



IBM Software Group

Lotus SalesTalk:

WebSphere Everyplace Mobile Portal Enable - Leveraging for Mobile Solutions Access

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Lotus software



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Yankee Group News Release

Yankee Group Finds Global Mobile Internet Services Market Should Exceed \$66 Billion Annually

Mobile Service Providers Could Achieve a 600% Increase in Global Consumer Mobile Internet Services

Boston, MA, November 14, 2007—Yankee Group today announced at the Mobile Internet World Conference and Expo that an untapped market for mobile internet services exists, **which should already be worth more than \$66 billion per year**. Instead, it has only reached \$9.5 billion. The full extent of these services' positive financial and socioeconomic impact has yet to be reached because service providers and their technology partners are not overcoming a wide range of barriers to adoption quickly enough. As a result, large numbers of consumers are being denied affordable and reliable mobile access to the internet, and service providers are missing out on a huge revenue opportunity.

More....

<http://www.yankeegroup.com/pressReleaseDetail.do?actionType=getDetailPressRelease&ID=1783>



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Lotus Offerings provide an anytime, anywhere platform

SERVER OPTIONS



CLIENT ACCESS OPTIONS

Rich Client	Lotus Expeditor Lotus Notes Lotus Sametime
Web Browser	Domino Web Access Lotus Quickr Lotus Connections WebSphere Portal
Mobile Devices	Lotus Notes Traveler Sametime Mobile Lotus Mobile Connect <u>WebSphere Everyplace Mobile Portal</u>

The Problem:



- *Portal can deliver markup to WAP devices, but that alone cannot deliver a compelling (or even useful) user experience*

- Symbian V6, V7
- Palm V4, V5
- PPC2002, 2003
- Smartphone
- WAP 1.1, 2.0
- 320x200
- 640x480
- 200x400
- 120x120
- Keyboard vs Stylus
- B&W vs Color
- Left to Right and Right to Left



Standard web pages cannot be pushed onto devices



How do you get
this web page onto
these phones



<i>Operating System</i>	Symbian	Symbian	Palm	BlackBerry	Microsoft Windows
<i>Display</i>	Black/White	Color	Color	Color	Color
<i>Screen</i>	120 x 120	176 x 220	240 x 400	240x160	200 x 320
<i>Interface</i>	Number pad	Number pad	Stylus	Keyboard	Keyboard



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With standard web technology, companies have to choose which mobile customers to target

If you program to the lowest common denominator, you do not present your best for devices that can handle more.

BUT

If you program to the higher phones, you lose any customers or users on lower-end phones.



<i>Operating System</i>	Symbian	Symbian	Palm	BlackBerry	Microsoft Windows
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Companies face the same basic choice for mobile devices that they do for PCs - build an application for the device or use the web

Client application or web application

As with PCs, this is a prevalent model for most companies to reach their customers and employees.

Client-based application

An application that is downloaded or installed on the device.

PC Example: Microsoft Office

Better where a company:

1. Requires specialized control or capabilities that exceed what is possible with a web browser
2. Is willing to invest the resources to develop and maintain the application despite the various and rapidly changing devices, vendors, capabilities, and underlying operating systems
3. Controls and limits the number and type of devices

Web-based application

A web solution that utilizes the browser already on the device.

PC Example: Amazon or online banking

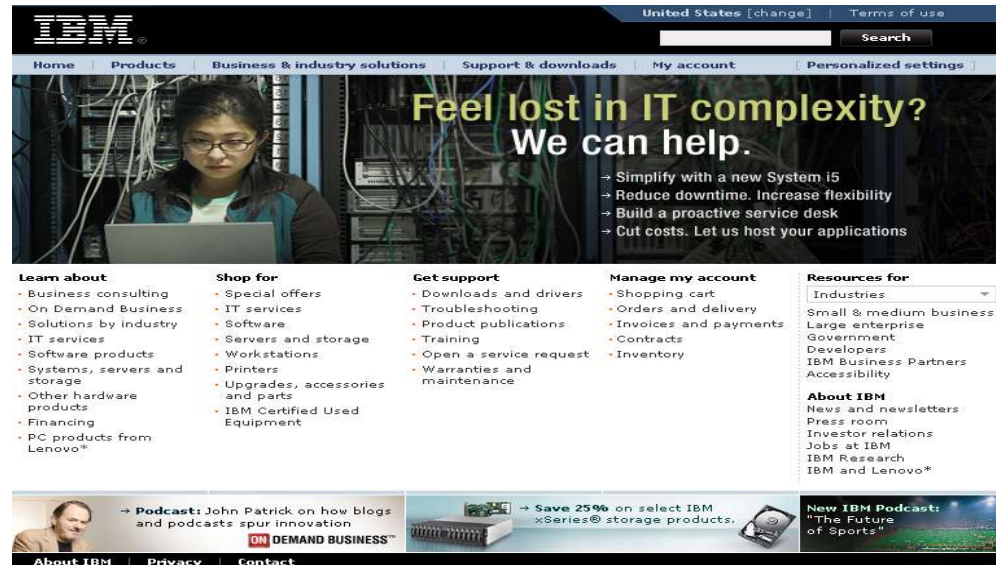
Better where a company:

1. Does not want to worry about every device environment and capability
2. Does not want to require their users to install anything.
3. Does not control the number or type of devices.
4. Has applications that can use the capabilities that browser-based solutions already provide.
5. Has existing web-based applications that they want to extend to mobile devices.



So, Design for Mobile! However.....

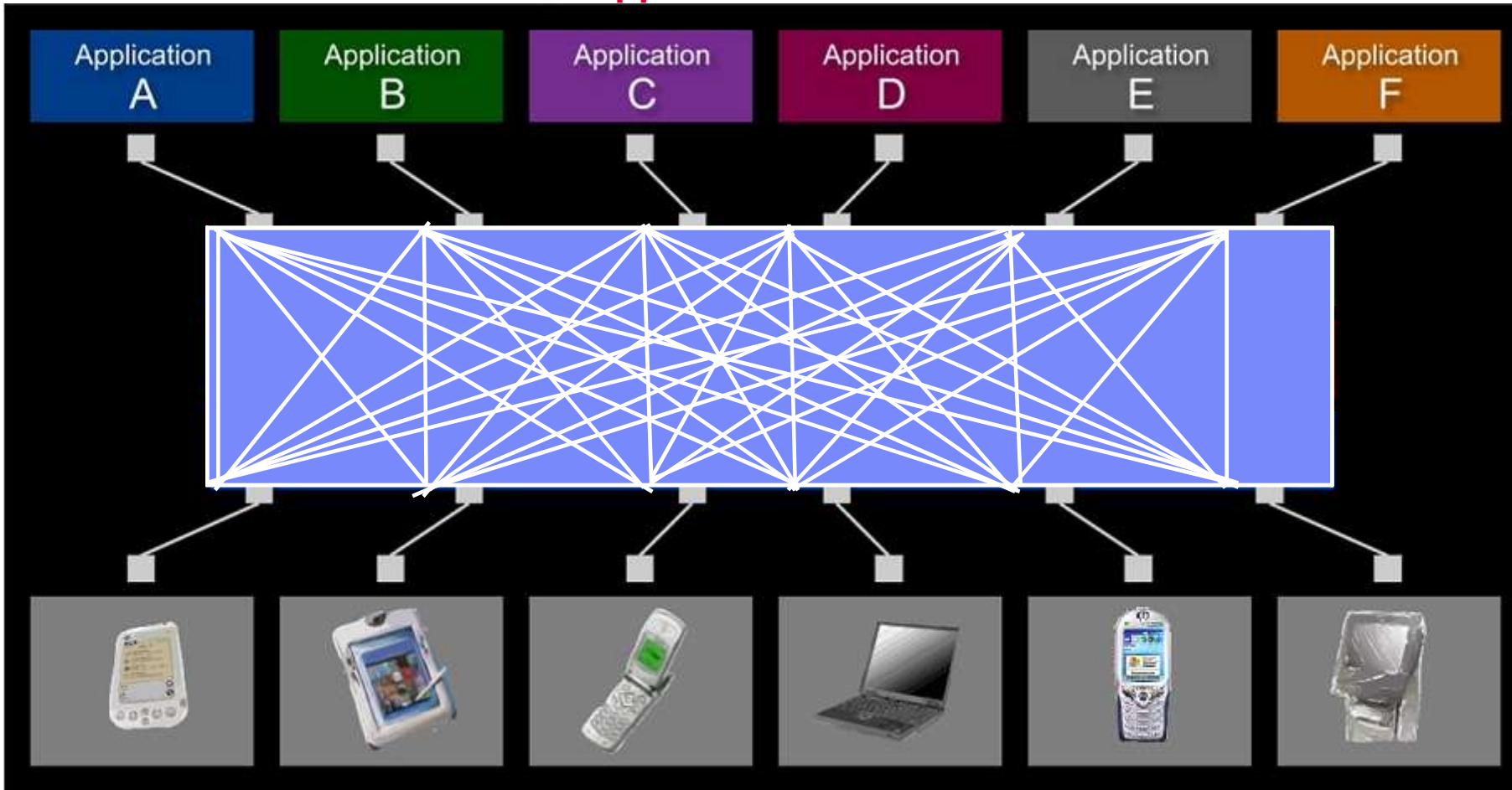
- Good UI design requires thought!
 - What is the most relevant information?
 - What information may be discarded?
 - Images: Scale, crop, or discard?
 - Target the customer!
- HTML pages always have “too much” information to be usable on a mobile device.
- Bandwidth is an issue
- Transcoding isn't a solution - the cost is inevitably greater than Design-for-Mobile.
- So, now you've decided to design for mobile.....



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...you still have a problem, and it looks like this:

M applications...

