




JBoss Portal advanced  
JBoss, a division of Red Hat

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## Feature Summary (1/2)

- J2EE-based Portal Framework
- Java Portlet portability via JSR-168
  - ✓ Content aggregation and personalization
- Pluggable themes
- Java Server Faces, Spring MVC, Struts bridge support
- Enterprise Grade Infrastructure
  - ✓ Supports most popular databases (Hibernate)
  - ✓ Highly Scalable
  - ✓ Secure
    - ✓ Single Sign On
    - ✓ LDAP Authentication




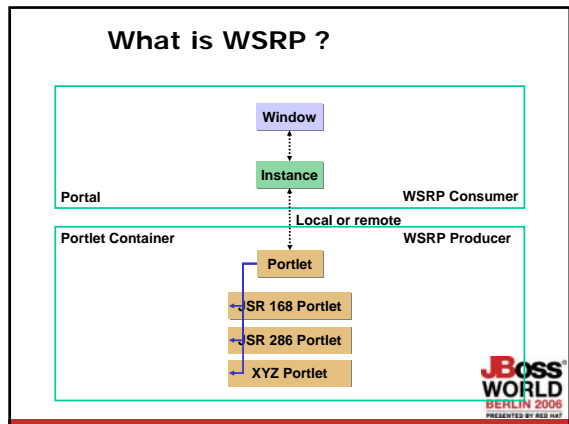
## Feature Summary (2/2)

- JCR-enabled WCM (JSR-170)
- WSRP consumer and producer support
- InterPortlet Communication (IPC)
  - ✓ Allows for communication with another window or linking to other pages.
- Management UI
  - ✓ Customization of portlets, portlet instances, windows, pages, security, and themes. Drag and drop windows
- Pluggable Themes
  - ✓ Hot deployable.
  - ✓ Can be assigned to windows, pages, portal instances.
  - ✓ CSS-driven – division of responsibilities.



## What is WSRP ?

- Web Services for Remote Portlets
- An OASIS specification
- Defines a standard for interactive, user-facing web services that plug and play with portal
  - ✓ WSRP Producer gives access to a set of portlets
  - ✓ WSRP Consumer uses the producer to expose the portlet in its environment
  - ✓ A protocol that uses web services
    - ✓ Provide portlet lookup
    - ✓ Handle various interactions that maps to the portlet specification
    - ✓ Makes it independent of the portlet technology

## Benefits

- WSRP clearly defines the contract between producers and consumers
- Easier development on the consumer side:
  - ✓ All WSRP content is presentation-oriented
  - ✓ Access is done in a standard way
- Easier management on the producer side:
  - ✓ Retention of content control
  - ✓ Subscription management
- Built on existing standards: SOAP, WSDL...



## What is a Portlet Container ?

- A portlet container manages a component
  - ✓ The component model for Java EE is defined by JSR 168 and JSR 286
  - ✓ It can be exposed remotely using WSRP
- Portlet container architecture has changed between 2.2 and 2.4+ since it is aligned with WSRP semantics
  - ✓ Efficient integration with WSRP
  - ✓ Flexible



## What is a Portlet Container ?

- A portlet container is defined by
  - ✓ A component model API : JSR 286
  - ✓ An API used by the portal
    - No API specification similar to the Portlet JSRs
    - Each portal bundles its portlet container
      - ✓ A basic JSR 168 is easy to implement
  - ✓ The only existing specification is WSRP
    - ✓ a set of interactions between a producer (the Portlet Container) and a consumer (the Portal)
    - ✓ is not an API
  - JBoss Portal defines its API
    - ✓ Aligned with WSRP semantics
    - ✓ Integrated with Java EE
    - ✓ Really an API
    - ✓ Designed for reuse and bundling (OEM)

