



# GateIn Introduction

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JBoss QA  
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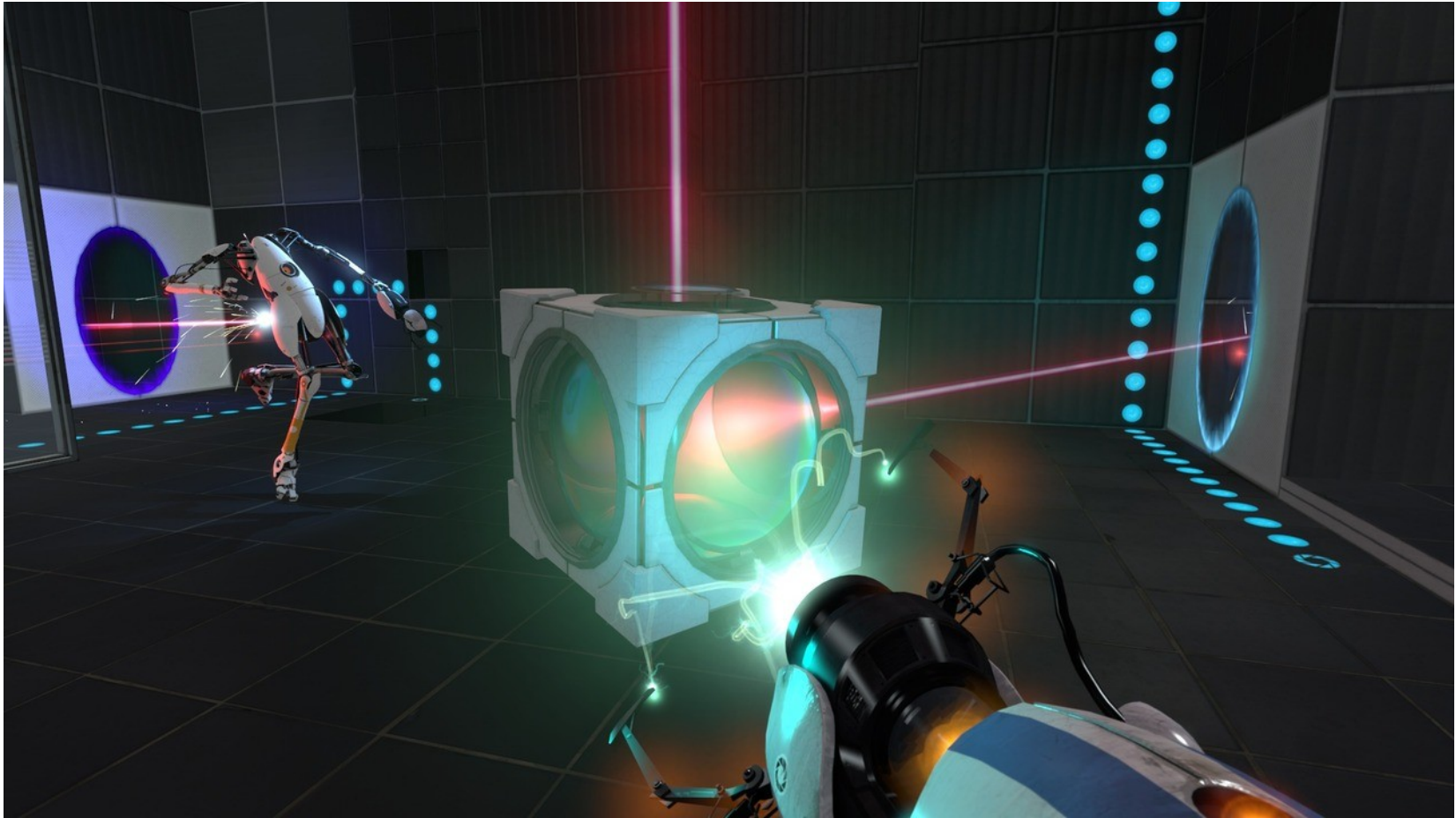
*Abstract:*