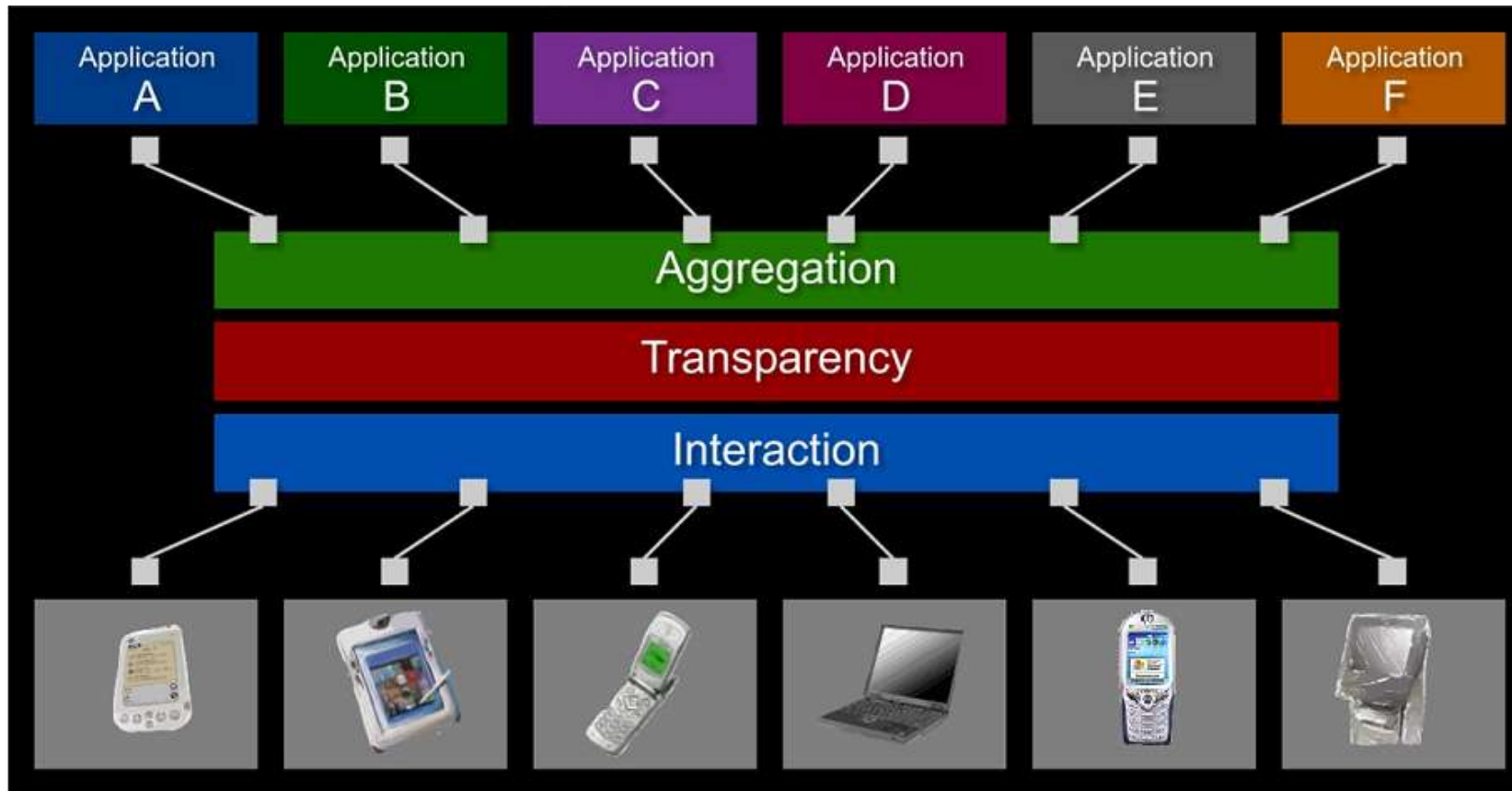


N devices



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Solution: A Mobile Platform that dynamically and intelligently adapts to the specific device



WebSphere Everyplace Mobile Portal Enable (WEMPE)

Platform for **device independent apps** that operate in **connected mode**

- **Lower development/maintenance cost** through device independent XDIME markup - 'Write once, render many'
- **Increased reach/target audience** through content on a variety of channels - PDAs, Smartphones, Laptops, Desktops
- **Reduced time to market and more revenue** through device database with over 5000 preconfigured device profiles and automatic device update service
- **Lower administration/integration cost** through integration with WebSphere Portal



What is WebSphere Everyplace Mobile Portal?

- 1) An extension to WebSphere Portal that:
 - Enables device specific markup capability
 - Extends Portal navigation to mobile devices
 - Adds mobile administration portlets
- 2) Provides a framework that can be used to create device independent portlet applications (XDIME Portlets). The Framework includes three components:
 - **The XDIME Aggregator** - displays navigation nodes which are configured and stored in Portal.
 - **XDIME Portlets** - render applications that generate XDIME.
 - **Mutli Channel Server (MCS) Integration** - converts XDIME to device-specific markup.
 - Easily supports new devices with mobile device update service

It takes advantage of many Portal features:

Configuration (xml access)

Navigation (Aggregator/Model API)

Security (e.g. TAI/ACL)

Scalability (cluster)

Virtual Portal

It includes an extensive tooling suite built on IBM's Eclipse-based Rational Software Development Platform



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WebSphere Everyplace Mobile Portal Enable: Business Value

- **Build and Deploy Applications Faster**
- **Enable LOB to focus on Value Added Enhancements**
- **Reduce user and device support costs**

- **Deploy new services faster**
in reaction to the market
- **Deliver more compelling user experience**
- **Generate faster promo and Marketing campaigns**

Cost Savings

Revenue Generation

Differentiation

Customer Loyalty

- **Accelerate time to market for new services/devices**
- **Improve merchandising of digital assets**
- **Efficiently update new mobile devices**

- **Provide a more consistent user experience**
- **Leverage device capabilities effectively**
- **Benefit from enhanced Portal administration**



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WEMPE KEY FEATURES

- XDIME PORTLETS - device independent markup language
- CONDITIONAL RENDERING
- NAVIGATION OPTIMIZATION
- DEVICE FILTERING
- IMAGE CONVERSION SERVICE
- ECLIPSE TOOLING for building XDIME mobile portlets
- Assign EXTENDED PROPERTIES to devices



FEATURE: XDIME Support

XDIME is an Device Independent Mark-up Extension to XML

- Device dependent attributes are moved to layout and themes, and other policies.
- Uses **Policies** to define how the various types of information are to be rendered in specific circumstances
 - Device policies
 - Layout policies
 - Theme policies
 - Component policies



Feature: Conditional Rendering

1. A developer can reference an image component instead of a hard-coded image name.
2. The component can be attached to various options.
3. WEMP then picks from those options based on the device's capabilities.

WebSphere Everyplace Mobile Portal software can dynamically use different images or text depending on the device

This phone can handle larger images



PDA Simulator

This phone can handle smaller images



XHTML Simulator



WML Emulator

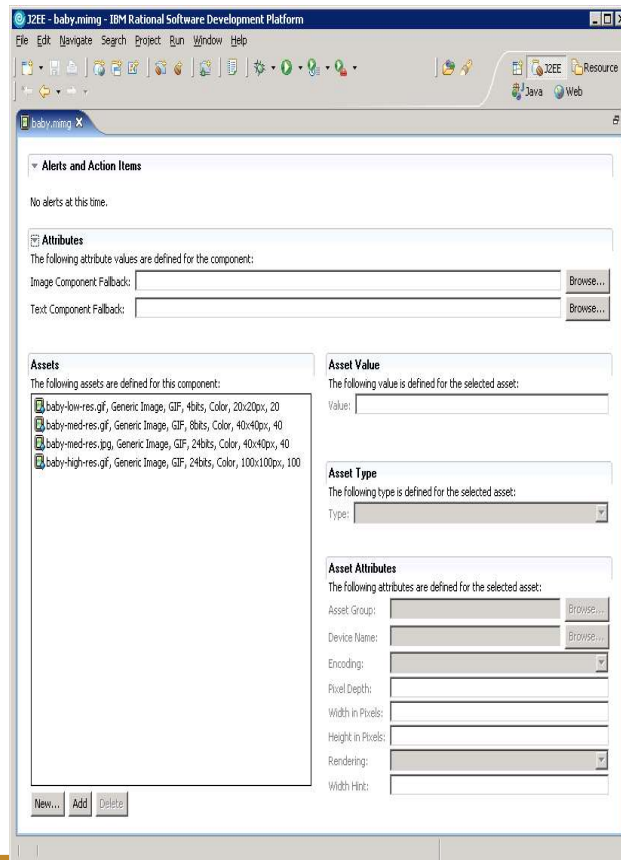
handle text

ABLES ENABLEMENT

Feature: Conditional Rendering (2)

Images: One image policy can be used to reference multiple images.

