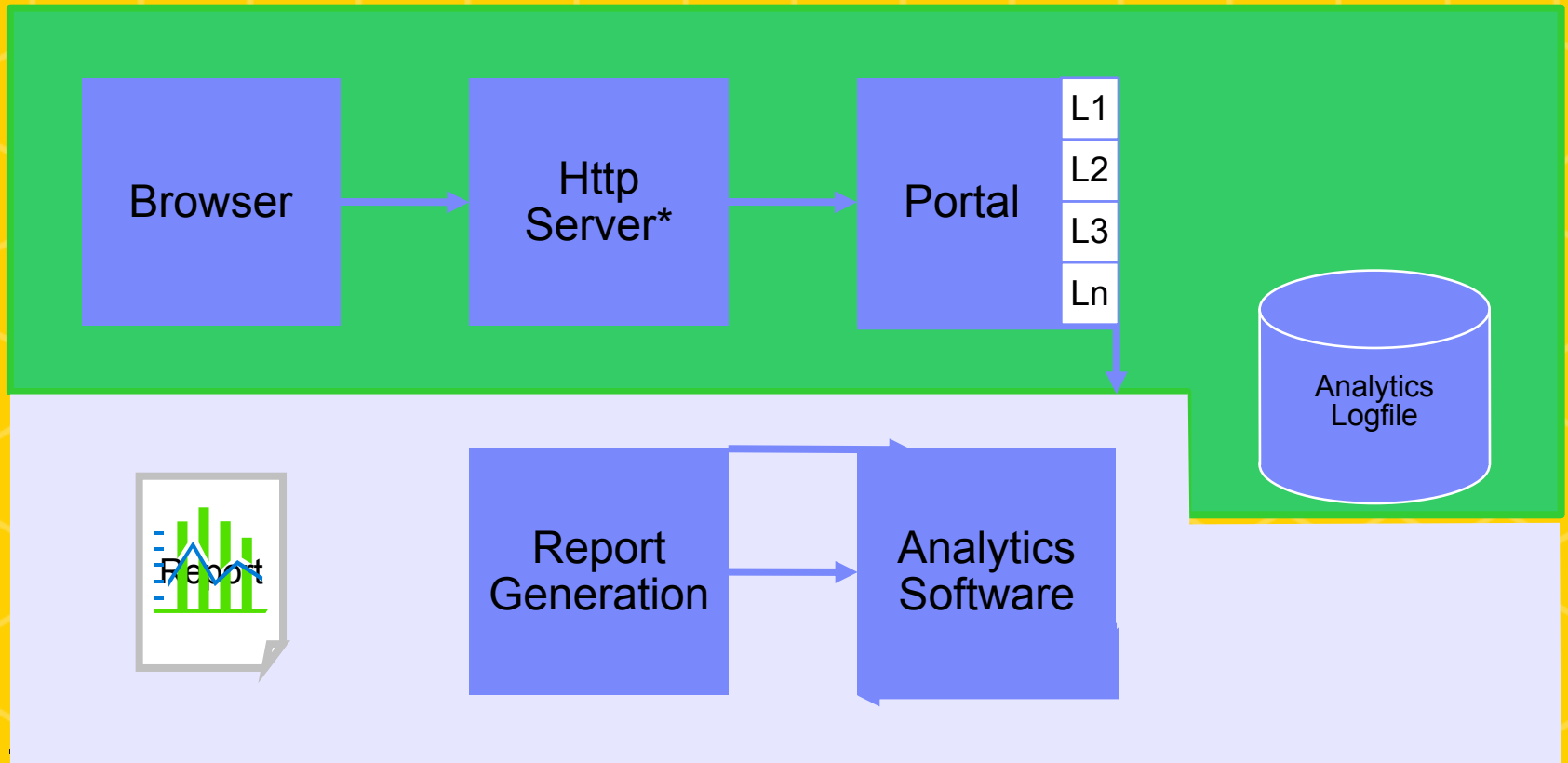
What is recorded?

