

# Portlet 2.0

One year later...

Thomas Heute – JBoss Portal Software Engineering Manager

Red Hat

6780

**JAZOON09**

THE INTERNATIONAL CONFERENCE ON JAVA TECHNOLOGY  
JUNE 22–25, 2009 ZÜRICH



# AGENDA

- > Quickie on 2.0 new features
- > Adoption
- > Portability
- > Portlets vs \*dgets

# Portlet 2.0 main 'new' features

- > Resource serving
  - Keep my context !
  - Resource isn't part of the aggregated result



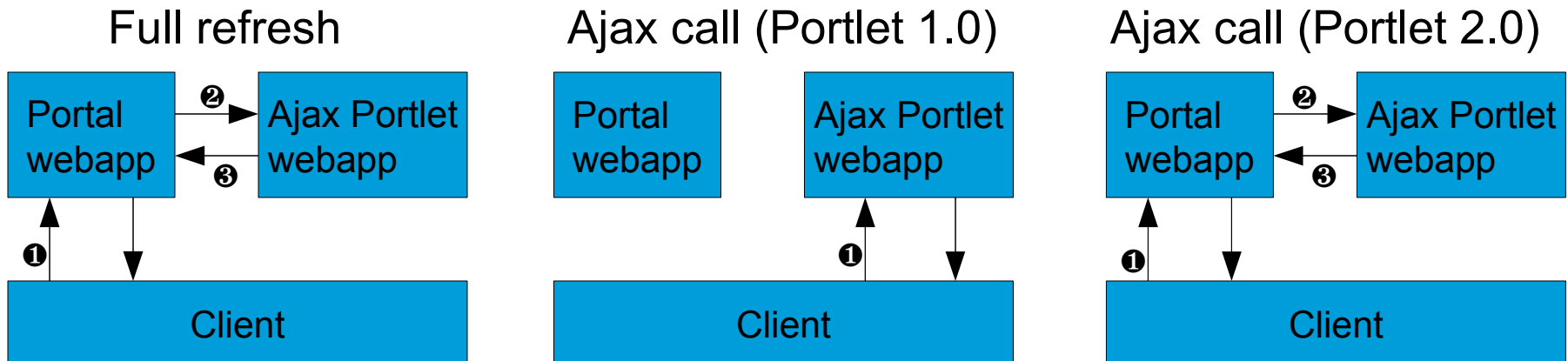
# Resource serving usage

- > Example: Forum post with attachment
  - Before (Portlet 1.0)
    - Had to be served by a servlet
    - Issue: the servlet had no idea of the current context
    - Fix: Issue a security token stored in session
  - After (Portlet 2.0)
    - Resource serving
    - Has access to the required file id
    - Has access to the security context

# Resource serving usage

## > AJAX calls

- Helps integration with Ajax libraries
- Richfaces <-- JBoss JSF Portlet Bridge --> JBoss Portal
- Advantages:
  - ➔ Maintain the portal/portlet session alive if packaged in multiple archives



# Portlet 2.0 main new features (cont'd)

- > Public render parameters
  - A portlet can decide to share some parameters with some other portlets

The screenshot displays the JBoss Portal interface. At the top, there is a navigation bar with 'Home', 'News', 'Weather', and 'Samples' buttons, and a 'Login' link. Below this, a Mozilla Firefox browser window is open, showing the URL 'http://localhost:8080/portal/portal/'. The browser window contains a configuration panel for a portlet with the following options:

- [minimize parent portlet](#)
- [maximize parent portlet](#)
- [make parent portlet normal](#)

Below these options, there is a section for setting the 'zipcode' public render parameter:

Set value of 'zipcode' public render parameter to:

- [Denver, CO](#)
- [San Francisco, CA](#)
- [Washington, DC](#)

The browser window also shows standard navigation icons and a 'Done' button.

Below the browser window, there are two portlets:

- Google Map Portlet:** Displays a map of Washington, DC 20001. The map shows major streets like U St NW, Logan Circle, and North Capitol Street. The text 'Washington, DC 20001' and 'maps.google.com' are visible on the right side of the map.
- Google Weather Portlet:** Displays weather information for Washington, DC 20001. The current temperature is 69°F with 'Light rain'. The wind is SE at 7 mph and humidity is 93%. The forecast for the next four days is as follows:
 

Day	Thu	Fri	Sat	Sun
Temperature	83°F	65°F	85°F	70°F
Temperature	90°F	70°F	83°F	67°F

## Portlet 2.0 main new features (cont'd)

### > Events

- A portlet can trigger an event, other portlets can listen to an event (using it's unique qualified name)

The screenshot shows the JBoss Portal interface. At the top, there is a navigation bar with the JBoss Portal logo and a 'Login' link. Below the navigation bar are four tabs: 'Home', 'News', 'Weather', and 'Samples'. The 'Samples' tab is active. Below the navigation bar, there are two portlets. The 'Cart Portlet' on the left shows a table with 'Description' and 'Price' columns. It lists 'Skateboard' with a price of '\$119' and a 'Total' of '\$119'. The 'Catalog Portlet' on the right shows a table with 'Description', 'Price', and 'Actions' columns. It lists various items like 'Tent', 'Skateboard', 'Sneakers', 'Snowboard', 'Backpack', 'Bike', and 'Surfboard', each with a price and an 'Add to cart' action.