MCS can determine which image suits the device making the request



Instead of being stuck resizing a single image, a designer can provide different images for the same reference



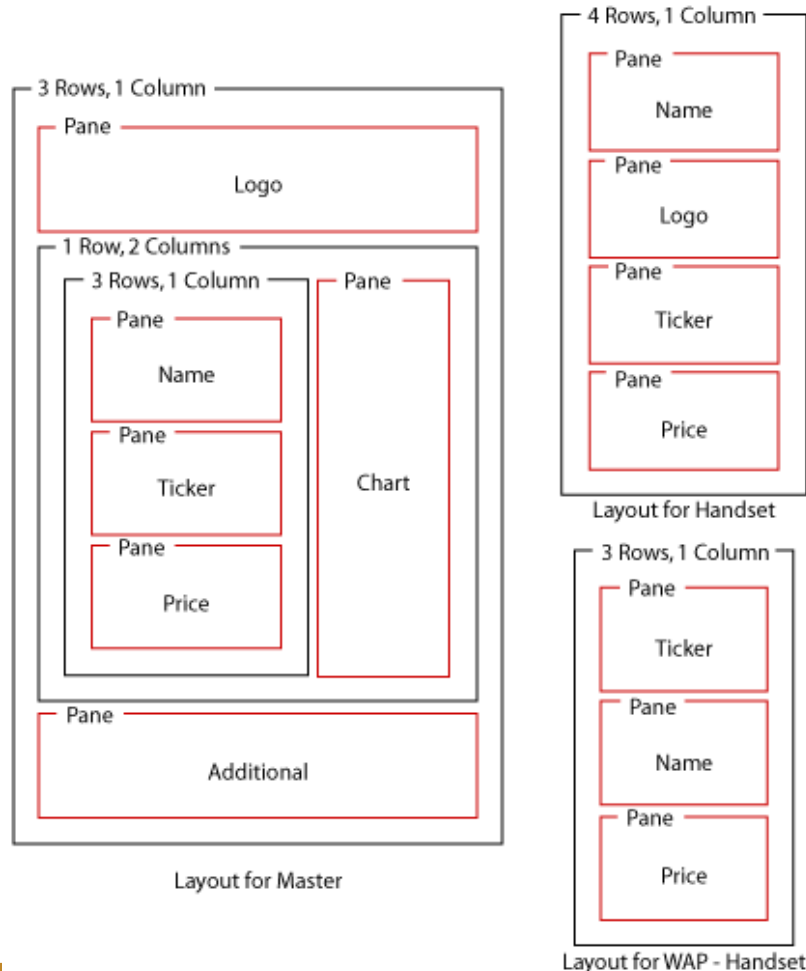
Mobile Portal also includes Image Conversion Service (ICS), which can dynamically resize/reformat images from single source image.



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FEATURE: Conditional Rendering (3)

Layouts: Facilitate design for best-case user interface. Varied screen sizes are not a problem with XDIME. (pages shown rendered with the same XDIME content)



FEATURE: Navigation Optimization

- Three navigation views available:

- List/Tree (default)
- Icon
- PDA

- Each view optimizes the presentation for the device making the request

- Custom views can be created

List View



Icon View



Tree View



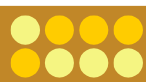
PDA



FEATURE: Device Filtering

Filtering based on Device Type/Capabilities

- Navigation nodes (Pages, Portlets and URLs) can be configured such that they appear only on devices with particular capabilities (example: color, audio, camera)
- Navigation Nodes can be configured such that they only appear on a certain type of device (example: PDA) or model (example: Sanyo SCP-8100).



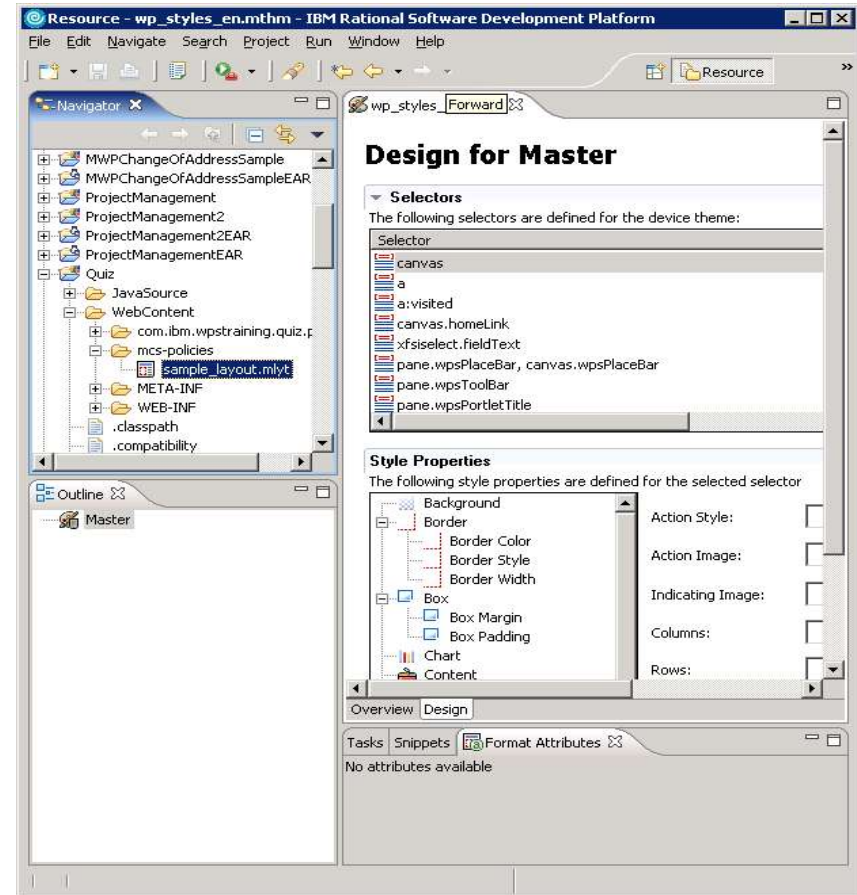
FEATURE: Image Conversion Service

- The Image Conversion Service (ICS) can:
 - Convert images to a different format and pixel depth
 - Reduce the color depth for a smaller color palette
 - Scale images
 - Limit the output file to a size that can be handled by the device
- For performance:
 - May use the Caching Proxy of WebSphere Application Server Edge Components as both a forward and reverse proxy
 - May be installed on separate application servers than WebSphere Portal and may be clustered



FEATURE: Mobile Portal Toolkit

- Based on Eclipse
- Create XDIME portlets and their policies
- Create one set of markup for all mobile devices
- Portlets can be tested within the toolkit
- Easily export applications to install on Portal Server
 - Over 5000 devices and growing...
 - 600+ attributes per device
 - Device Update service permits download of new/changed templates
- Interrogate device attributes to determine device capabilities.



FEATURE: Mobile Portlet Toolkit

- Create one markup (XDIME) to support all mobile devices
 - A single portlet may support both wireless (XDIME) and wired (HTML) content.
- XDIME elements reference Components, Theme and Layout policies
- Portlets are JSR-168 Compliant - developers may also use STRUTS
- Application developers do not have to be concerned with updating their applications for new devices
- Mobile Portal Toolkit is used to create portlets and their policies
 - Portlets can be tested within the toolkit
 - Eclipse-based plugins....run on Rational Application Developer



FEATURE: Extended Properties

- Extended Properties may be used to assign additional information to devices
- Benefits:
 - Information is described in a structured fashion
 - Data types such as enumerations, boolean, enforced on admin UI
 - Information assignable to Pages and URLs, not just Portlets.
- Administrative tools are used to configure and/or add Extended Properties
- Device Type/Capability, Render Mode, and Navigation Title are examples of predefined Extended Properties