- Users requesting pages and portlets
- Session activities (login, logout, timed out, login failed)
- Page management (creating, updating, deleting a page)
- User Management actions (creating, updating, deleting users and groups)
- Virtual portal (WebSphere Portal 6.1.0.1)
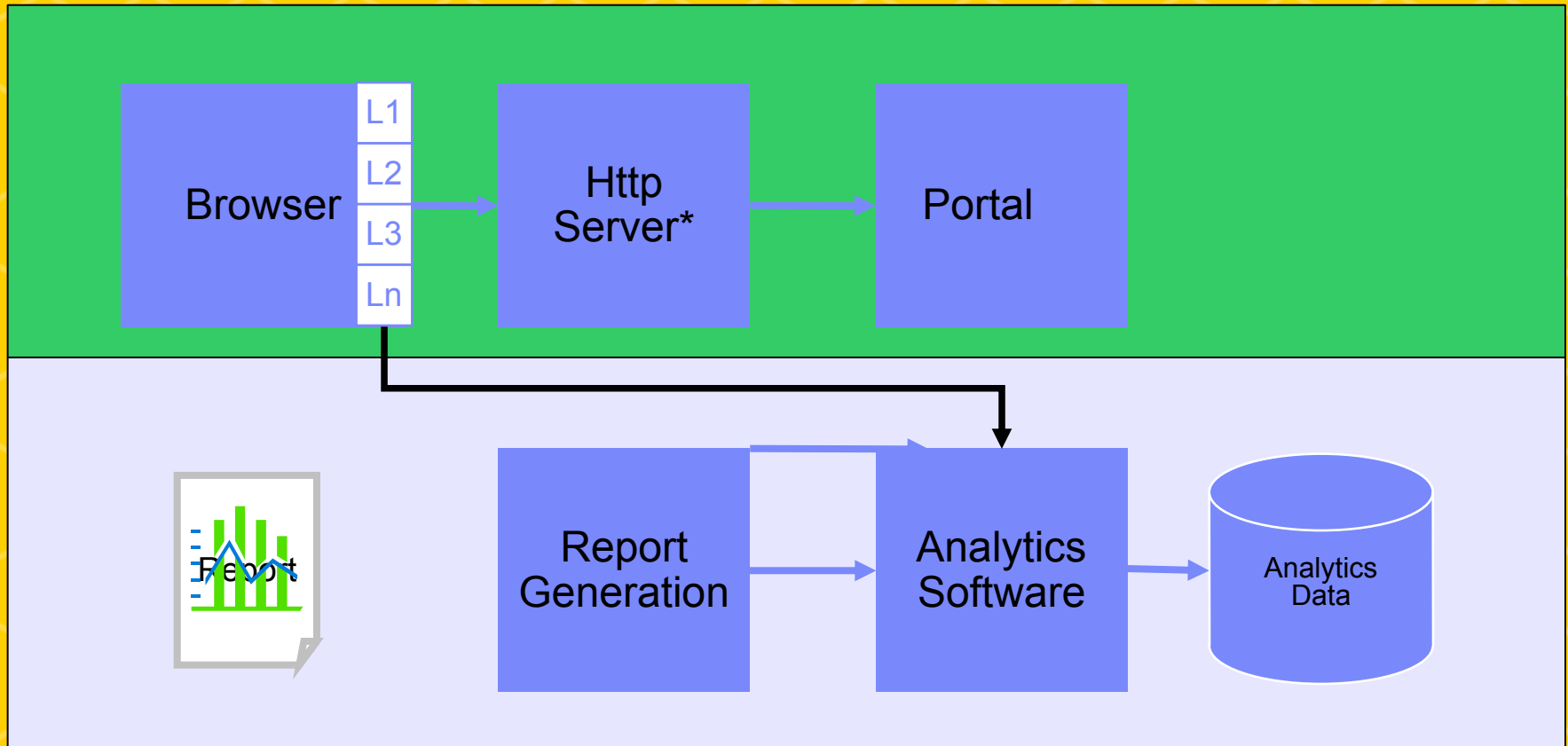- WCM viewed (WebSphere Portal 6.1.0.1)

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Analytics Architecture – Script / Web Bug injection based

Browser
- L1
- L2
- L3
- Ln

→ **Http Server*** → **Portal**

Report

Report Generation → **Analytics Software** → **Analytics Data**

What is recorded?