*This presentation is an introduction to portal and portlets basics, features and UI of GateIn Portal. Workshop covers specification details for portlet development.*

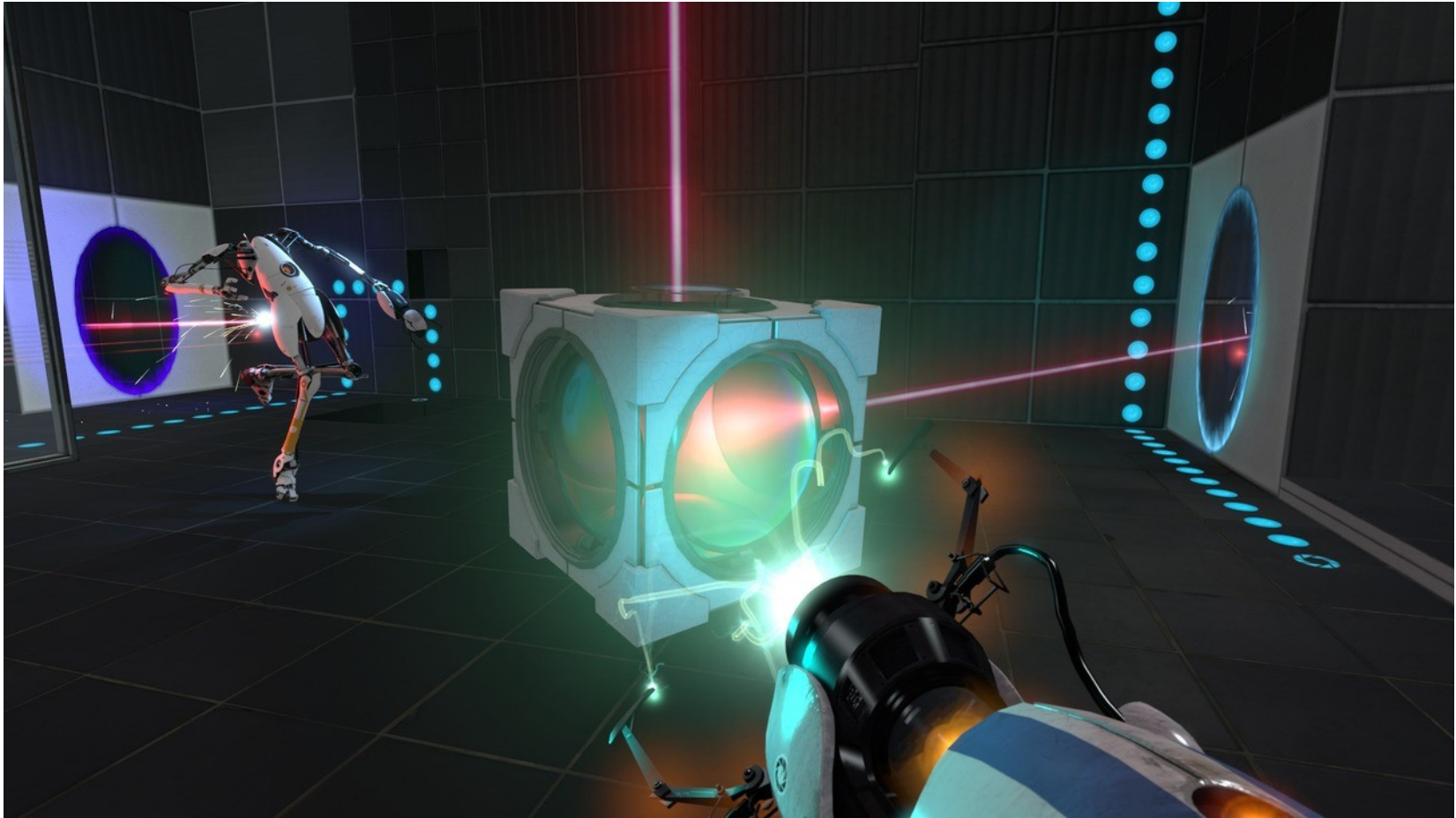
# Agenda

- Motivation for portals & portlets
- GateIn Overview (demo)
- JSR-168 / 286 Portlet development
  - Lifecycle, API
  - Tag library
  - IPC (inter-portlet communication), resources etc.
- Workshop

# What is portal?



# PORTAL 2



No! :)



**Volání za 3,50 Kč**

**Twist Přátelé**  
Přejděte nyní zdarma na tarif Twist Přátelé a můžete volat za 3,50 Kč a SMSovat jen za 1,50 Kč až 5 vybraným přátelům.