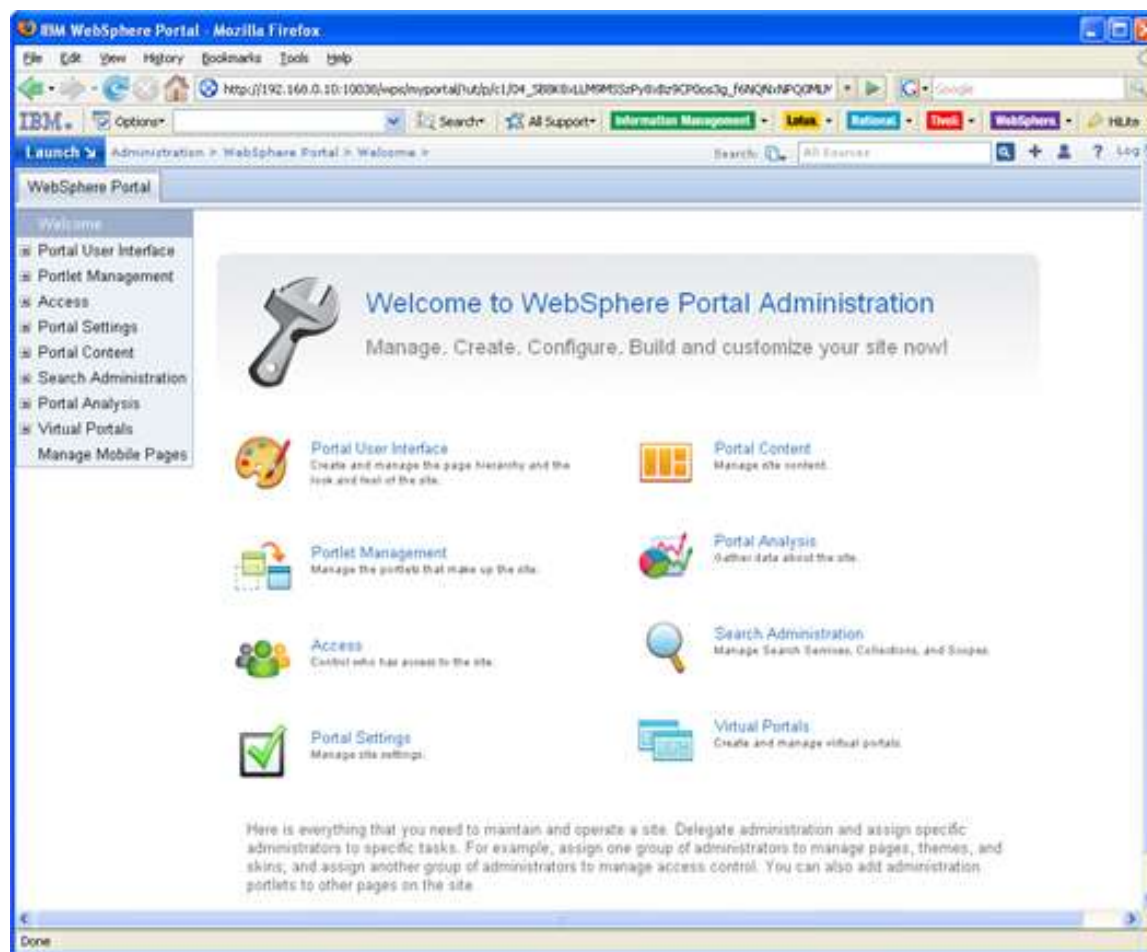
Virtual Portal Support

■ Exploits WP 6.0 Virtual Portal Support

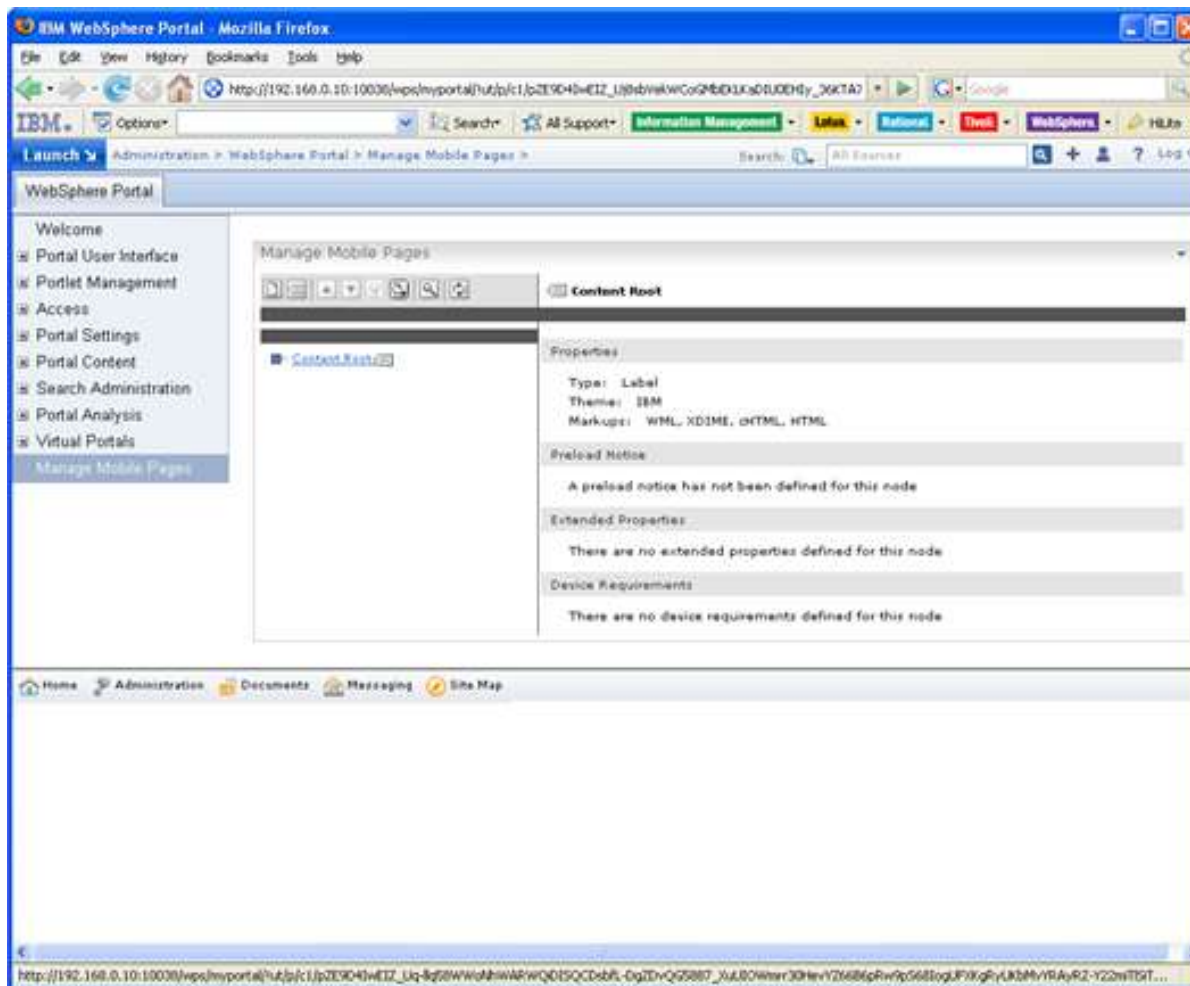
- Use a single installation of portal to deploy multiple portals with different URLs, anonymous pages, user groups, and themes and skins.
- Reuse existing hardware and simplified administration of multiple portals.



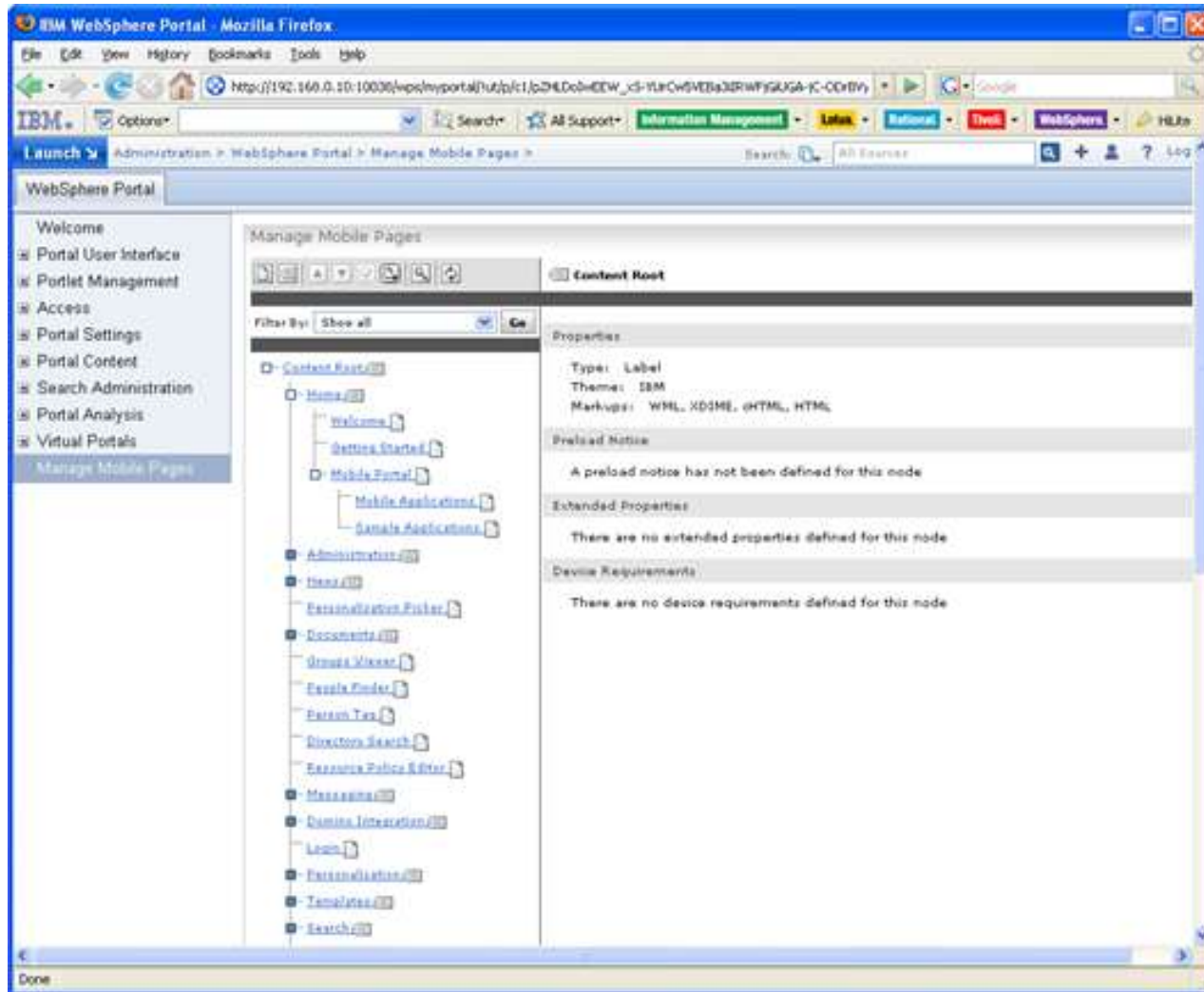
WebSphere Portal (WP) 6 Administration



WP Administration - Manage Mobile Pages



WP Administration - Mobile Portal



Production Use Case:

Financial Industry – Major North American Financial Institute

Summary:

- Financial Industry
- B2C
- Production deployment.

Business Challenge:

- Customer believes that mobile access to information and services is critical in the financial arena. Major drivers include:
 - 1) Financial information changes quickly
 - 2) Customers expect real-time access to that information and related services
 - 3) Customers often travel and need mobile access.
- Customer's research has shown their industry is a year away from having mobile financial offerings as a standard customer offering; however the customer acknowledges that other market leaders are beginning to offer mobile financial information today.

Customer Use:

- Utilizes WebSphere Everyplace Mobile Portal software as a new channel for their customers. The primary use of the software is for the extension of a customer's existing services, such as viewing:
 - ✓ Their portfolio makeup
 - ✓ Portfolio performance
 - ✓ Other financial information such as research.
- Expects later phases to include:
 - ✓ Executing transactional services from the mobile device, including stock trades.
 - ✓ Setting mobile alerts such as stock thresholds.
- ✓ More than 90% reuse of existing assets.

