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What Comes Next in the Portlet Specification V 2.0 with JSR 286

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<http://www-306.ibm.com/software/genservers/portal/index.html>

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TS-3627

Goal

Learn what might come next in the Java™ Portlet Specification in JSR 286 and provide feedback

Note: This presentation only represents the current thinking of the JSR 286 Expert Group and the final specification may differ from the content in this presentation.

Agenda

A little history: JSR 168—Portlet
Specification V 1.0

Overview JSR 286—V 2.0

Major themes for V 2.0

What comes next

How you can participate

Summary

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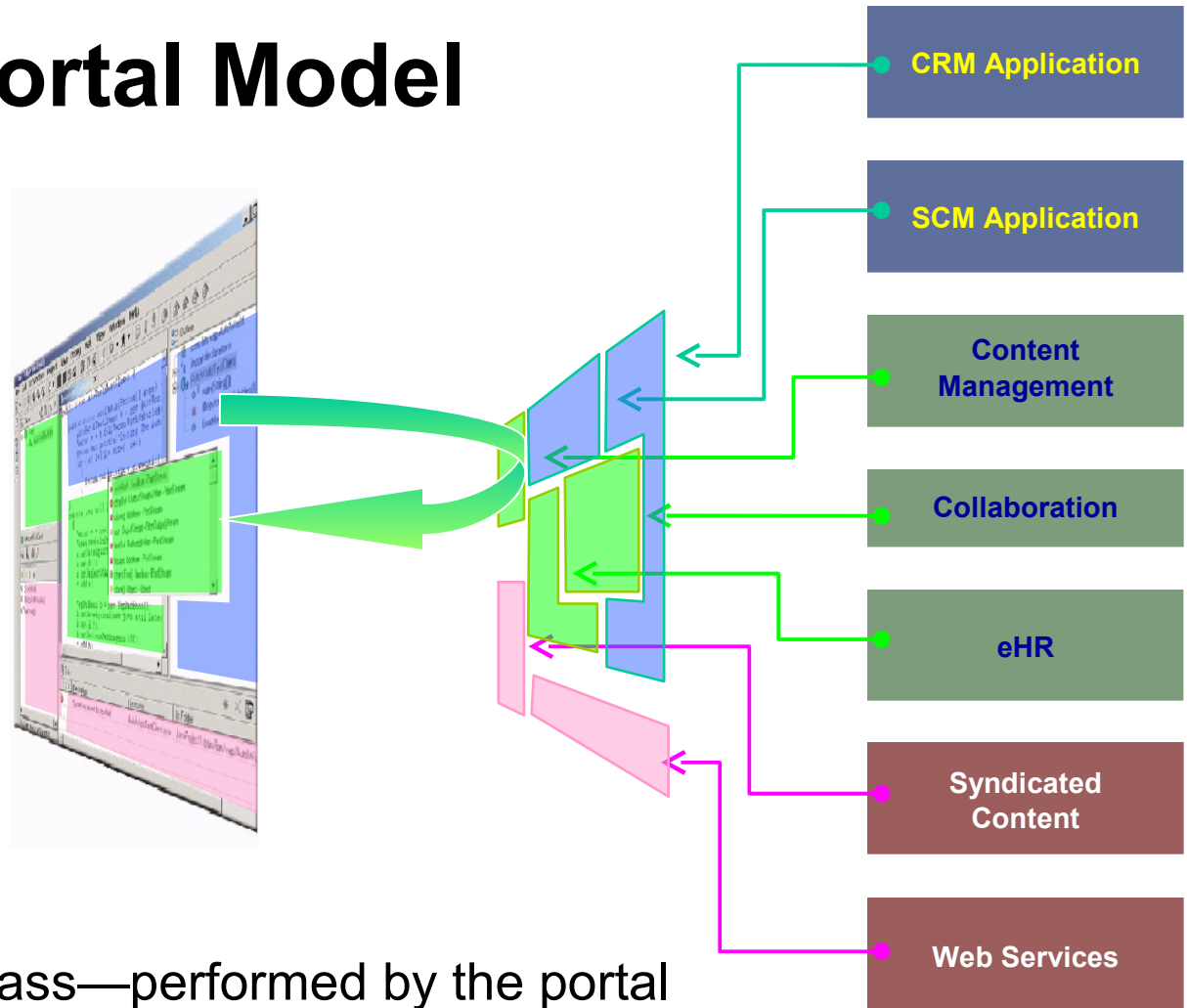
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Overview Portal Model



- Integration-at-the-glass—performed by the portal
- Components may or may not work on the same backends

Why Have Portlet Standards at all?