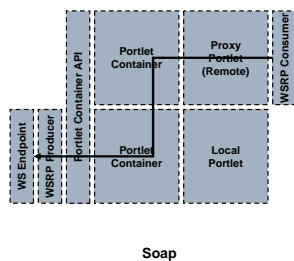


## WSRP Implementation

- The traditional way to do it
  - ✓ The producer is a web service that interacts with the API offered by the portlet container for operations such as
    - Runtime invocation
    - Portlet Management
  - ✓ The so called *proxy portlet* is the consumer



## WSRP Implementation

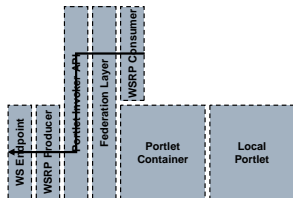


## WSRP Implementation

- Our implementation aims to
  - ✓ Provide better manageability and reusability
  - ✓ Be the de facto standard for open source WSRP
    - Performant
    - Reliable
    - Configurable
  - ✓ Separate concerns
    - Deal and encapsulate with WSRP concerns
      - ✓ e.g handle `initCookie` operation transparently for instance



## WSRP Implementation



Soap

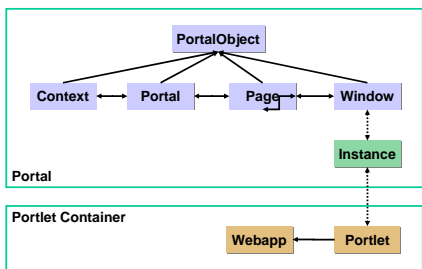


## WSRP Implementation

- **What it buys us ?**
  - ✓ One unified stack
  - ✓ Manageable
  - ✓ Flexible
  - ✓ Routing capabilities
  - ✓ A true middleware approach : WSRP is just a transport layer
- **What it buys you ?**
  - ✓ Consumer reuse for portal builders
  - ✓ Producer reuse for integration of legacy applications



## JBoss Portal architecture overview

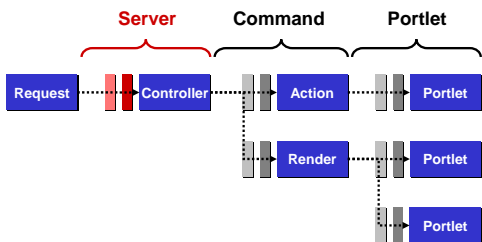


## JBoss Portal architecture overview

- **Layered architecture**
- **JBoss Portal uses aspects to implement the portal**
  - ✓ Great modularity
  - ✓ Easy integration
  - ✓ Separation of concerns
  - ✓ Three nested pipelines