**Vyberte si inkaso**  
Aktivujte si do 31.12.2011 jako platební metodu inkaso a my vám jako poděkování slevíme 100 Kč z dalšího Vyúčtování.

**Zákazník**

Jméno

Heslo

**Přihlásit** >

**Vstup bez registrace** >

Automatické přihlášení

**Zaregistrovat se**  
Zapomněli jste heslo?

**HD VOICE**

**HD Voice v naší 3G síti**  
Jako první operátor v ČR vám přinášíme nejmodernější zvukovou kvalitu hovoru - HD Voice. Zvuk jasnější, zřetelnější a s potlačenými šumy.

**Můj T-Mobile** v

**Průvodce webem** >>

**Katalog služeb** >>

Nejprodávanejší telefony Nejprodávanejší tarify Speciální nabídky

**Samsung S5630 Galaxy Ace - černý**

- S Internetem v mobilu ještě levnější
- Operační systém Android 2.2
- 3,5" dotykový displej

**3.999 Kč** s měsíční útrátou 500 Kč

**Vybrat** >

**Sony Ericsson Xperia Ray - černý**

- S Internetem v mobilu ještě levnější
- Stihlá konstrukce, kvalitní materiály
- 8,1 Mpx fotoaparát s autofocusem

**5.999 Kč** s měsíční útrátou 500 Kč

**Vybrat** >

**T-Mobile move - černý**

- S Internetem v mobilu ještě levnější
- Rychlý Internet 3G, WiFi, GPS
- 2GB paměťová karta v balení

**1.999 Kč** s měsíční útrátou 250 Kč

**Vybrat** >

**Prodlužte si smlouvu**

**V eShopu pohodlně a se slevou 30%**  
Neváhejte, prodlužte si smlouvu a automaticky získáte slevu 30% na paušál po dobu 3 měsíců!

**Předplacená karta ZDARMA**

**Volejte a pošlete SMS zdarma**  
Vyzkoušejte si služby T-Mobile - s předplacenou Twist kartou to máte po 5. minutě nebo 5. SMS zdarma.

2v1 a 3v1 **ADSL T-Mobile Bonus faktura** hlasová schránka hry **internet** kde je konfigurátor MMS **Mých5 moje útrata** nastavení mě pětky **prodloužení smlouvy** SMS zdarma **Televize Twist Start** vřítací tóny **Vyúčtování**

**"Nevíte si s něčím rady?"**  
? ? ?  
Podívejte se do Často kladených dotazů

**SUMMIT**JBoss  
WORLD

PRESENTED BY RED HAT

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## RECENT NEWS:

11/15/11: Red Hat Provides Comprehensive Lifecycle Support for Java in the Cloud with OpenShift PaaS

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services, programs**EXPLORE  
COMMUNITIES**Communities and  
social media**ACCESS MY  
ACCOUNT**Customer support,  
subscription benefits

# Portal

- A portal is a web based application that provides personalization, single sign on, content aggregation from different sources in the form of portlets.
- Framework for integration of information, people and processes in an organization.
- Set of services/applications.
- Portal server.



# Types of portals

- General (yahoo.com)
- Community (MySpace.com)
- Business (Amazon.com)
- Information (BBC.co.uk, idnes.cz)
- Enterprise (GateIn, Liferay)
- Horizontal (Seznam.cz) vs. Vertical (CouchSurfing.org)
- B2B, B2C, B2E, G2C

# Enterprise Portals

GateIn is the new generation of Open Source portal, co-headed by Red Hat JBoss and eXo Platform who partners to gather the best portal experts and communities around a robust and intuitive portal that brings rich administration functionalities to IT systems.