Production Use Case:

Retail Industry – Major International Retailer

Summary:

- Retail Industry
- B2E
- Managing employees and the store

Business Challenge:

- Customer has a requirement to utilize mobile devices in stores with access to portal based applications for store managers and employees. Major drivers include:
 - 1) Access to alerts from the Workforce Management system for time & attendance alerts and approvals
 - 2) Use of mobile devices in store for Task Management check-lists
 - 3) Access to Events Calendar
- Customer has Motorola Symbol devices of various models and requires an effective and efficient way for proper display and rendering of portal content to Store Managers and employees.

Customer Use:

- Utilizes WebSphere Everyplace Mobile Portal software as the rendering middleware to support access to key portal applications that are accessed by mobile store managers and employees in stores. The primary use of the software is for the extension of a customer's existing services, such as viewing:
 - ✓ Task Management
 - ✓ Workforce Management – time & attendance
 - ✓ Events Calendaring
- Expects later phases to include:
 - ✓ Inventory information
 - ✓ Extension of their overall B2E portal applications
 - ✓ Setting mobile alerts such as stock thresholds.
- ✓ More than 90% reuse of existing assets.

Production Use Case: Communications Industry – Major North American Telecom

Summary:

- Mobile retail and customer support
- B2C
- Third year in production – over 40 million users

Business Challenge:

- Customer ranked near the bottom for customer service quality. Increasing human customer service was expensive.
- Customer wanted a branded, mobile retail presence that would provide value that end users could not get elsewhere.
- Customer needed a common mobile entry point to support:
 - Various capabilities – retail transactions, customer support.
 - A complex infrastructure with multiple existing back-end systems.
- Massive number of users and transaction volume required a highly scalable system.

Customer Use:

- Created a comprehensive e-care platform that helped drive traffic away from 'expensive' human manned call centers, towards a self-care portal, using WebSphere Everyplace Mobile Portal software.
- Created a new business model around the sale of Digital Media content.
- Reuses existing back-end infrastructure and OSS/BSS systems.
- Supports sales in excess of \$1 Million per day.
- Supports over 800 Transactions Per Second of throughput

WebSphere Everyplace Mobile Portal FAQs:

Q	My company already has Portal, along with a variety of portlet applications. Will WebSphere Everyplace Mobile Portal software make our existing applications visible on mobile devices?
A	No. WebSphere Everyplace Mobile Portal software will not simply transcode existing web pages/applications. In fact, IBM dropped this capability from the software because customers realized computer web pages and mobile web pages are not the same. However, you can reuse the same backend infrastructure and portlets, such as retrieving my stock preferences.
Q	Is WebSphere Everyplace Mobile Portal software scalable?
A	Yes. The software is currently installed and operating in the one of the world's largest Portal clusters.
Q	How do I keep up with all of the devices, and what is an MDU?
A	The Mobile Device Update service is a subscription, (provided for sale as WebSphere Everyplace Mobile Device Enable) component that keeps the device repository up-to-date in order to support new devices as the enter the market. Customers simply download the repository whenever and as often as they prefer.



WebSphere Everyplace Mobile Portal FAQs (cont'd):

Q	What version of Portal does WebSphere Everyplace Mobile Portal support?
A	IBM WebSphere Everyplace Mobile Portal V6, with IBM WebSphere Portal V6.0.0.1 and higher support, was generally available in August 2007.



SUMMARY: Benefits of Mobile Portal

- Write-once for Mobile devices: Layouts optimize screen utilization, Multi Channel Server handles markup variance.
- Virtual portal support allows support for multiple brands and Mobile Virtual Network Operators.
- Navigation is administered via WYSIWYG interface in Portal Administration
- Integration with WebSphere Portal: Enables unified Navigation administration for HTML and Mobile users
- User may customize their portal from the HTML view, and see changes in XDIME view
- Scalability - Very large cluster is possible with Portal and Mobile Portal
- ACL is controlled in Portal Administration. Enables unified ACL administration, reduces duplication of effort. (Lower ACL administration cost.)



WEMPe Platforms and Pre-reqs

Supported Servers & Operating Systems

- pSeries® with IBM AIX 5L V5.3 and the 32-bit kernel
- Intel® (x86) hardware, with either:
 - Red Hat Enterprise Linux Advanced Server Version 3.0 Update 6 and Version 4.0 on an Intel x86 32-bit server
 - SuSE Linux Enterprise Server (SLES) Version 9 Service Pack 1 on an Intel x86 32-bit server
Note: This version of SLES uses the Linux 2.6 kernel
 - Windows 2003 Advanced Server
- Sun Solaris

Supported Devices

- All types of browser enabled devices (More than 5000 supported devices in the device database)

Image Conversion Service installed on a separate application server

- Java Runtime Environment 1.4.2 service release 6 or later.

Pre-requisites:

- WebSphere Portal for Multiplatforms V6.0.0.1 (Server, Enable or Extend)
- IBM Rational Application Developer V7.0 or Rational Software Architect V7.0
 - which support Eclipse 3.2.1 (prerequisite to use the Mobile Portal Toolkit)



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WebSphere Everyplace Mobile Portal Enable

- Highly scalable, proven mobile portal middleware
- “Write once, render many” to mobile devices through device independent authoring
- XDIME (XML-based Device Independent Markup Language)

Extend web portal to mobile devices

WebSphere Everyplace Mobile Portal Enable 5.1

- Leverages Websphere Portal 5.1
- Virtual Portal Support
- Enhanced Mobile Portal Toolkit development environment
- Supports high-performance rendering to a wide variety of devices
- JSR 168 portlet support

WebSphere Portal 6 Support

WebSphere Everyplace Mobile Portal Enable 6.0

- GA Q3 2007
- WebSphere Portal 6.0 alignment
- Rational Application Developer 7
- Rational Software Architect Support
- Improved scalability
- Automated installation
- Increased device repository capabilities

Increased rendering and personalization

WebSphere Portal Mobile 6.x*

- Target 2008 availability
- Rendering engine update
- Enhanced performance
- New out of box samples
- Enhanced personalization capabilities
- Continued alignment with emerging standards

** Note: Roadmap information is based on current candidates and is subject to change*



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Software services for IBM WebSphere Everyplace Mobile Portal Enable (WEMPE)

Technical consulting

IBM Software Services for Lotus can assist companies with deploying WebSphere Everyplace Mobile Portal Enable (WEMPE) to extend content and services to their mobile colleagues, customers, and partners. Device-independent authoring with WEMPE ("write once, render many") facilitates introduction of new end-user cell phones and PDA's without changes to the style guide or impact to the existing applications or products.

Consulting Services range from enhancing/extending current Web applications to full planning, implementation, and deployment of applications for mobile users.

To contact ISSL:

<http://w3-103.ibm.com/software/xl/portal/viewcontent?type=doc&srcID=Y2&docID=H073888K58176A94>

Or www.lotus.com/services

Premium services

IBM Software Premium Support provides an integrated set of support services that helps customers sustain and optimize their IBM WebSphere Everyplace Portal Mobile Enable infrastructure. It is designed to complement enhanced support and provides value through proactive support, knowledge sharing, and problem management. The program is structured to move the customer's organization forward rather than just managing problems.

For more information: ibm.com/software/support/premium

Pricing

- **IBM WebSphere Everyplace Mobile Portal Enable Processor Value Unit (PVU) License + SW Maintenance 12 Months (D55XJLL) \$580/PVU**
- **IBM WebSphere Everyplace Mobile Device Enable Processor Value Unit (PVU) License + SW Maintenance 12 Months (D55XLLL) \$26.50/PVU**

Note: The above two products are always purchased together. They must be purchased in the same quantities as each other. IBM WebSphere Portal Server, Enable, or Extend is a pre-requisite.

Resources for WebSphere Everyplace Mobile Portal:

Overview

http://www-306.ibm.com/software/pervasive/ws_everyplace_mobile_portal_enable/

Information Center

<http://publib.boulder.ibm.com/infocenter/pvccom/v6r0m0/index.jsp>

DeveloperWorks articles

Intro:

http://www-128.ibm.com/developerworks/websphere/library/techarticles/0411_burke/0411_burke.html

Examples:

http://www-128.ibm.com/developerworks/websphere/library/techarticles/0412_balhoff/0412_balhoff.htm

http://www-128.ibm.com/developerworks/websphere/library/techarticles/0512_burke/0512_burke.html

Articles are added regularly – please search “WebSphere Everyplace Mobile Portal”

RedBook (WEMP version 5)

<http://www.redbooks.ibm.com/abstracts/REDP3942.html?Open>

Resources for WebSphere Everyplace Mobile Portal (2)

Techworks Education – WebSphere Everyplace Mobile Portal 6.0

<http://techworks.dfw.ibm.com/americas/DSTR-77DMK5>

IBM DemoNet demonstration site:

<http://wesd.dfw.ibm.com/wps/portal>

WebSphere Everyplace Mobile Portal wiki:

<http://w3.webahead.ibm.com/w3ki/display/WEMP/Home>

WebSphere Everyplace Mobile Portal – Lotus brand XL Portal site:

http://w3-103.ibm.com/software/xl/portal/!ut/p/c1/04_SB8K8xLLM9MSSzPy8xBz9CP0os3hvL3c_A3cfQwML4wADAYMPi8CAwBAjQwMDQ6B8JB55I2J0G-AAjgYEdeDXIvfdpA8HvP9PPJzU_ULckMjDLJMFAGo1Ran/dl2/d1/L2dJQSEvUUt3QS9ZQnB3LzZfS0pHTjBHTDEwODNQMDAYSDhRUFFUMjEwTzU!?nb=ca&ni=lotus&ca=essagingandcollaboration&pr=wseveryplacemobileportal

Contact Resources

■ Product Line Managers

- Bob Bunzey, WebSphere Everyplace Mobile Portal Offering Manager
- Lauren Wendel, WebSphere Everyplace Mobile Portal Product Manager
- Amy Ewing, WebSphere Everyplace Mobile Portal Marketing Manager

■ World Wide Sales Executives

- Mike Craney, World Wide Portal Sales Leader

■ World Wide Technical Sales and Services Leads

- David Dutcher, WW Technical Pre-Sales Support
- Van Landrum, Americas Software Technical Sales
- Jeff Mirman, Team Lead, Enterprise Access and Client Technologies, Americas

■ Americas Sales and Technical Sales Leads – Lotus Mobile and Enterprise Access software

- Americas Sales Software Lead - Lotus Mobile and Enterprise Access Software, Pat McNamara
- Americas Technical Sales Manager - Lotus Mobile and Enterprise Access Software, Peter Jasion
- Americas Technical Sales Support – Dan Stromnger

■ Global Telecommunications Industry, Strategy and Growth Initiatives

- Aamer Rana, Senior IT Consulting Architect, Application and Integration Middleware
- Deepika Sachdev, IBM Global Business Services Application Consultant
- Jitendra Khanna, IBM Global Business Services Project Manager
- Cash Ramnath, IBM SWG Global Executive Industry Architect, Media and Entertainment and Telecom Solutions

CALL TO ACTION

■ THINK UPSELL

- WEMPe has the potential to add significant revenue to your current deal, and get more money out of existing companies.