Situation before JSR 168 (Portlet Specification V 1.0)

- Different Portal Vendors have defined different APIs
 - Different APIs for local “components” (simple JavaServer Pages™ technology/Portlets/Channels/Modules/...)
- No portability/interoperability
- Application and Content Providers must implement different portlets for different portals
- Customers developing significant numbers of portlets are quickly locked into a particular portal solution
- No standardized, easy way to plug-n-play content and applications into portals exists

Why Have Portlet Standards at all?

Situation now

- Portlet standard for local Java based portlets
 - Portlet Specification, first version defined as JSR 168
 - Finished Oct. 2003
 - Co-leaded by IBM and Sun
 - Reference implementation available at Apache, provided by IBM
 - <http://portal.apache.org/pluto>
 - Compliance test suite available from Sun
 - Wide market adoption: supported by many commercial and open source portals
 - BEA, IBM, Oracle, Sun, Tibco, Vignette...
 - Apache, eXo, JBoss, Liferay, uPortal...

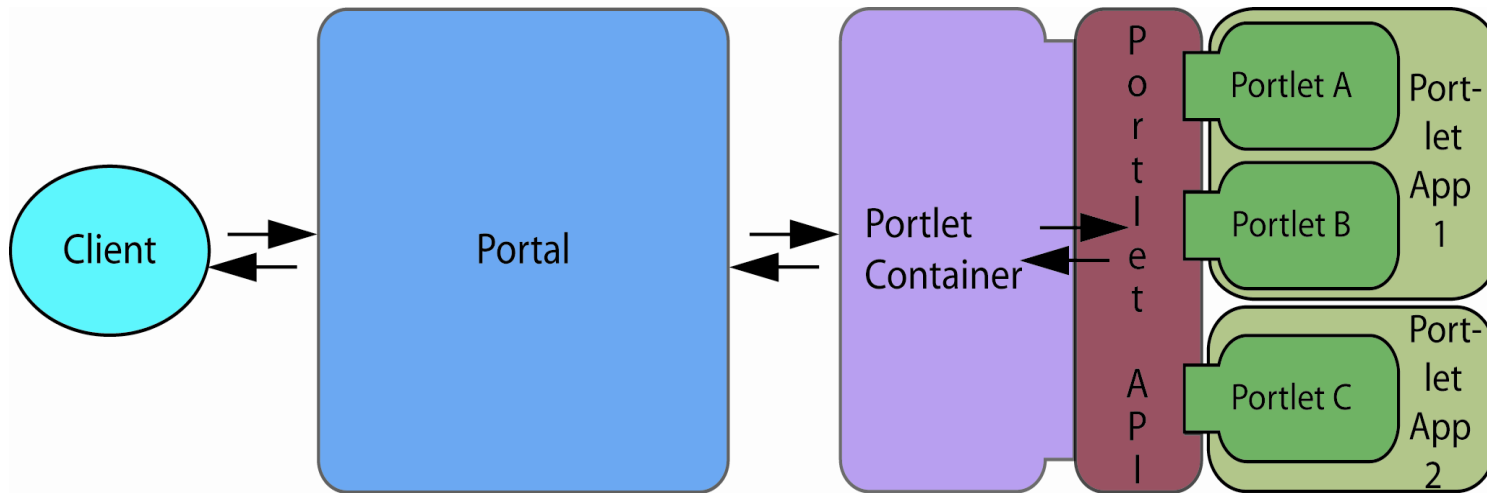
Why Have Portlet Standards at all?