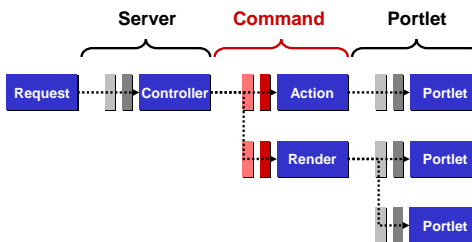
## JBoss Portal architecture overview



- Per client request
- Examples : determine locale, content type

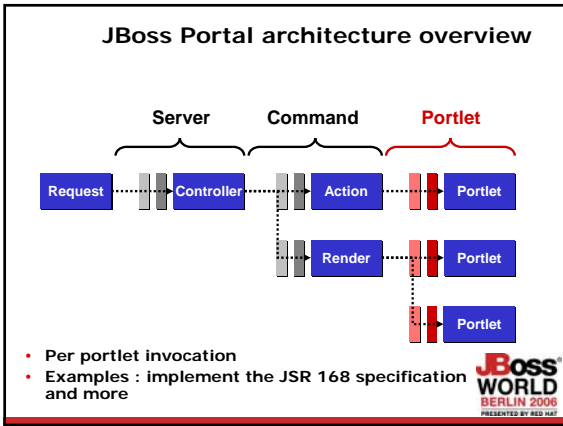


## JBoss Portal architecture overview

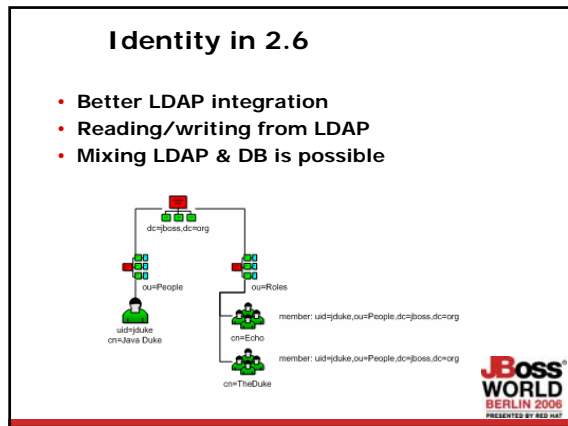
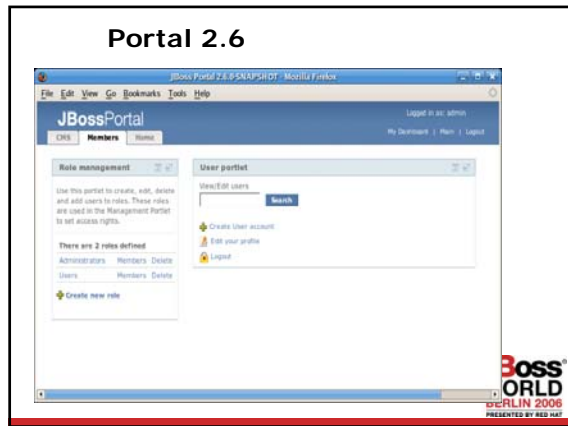


- Per command executed during a request
- Examples : portal object security, navigation graph, node events





- ### Portal 2.6
- **Portal 2.6 (1Q 2007):**
    - ✓ Personalization
    - ✓ Identity – improve LDAP integration (profile metadata)
    - ✓ Usability improvements (user navigation, admin, etc...)
    - ✓ WSRP – higher conformance levels
    - ✓ CMS
      - ✓ Indexing service (tie-in)
      - ✓ JBPM-CMS integration
    - ✓ Lucene search service
    - ✓ JBoss Operations Network integration
- JBoss WORLD BERLIN 2006**  
PRESENTED BY RED HAT



## Identity in 2.6

- **UserModule**
  - ✓ User findUserByUserName(String userName)
  - ✓ User findUserById(Object userId)
  - ✓ User createUser(...)
  - ✓ Void removeUser(Object userId)
  - ✓ Set findUsers(...)
  - ✓ ...
- **RoleModule**
  - ✓ Role findRoleByName(String name)
  - ✓ Role findRoleById(Object id)
  - ✓ Role createRole(...)
  - ✓ Void removeRole(Object roleId)
  - ✓ ...



## Identity in 2.6

- **MembershipModule**
  - ✓ Set getRoles(User user)
  - ✓ Set getUsers(Role role)
  - ✓ Void assignUsers(Role role, Set users)
  - ✓ Void assignRoles(user user, Set roles)
  - ✓ Finders.
- **UserProfileModule**
  - ✓ String getProperty(User user, String propertyName)
  - ✓ Void setProperty(User user, String name, Object property)
  - ✓ Set getProperties(User user)



## Portal 3.0

- **Portal 3.0 (3Q 2007)**
  - ✓ Application server agnosticism – WebLogic first
    - ✓ MicroContainer based
  - ✓ Parallel rendering engine
  - ✓ WSRP 2.0 support



## Portal 3.X

- **Portal 3.X (2007+)**
  - ✓ Portlet 2.0 support
  - ✓ ← Your ideas go here
    - ✓ <http://www.jboss.org>
    - ✓ Forum



## Don't miss:

- Party tonight !
- Tomorrow 10am: **Managing Identities with Red Hat**
- Tomorrow 12:20: **Introduction to EJB 3.0**