■ INVESTIGATE

- Ask your customers and your prospects what their mobile strategy is, and WHO is in charge of it

■ QUESTION

- Ask the appropriate person(s) about their mobile strategy, particularly how they intend to support different devices in the US and overseas

■ PRESENT

- The Value of the WebSphere Mobile Solution to the business strategy people, and have your ITS present the technical details to IT

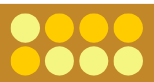
■ CALL FOR HELP

- We're aware that deep skills on this product are not abundant in the field. We're here to help.

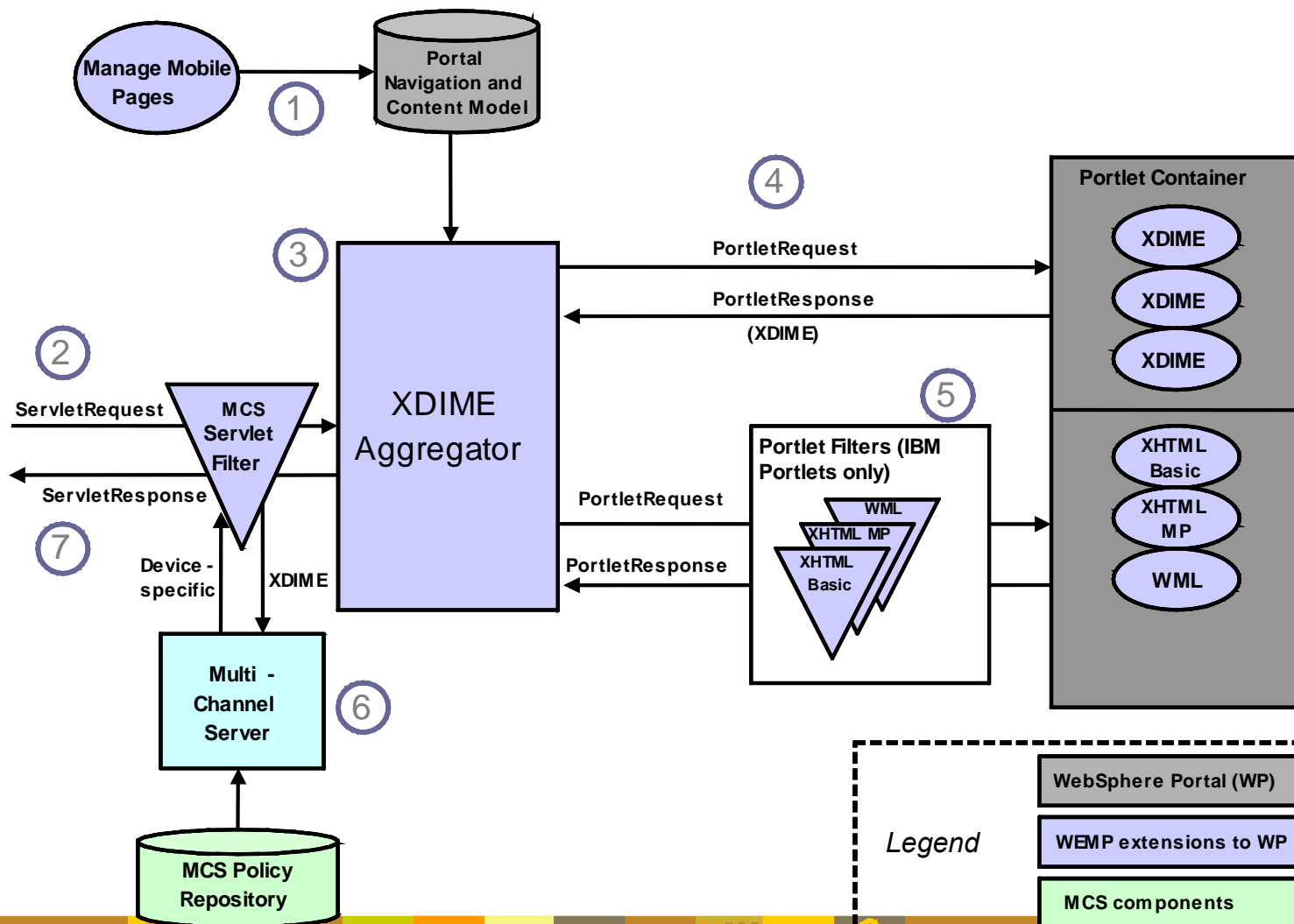


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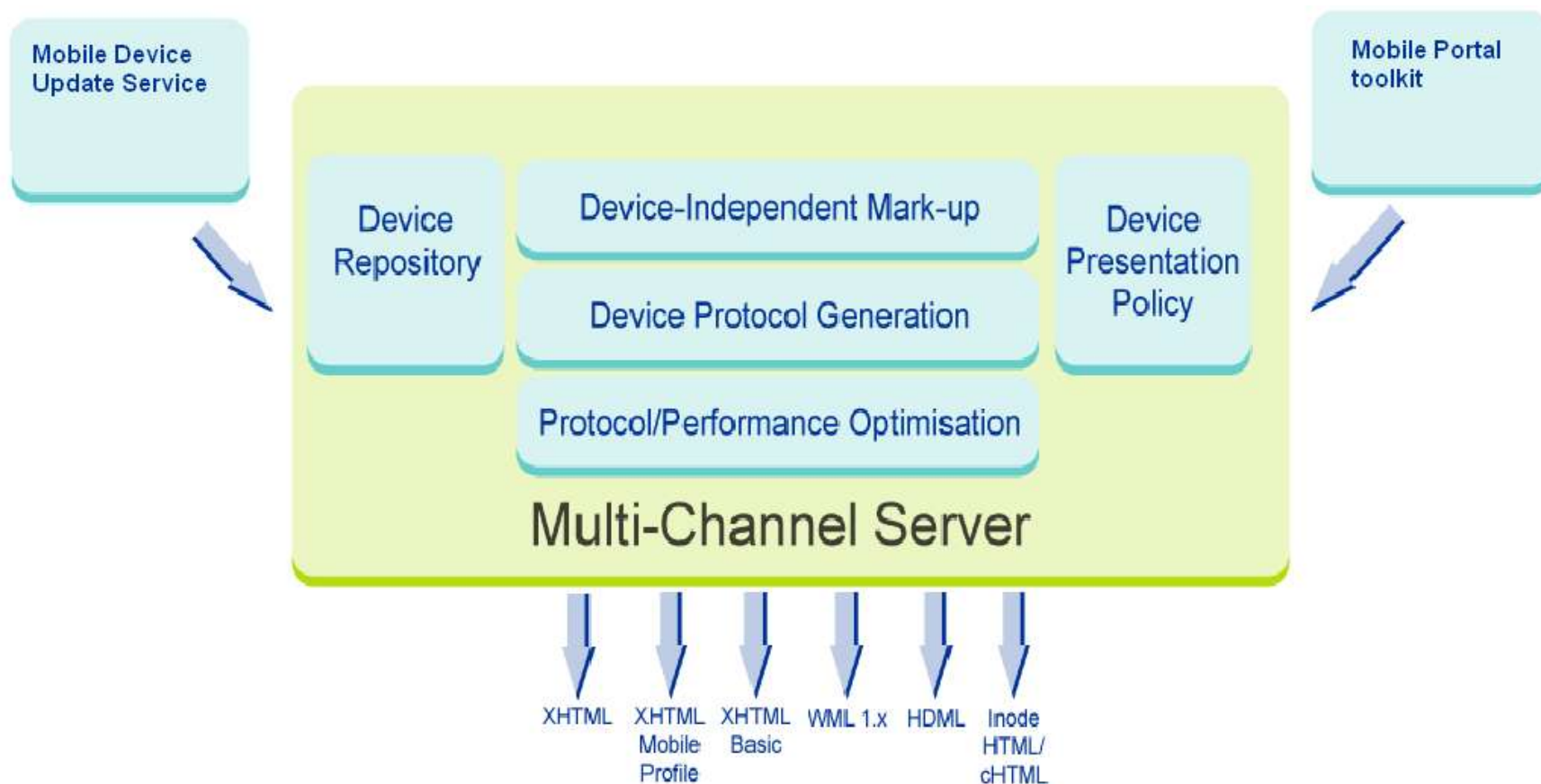
Backup



Runtime Component Interaction



Multi-Channel Server



- MCS Runtime processes mark-up in conjunction with theme, layout, and component policies to generate device specific mark-up (Note: HDML handled by converting WML via MAG gateway)



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Yankee Group News Release

Yankee Group Finds Global Mobile Internet Services Market Should Exceed \$66 Billion Annually

Mobile Service Providers Could Achieve a 600% Increase in Global Consumer Mobile Internet Services

Boston, MA, November 14, 2007—Yankee Group today announced at the Mobile Internet World Conference and Expo that an untapped market for mobile internet services exists, which should already be worth more than \$66 billion per year. Instead, it has only reached \$9.5 billion. The full extent of these services' positive financial and socioeconomic impact has yet to be reached because service providers and their technology partners are not overcoming a wide range of barriers to adoption quickly enough. As a result, large numbers of consumers are being denied affordable and reliable mobile access to the internet, and service providers are missing out on a huge revenue opportunity.