Situation now—looking beyond the Java technology space

- Portlet standard for remote portlets
 - Web Service for Remote Portlets (WSRP), defined at OASIS, aligned with JSR 168
 - http://www.oasis-open.org/committees/tc_home.php?wg_abbrev=wsrp
 - Chaired by IBM
 - Sample implementation available at Apache, provided by IBM
 - <http://ws.apache.org/wsrp4j>
 - Conformance test suite available at alphaworks
 - <http://alphaworks.ibm.com/tech/wsrptk>
 - Wide market adoption: supported by many commercial and open source portals

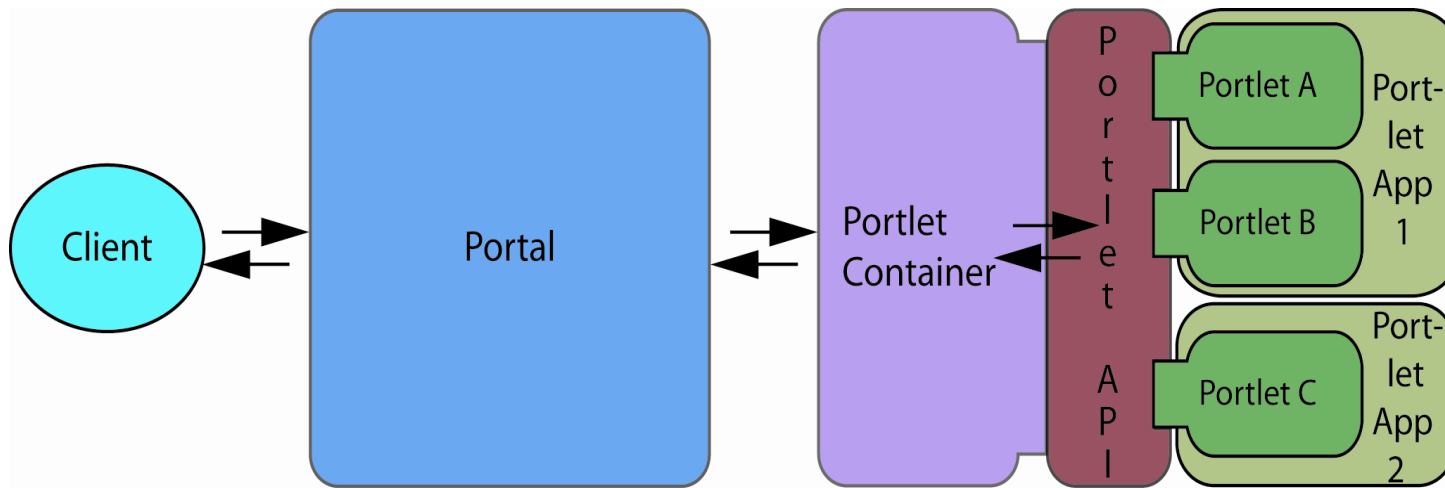
What Does JSR 168 Define?

- Portlet API and portlet container
- Contract between the API and the container
- Deployment unit: portlet application