- Depends on the specific solution
- Information is sent to analytics system from the browser (web bug, Javascript)
- Some tools cover multiple request per single page (page+portlet+content)
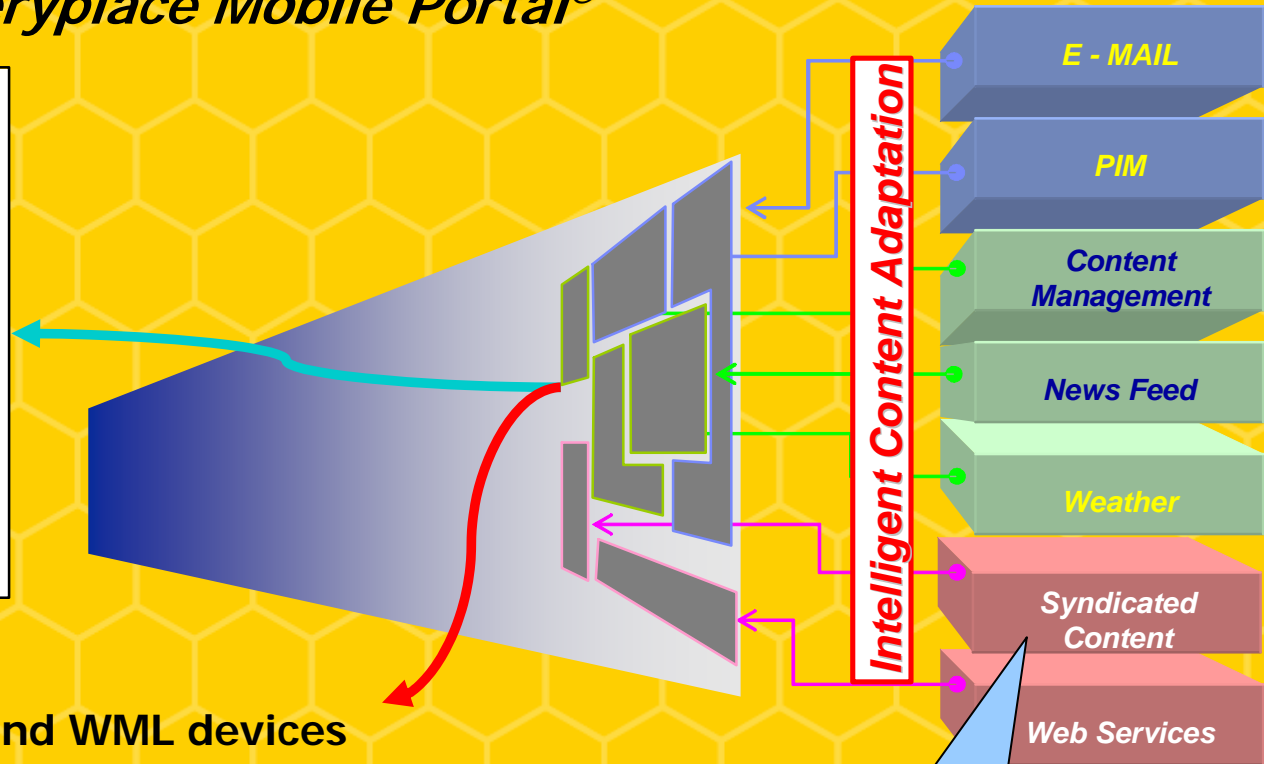- Includes static and cached content

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Extending your Portal site to mobile devices

IBM

Using WebSphere Everyplace Mobile Portal®

Rich and capable device
e.g. HTML based Browser PC

Limited capability devices
e.g. Reduced form factor and WML devices

Intelligent Content Adaptation

E - MAIL

PIM

Content Management

News Feed

Weather

Syndicated Content

Web Services

Device-independent content authoring

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End of presentation

धन्यवाद   *Thank You*   நன்றி

Thanks for attending!

Any questions?

(and please don't forget to fill out the survey before you leave)

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