According to the Yankee Group Report published today, *Mobile Internet Utopia: Imagine if Supply Could Satisfy Demand*, the \$66 billion figure for global consumer mobile internet services is a conservative estimate because it refers only to access. It excludes all incremental revenue from the billions of transactions consumers would generate if they had ubiquitous mobile internet access. If operators make it a priority to provide accessible, easy-to-use services, and flat-rate price plans they can drive significant additional growth in mobile data usage and ARPU.

"Demand for mobile access to the internet is far greater than has been achieved to date," said Declan Lonergan, co-author of the Report and director in Yankee Group's Consumer Research group. "Most future projections are also conservative. This is because success of the mobile internet continues to be restrained by several obstacles that litter the path to our vision of ubiquitous connectivity. The true scale of the social and economic impact that can be achieved by extending mobile internet access to millions of new customers would go far beyond the financial metrics that we have modeled. Consumers, businesses and societies would all benefit in unquantifiable terms."

This Yankee Group Report explores the opportunities that improved access to the mobile internet can deliver, both in terms of financial impact and positive socioeconomic effects. As an example, providing individuals with access to high-speed mobile internet services for the first time would enable them to create completely new types of service, around which whole industries would emerge.

<http://www.yankeegroup.com/pressReleaseDetail.do?actionType=getDetailPressRelease&ID=1783>



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The virtual workplace is here

- **58%** of IT Executives consider their company to be a virtual workplace
- **90%** of employees work in locations other than headquarters
- Between **60% and 70%** of employees work in different locations from their bosses
- The number of virtual workers has increased by a whopping **800%** over the past five years



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WORLDWIDE SALES ENABLEMENT

XDIME Markup supports conditional rendering for mobile devices

Panes assign meaning to content

```
<canvas layoutName="/stockLayout.mlyt" type="portlet" class="body">
```

```
  <pane name="Name">
    <b>JK Telecom</b>
  </pane>
```

```
  <pane name="Ticker">
    JKT
  </pane>
```

```
  <pane name="Price">
    192.73 +0.25
  </pane>
```

```
  <pane name="Logo">
    
  </pane>
```

```
  <pane name="Chart">
    
  </pane>
```

```
  <pane name="Additional">
    <hr/>
    JK Telecom is a industry leading communication services provider.
```

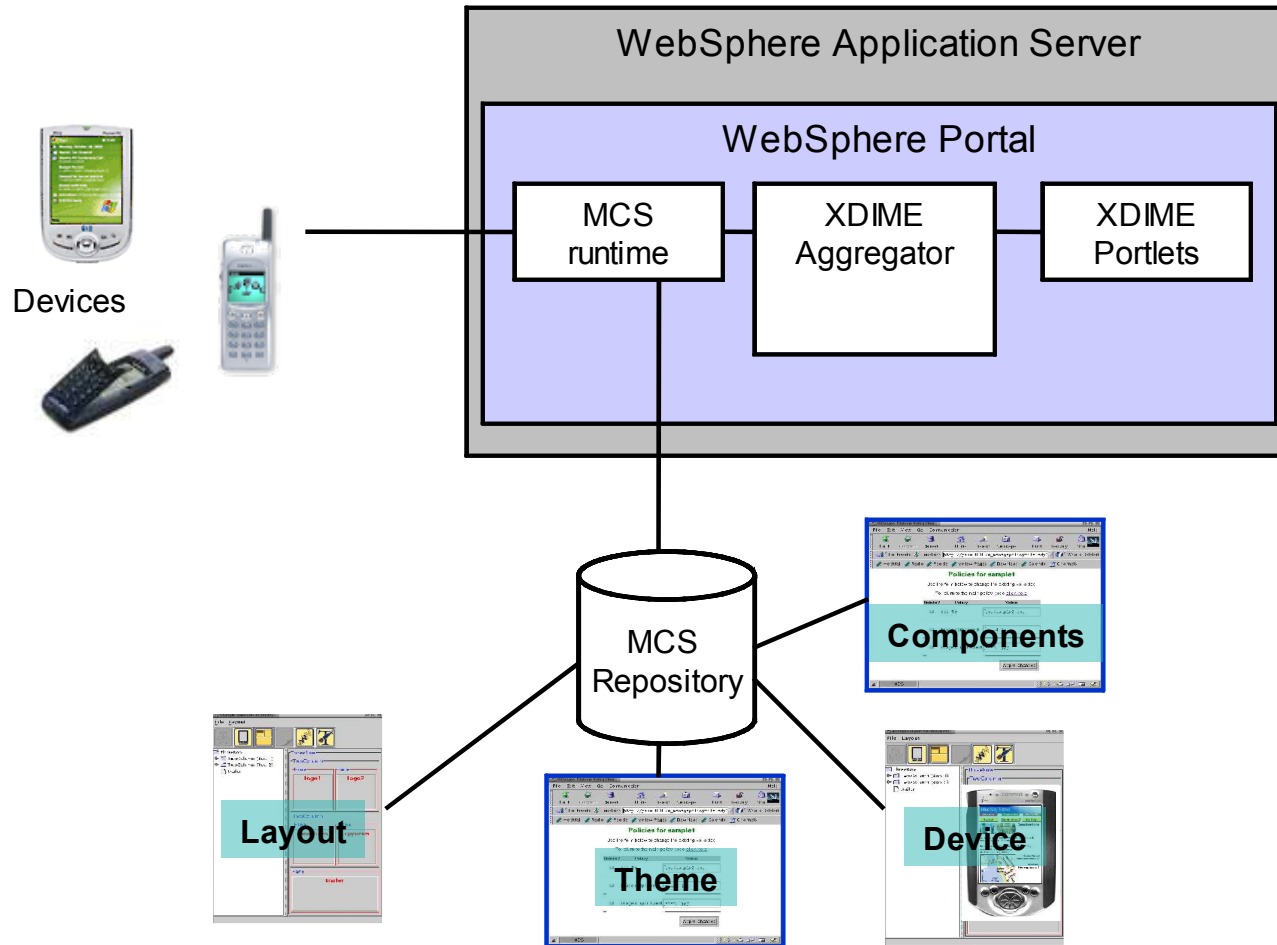
```
  </pane>
```

```
</canvas>
```



WORLDWIDE SALES ENABLEMENT

WebSphere Everyplace Mobile Portal Overview

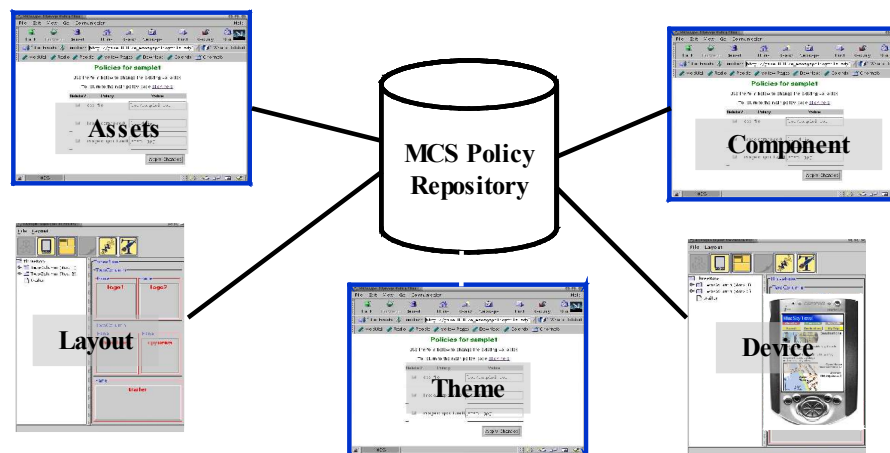


XDIME for Device Independent Applications

■ XDIME Aggregator

- Extends the WebSphere Portal (WP) framework to support XDIME
- Evaluates attributes of each content node, compares them with device capability by querying the device database and then renders appropriate content to the device

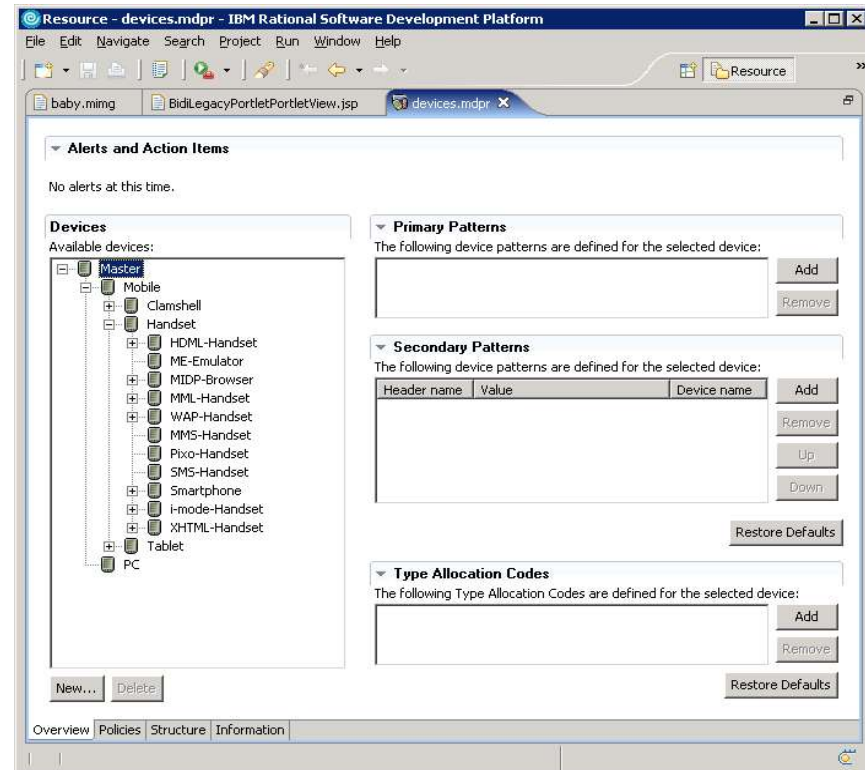
■ Multi Channel Server (MCS) Integration