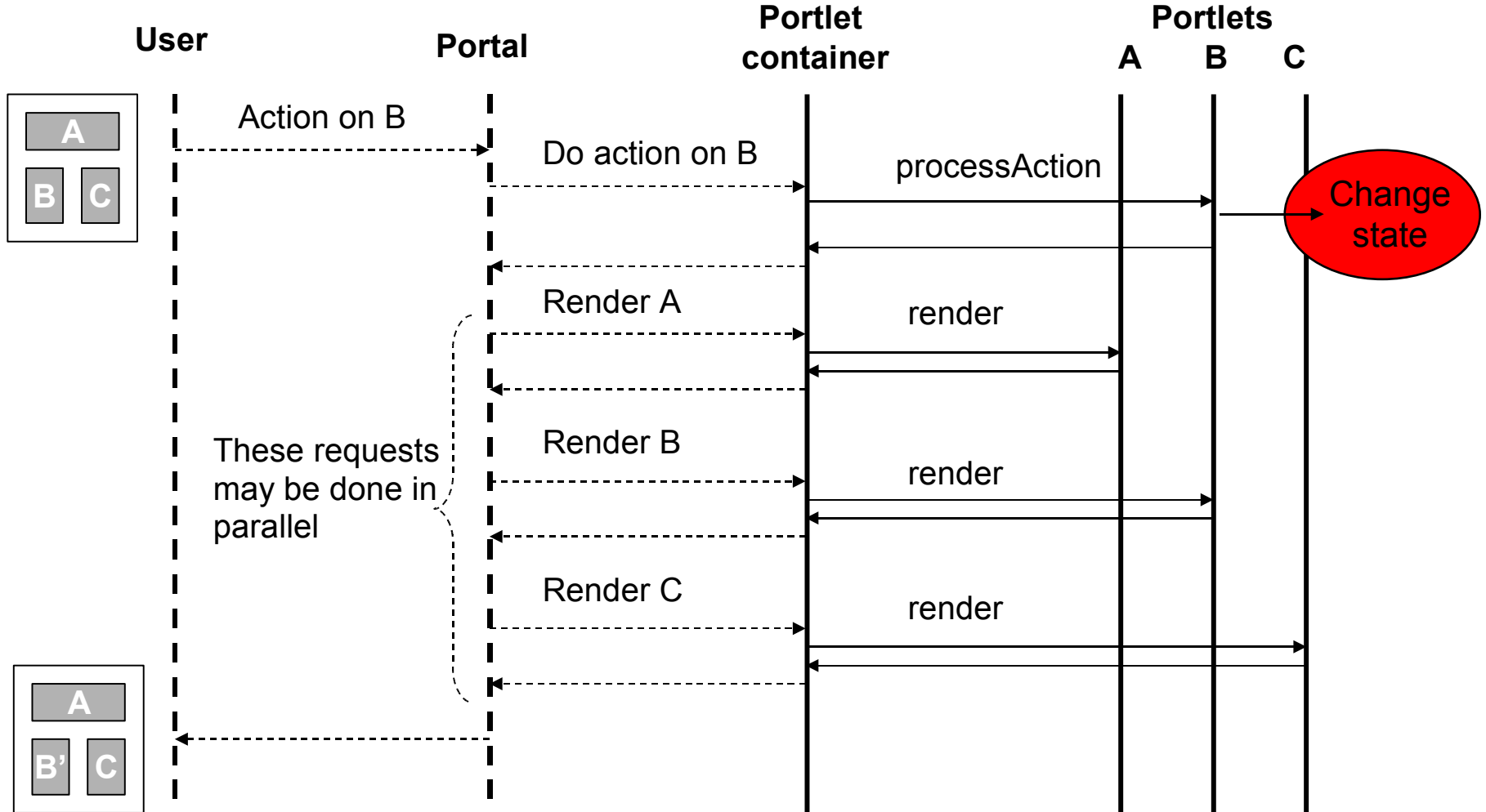


What Is Out of Scope of JSR 168?

- Aggregation, layout management
- Page personalization and configuration engines
- Portal administration and configuration



Portlet Request Flow



Why Do We Need a V2.0?

What's wrong with V 1.0?

- The goal of V 1.0 was to provide the basic portlet capabilities
- Should solve the simple 60% use cases
- People should get familiar with the basic programming model before introducing advanced features
- Now, more than 2 years later people are starting to create advanced portlet applications
 - V 1.0 feature are insufficient
 - V 1.0 does not provide any coordination means beyond the application session scope

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JSR 286—Portlet Specification V 2.0

- Started 29th Nov 2005
- Led by IBM
- Expert Group members:
 - Apache Software Foundation, BEA Systems, R. Butler, P. Dabke, D. DeWolf, C. Doremus, A. Douma, eXo Platform SARL, S. Frid, IBM, JBoss Inc., Liferay LLC, K. Mann, S. Millidge, Novell Inc., J. Novotny, Oracle, P. Pandey, S&N AG, SAP AG, C. Severance, H. Suleiman, Sun Microsystems Inc., SunGard Higher Education, TIBCO Software Inc., University Jena, Vignette
- Reference implementation will be provided at Apache, the TCK will be available for free
- More information at <http://jcp.org/en/jsr/detail?id=286>

Current Proposed Schedule

Note: may be subject to change

- Early public draft covering WSRP 2.0 features: July 06
- Early public draft covering all features: Oct 06
- Public draft: Dec 06
- Final public draft Feb 07
- Submit spec+RI+TCK Apr 07
- Finished May 07