Cart Portlet	
Description	Price
Skateboard	\$119
<b>Total:</b>	\$119

Catalog Portlet		
Description	Price	Actions
Tent	\$225	Add to cart
Skateboard	\$119	Add to cart
Sneakers	\$90	Add to cart
Snowboard	\$450	Add to cart
Backpack	\$75	Add to cart
Bike	\$800	Add to cart
Surfboard	\$333	Add to cart

## Adoption by portal vendors

- > Specification went final on June 12<sup>th</sup> 2008
  - JBoss Portlet Container 2.0 on June 13<sup>th</sup> 2008 (included in the 2.7.0 portal on Oct 30<sup>th</sup>)
  - eXo Portlet Container 2.0 on June 18<sup>th</sup> 2008 (included in the portal on July 1<sup>st</sup>)
  - Liferay portal on July 17<sup>th</sup> 2008 (5.1.0)
  - Apache Jetspeed 2.2.0 on May 27<sup>th</sup> 2009
  - IBM Websphere Portal 6.1 on Sept 3<sup>rd</sup> 2008
  - Oracle Portals (BEA (2) + Oracle (2) + Sun (1))



# Adoption by Web Framework

- > JSF support
  - JSR-301 specification addresses JSR-168
  - JSR-329 addressing JSR-286 (JBoss Portlet Bridge on the way)
- > From what I was able to gather:
  - Wicket support
    - Mostly there with support of events
  - Struts 2 plugin for JSR-286 can be found on the web
  - Spring MVC also supports the JSR-286
  - WebWork

# Portability

- > Remember: The Portlet spec is all about... the portlet (Not the portal)
  - Doesn't define the notion of page
- > Coordination among portlet
  - **UI** level
  - Event mechanism isn't a replacement for JMS
    - Don't abuse this mechanism
  - Should we coordinate across pages ? Some portal vendors allow it, some portal vendors forbid it.
    - If cross vendor functionality is important for you, do not rely on cross-pages coordination
  - Portlets aren't a template mechanism per se
    - Think twice before splitting your application

# Portlet vs Widget vs Gadget (vs Toilet ?)

- > Widget, Gadget are various names for same/similar thing
  - “Gadgets powered by Google are miniature objects made by Google users like you that offer cool and dynamic content that can be placed on any page on the web.”
  - Netvibes, Yahoo, MacOSX widgets
  - OpenSocial
  - OpenAjax Alliance (IBM, Google, Sun, Red Hat, Oracle, Microsoft...)
    - Widget proposal

# Web \*dget

- > \*dget are usually
  - Aggregated on the client
  - Mostly pulling data, only preferences are stored on a server
  - Javascript to do DOM manipulation

# Portlet advantages

- > Made for complex applications (use your favorite framework)
- > Fragment's states are kept on full refresh
- > Better integration with the portal
  - Identity propagation
  - Security
  - User interaction with the portal
  - Visual

## \*dget advantages

- > Quick to develop small applications
- > Made for client side aggregation (best experience for standard computer)
- > Easy to share

# Portlets and \*dget in a portal

- > Portal frameworks are made to aggregate content
  - Static content (CMS)
  - Portlets / WSRP
  - \*gets
  - ...


# Portlets with \*dget

JBoss Portal
Logged in as: admin

Home
News
Weather
Samples
Dashboard | Admin | Copy to my dashboard | Logout


Open remote control!

Description	Price
Bike	\$800
Tent	\$225
<b>Total:</b>	<b>\$1025</b>



Google™ Custom Search

Get & Share
+







San Francisco, CA 94102

maps.google.com

**Weather for Denver, CO 80201 -**

56°F

Current: **Partly Cloudy**  
 Wind: NW at 0 mph  
 Humidity: 83%

Mon	Tue	Wed	Thu
			
92°F   61°F	94°F   61°F	92°F   63°F	92°F   61°F

Description	Price	Actions
Tent	\$225	Add to cart
Snowboard	\$450	Add to cart
Bike	\$800	Add to cart
Sneakers	\$90	Add to cart
Surfboard	\$333	Add to cart
Skateboard	\$119	Add to cart
Backpack	\$75	Add to cart

Powered by JBoss Portal



# Personal thoughts on a late night about future

- > We could use more annotations a-la Servlet 3.0 or JSF 2.0 @Portlet (no portlet.xml)
- > We could all benefit from a *portal* spec
  - More aware of the environment, communication with the portal itself
  - Portal object management
  - Federated search/index
  - ...

# Shameless plug

- > JBoss Portal + eXo Portal project merge coming up
- > Contributors around ?
- > We are hiring !
  - Product engineer (Java EE Developer)
  - Senior Java EE Developer



Thomas Heute  
Red Hat

<http://www.jboss.org/jbossportal>  
@jbossportal on Twitter  
theute@redhat.com

**JAZOON09**

THE INTERNATIONAL CONFERENCE ON JAVA TECHNOLOGY  
JUNE 22-25, 2009 ZURICH