Mobile Portal Toolkit - continued

Device Repository

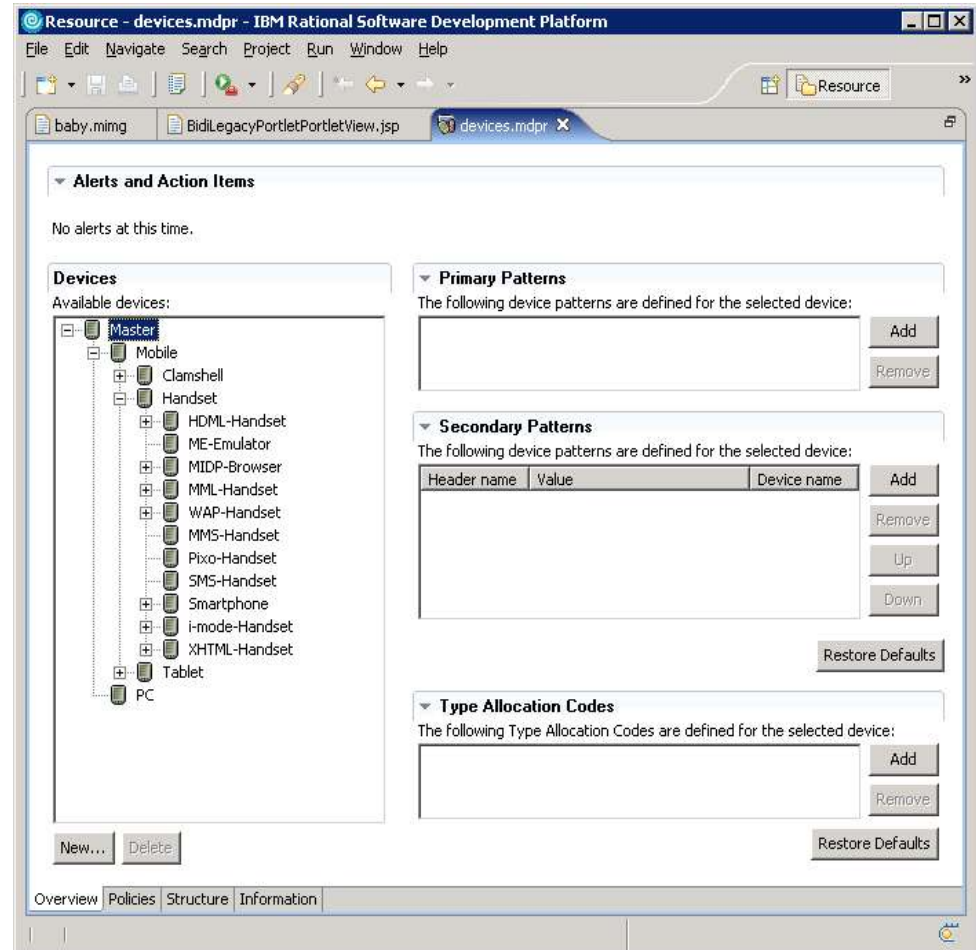
- Hierarchical representation of devices
- Rich Mobile Device Profile Repository
 - Aligned with W3C CC/PP and WAP Forum UAPROF
 - Over 5000 devices and growing...
 - 600+ attributes per device
- Robust Device Identification
 - compressed XML file in RAD
 - DB based on Server (DB2, Oracle)
- Updates available via **WEMP Device Enable** (Device update service, paid subscription, sold with WEMPE)



Mobile Portal Toolkit - continued

Device Repository Editor

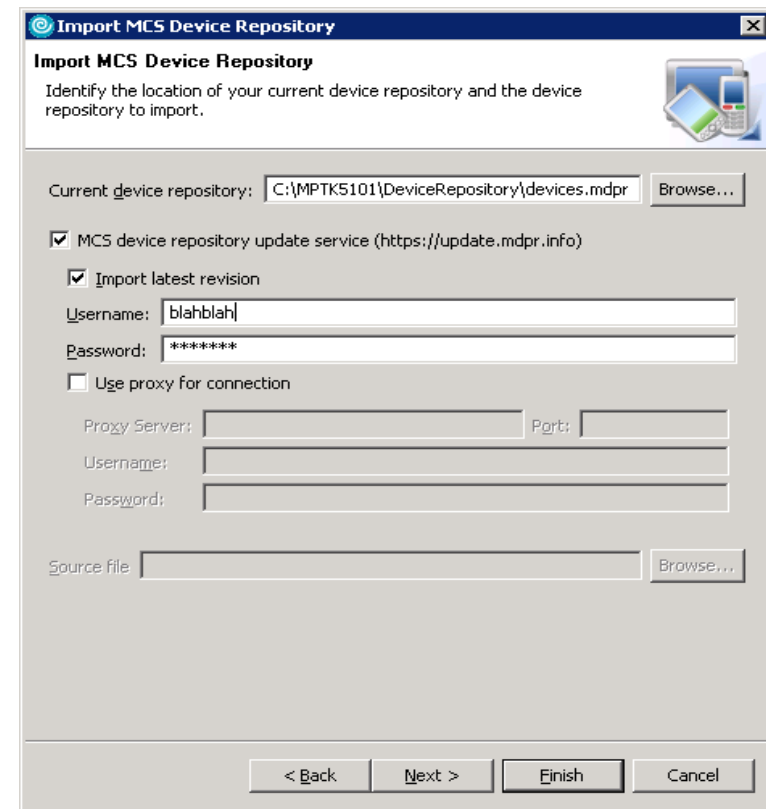
- Add custom attributes to repository using UI interface.
- Add "pre-release" devices to repository to test in pre-production environment.
- Interrogate device attributes to determine device capabilities. (MCS API or manually)
- Search capability to find specific entries in repository.



Mobile Portal Toolkit - continued

Mobile Device Update Service

- Repository updated regularly.
- Merge/Replace repository using this tool.
- Mobile Device Update subscription required (WebSphere Everyplace Mobile Device Enable is sold with WebSphere Everyplace Mobile Portal Enable)
- A process is established for requesting device addition to the repository



JSR 168 Portlet Support

JSR 168

- The Java Specification Request 168 Portlet Specification (JSR 168) standardizes how components for portal servers are to be developed
- Portlets using this API and adhering to the specification may be deployed to any portal product that conforms to this specification
- A JSR 168 portlet identifies each MIME type that it supports. The MIME type for XDIME is x-application/vnd.xdime+xml



Struts Portlet Support

Struts XDIME tag library

- Is a port of the WebSphere Portal version of the Struts HTML tag library
- Allows web developers to create dynamic XDIME based user interfaces that exist in a Struts environment
- Sample Struts portlets are available including:
 - A “blank” Struts portlet that can be used as the base to create new Struts portlets that use the IBM portlet API.
 - A JSR 168 compliant “blank” Struts portlet that can be used as the base to create a new Struts JSR 168 portlet.
 - A sample JSR 168 Struts portlet that can be used by developers as an example of how to code a Struts JSR 168 portlet.



Remote Policy Server Support

- Allows the Multi-Channel Server to fetch policies from a remote server instead of from the local MCS database
- Allows Everyplace Mobile Portal to be integrated with a content management server. The content management server will be responsible for authoring, approving, publishing and withdrawing the policies
- Policies are referenced by specifying a remote URL instead of specifying the local policy name
- The application which serves the remote policies is implemented by the customer
- WEMP V6.0 provides a sample remote policy servlet and consumer calendar portlet
- **Note:** The Mobile Portal Toolkit cannot be used to create remote policies because local and remote policies do not use the same schema. Instead, use the XML editor and the remote policy schema XSD provided with WEMP 6.0 to create remote policies. (The schema is added to the RAD XML schema catalog when the Mobile Portal Toolkit is installed.)



Mobile Portal Toolkit Development Environment

- **Supports Rational Software Development Platform**
 - Rational Application Developer 7.0
 - Rational Software Architect 7.0
- Test your XDIME enabled portlets in the WP 6.0 Unit Test Environment
- **Note:** The WebSphere Portal 6.0.0.1 test environment must be installed with RAD/RSA 7.0 if the Everyplace Mobile Portal test environment will be used.
- Portlet creation wizards for IBM and JSR 168 Portlets, including Struts
- **Samples Galleries, including:**
 - Mobile Struts MailReader JSR 168 portlet: Port of the original Jakarta Struts MailReader example that has been modified to run in WP and support the XDIME markup
 - Mobile ICS Portlet: Used to demonstrate the basic capabilities of the Image Conversion Server (ICS)
 - Mobile JSR168 Portlet: Shows how to use the JSR168 API in a Mobile portlet, also demonstrates various XDIME elements
- Ability to both edit and search Device Repositories