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Major Themes for V 2.0

Coordination

- The #1 complaint about V 1.0 was the missing capability to send events between portlets
- V 1.0 only has the portlet application session scope for coordination
 - Only useable within the one portlet application, not across portlet applications
- V 2.0 will add additional coordination capabilities
 - Eventing
 - Sharing of session data beyond the current portlet application
 - Sharing of render parameters across portlets

Major Themes for V 2.0

Coordination—events

- JSR 286 will introduce a loosely coupled event paradigm
 - A portlet can declare events it wants to receive and events it wants to emit
 - The portal/portlet container will act as broker and distribute the events accordingly
 - Allows wiring of portlets at runtime
- Event handling will be an additional step in the overall action phase
 - State changes are allowed
 - Event handling must be finished before rendering starts

Major Themes for V 2.0

Coordination—shared sessions

- Allow portlets to share session related data across web application boundaries
 - E.g. a shopping cart that can be filled by portlets from different applications
- Data is available in the scope of the current user session

Major Themes for V 2.0

Coordination—shared render parameters

- Allow render parameters to be shared across portlets
 - E.g. the zip code of a selected city may be a shared render parameter that would allow different portlets (map, tourist information, weather) to display information for this city
- As render parameters can be encoded in the URL this allows for
 - Bookmarkability
 - Support of browser back/forward button
 - Caching

Major Themes for V 2.0

WSRP V 2.0 alignment

- Align with Web Services for Remote Portlets V 2.0
 - Enables writing JSR 286 portlets and publish them as WSRP services
- New features in WSRP 2.0
 - Coordination
 - Resource serving
 - Portlet management
 - Import/export of portlets
 - Runtime Ids, like portlet instance ID
 - CC/PP support

Major Themes for V 2.0

Better support of web frameworks

- Talk to lead developers of frameworks like JavaServer™ Faces technology, Struts, Spring, WebWork in order to get feedback how to better integrate portlets with these web frameworks
- Goal: provide additional means in the Portlet Specification to make such an integration easy and portable across portals

Major Themes for V 2.0

AJAX support

- Currently asynchronous rendering of portlets is not mentioned in the Portlet Specification
 - AJAX (Asynchronous JavaScript technology and XML) support is vendor specific
- Challenges when using AJAX for portlets
 - Difficult to get AJAX working for more than one portlet on a page
 - State is updated without server roundtrip and thus the state that may be encoded in other portlets may be stale
 - Bypasses standard browser paradigms, like back button and reload
 - Lot of extra effort is required to get these paradigms working again in an AJAX application

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Where Do We Stand?

- In the process of creating the 1st early public draft covering WSRP 2.0 features
 - Goal: July 06
 - Incl. coordination features previously mentioned
- Start RI based on this 1st draft under the Apache Pluto umbrella
- Create public mailing list in order to get feedback and discuss 1st draft

What Comes Next?

- Create 2nd early public draft covering all features and feedback of 1st draft
- Goal: Oct 06
- Create 1st Public draft based on feedback of 2nd early draft
- Goal: Dec 06

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How can You Participate?

Get involved!

- The JSR 286 EG will create early public drafts allowing you to give feedback early on
- There will be a public draft with a defined review period where you can give feedback
- You can help by working on the RI at the Apache Pluto project
- Send feedback even after the JSR 286 is finished to the JSR 286 comment alias (jsr-286-comments@jcp.org) in order to provide input for the next version

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- JSR 286 has started Nov 2005 and will provide V 2.0 of the Portlet Specification
- Major themes for V 2.0 are
 - Coordination between portlets
 - Alignment with WSRP 2.0
 - Better support of existing web frameworks
 - Support of AJAX style developments
- The JSR 286 EG will provide early drafts in order to give everyone the chance to give feedback and create early prototypes

For More Information

- JSR 286: Portlet Specification 2.0
<http://jcp.org/en/jsr/detail?id=286>
- JSR 168: Portlet Specification
<http://jcp.org/en/jsr/detail?id=168>
- WSRP:
http://www.oasis-open.org/committees/tc_home.php?wg_abbrev=wsrp
- Apache pluto project:
<http://portals.apache.org/pluto/>

Q&A

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