For more information, please contact us.

Bienvenue !

Accessoires.

Utilisateur

You are currently not logged in.

You can create an account.

Welcome to Liferay

INSTANT WEBSITES

SOCIAL NETWORKS

SHARED WORKSPACES

SOA, ENTERPRISE INTEGRATION, AND MASHUPS

JBoss Enterprise Portal Platform

Site Publisher (powered by eXo)

Site Publisher Documentation

New to JBoss Site Publisher?

Manage multiple websites, all in one place

# Advantages

- integration
- single sign-on
- customization & personalisation
- authorization & authentication
- communication
- extensibility

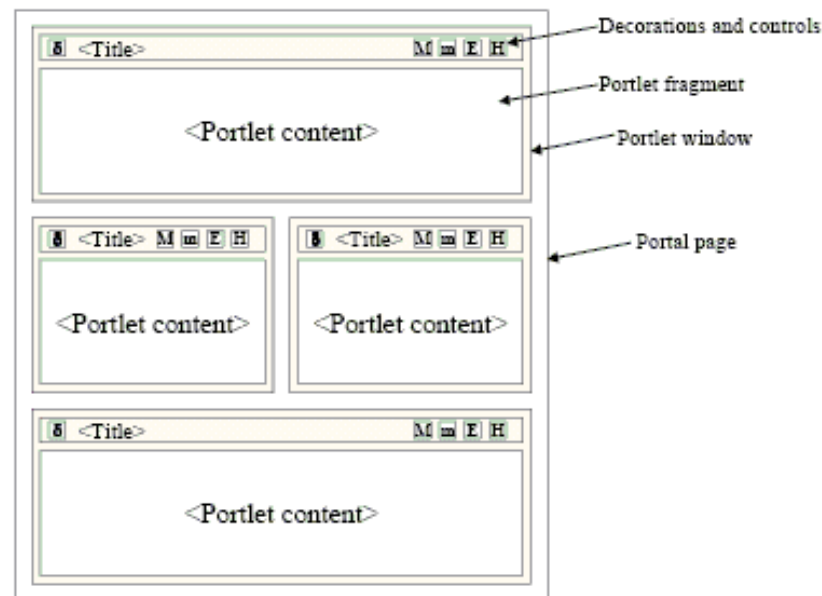


# What is that 'portlet' thing?



# Portlet

- Small web application designed to be deployed on portal server.
- Reusable web component generating dynamic content (markup fragment) based on requests. Portal aggregates portlet markup fragments into a complete portal page.



Site Group Dashboard Site Editor Root Root

**GateIn**

Home SiteMap Group Navigation Sample-Ext Page Portal **Test**

Test

**My Tapestry Hello World Portlet**


September 2010  
Week 40

**27**  
Monday

Edit | Help

Done

**Google Map Portlet**



**San Francisco, CA 94102**

maps.google.com

Public transit: Market St & South Van Ness Ave

Done

**Currency Converter**

From: US Dollar

To: Euro

USD 1

EUR 0.74

Data provided by Yahoo! Finance  
Conversion Rates accurate as of 24-Sep-2010

Done

**Netflix Portlet**

Movies and TV shows | Actors and directors


**Search for movies, TV shows** NETFLIX

Movie / TV show name:

Search

Done

**jQuery Portlet**



Show me the magic

Done

**Lottery Portlet**

Hi root, Your Specially Picked

9 11  
1 12 7

**Winning Numbers**

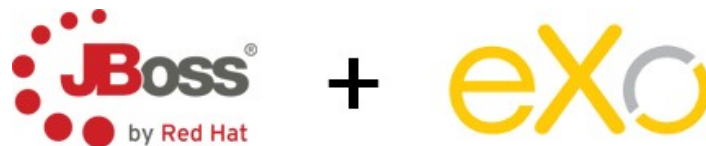
**27 28 9 44 10 23**

**PLAY RESPONSIBLY**  
GAMBLING PROBLEM REFERRAL LINE  
1-888-277-3115

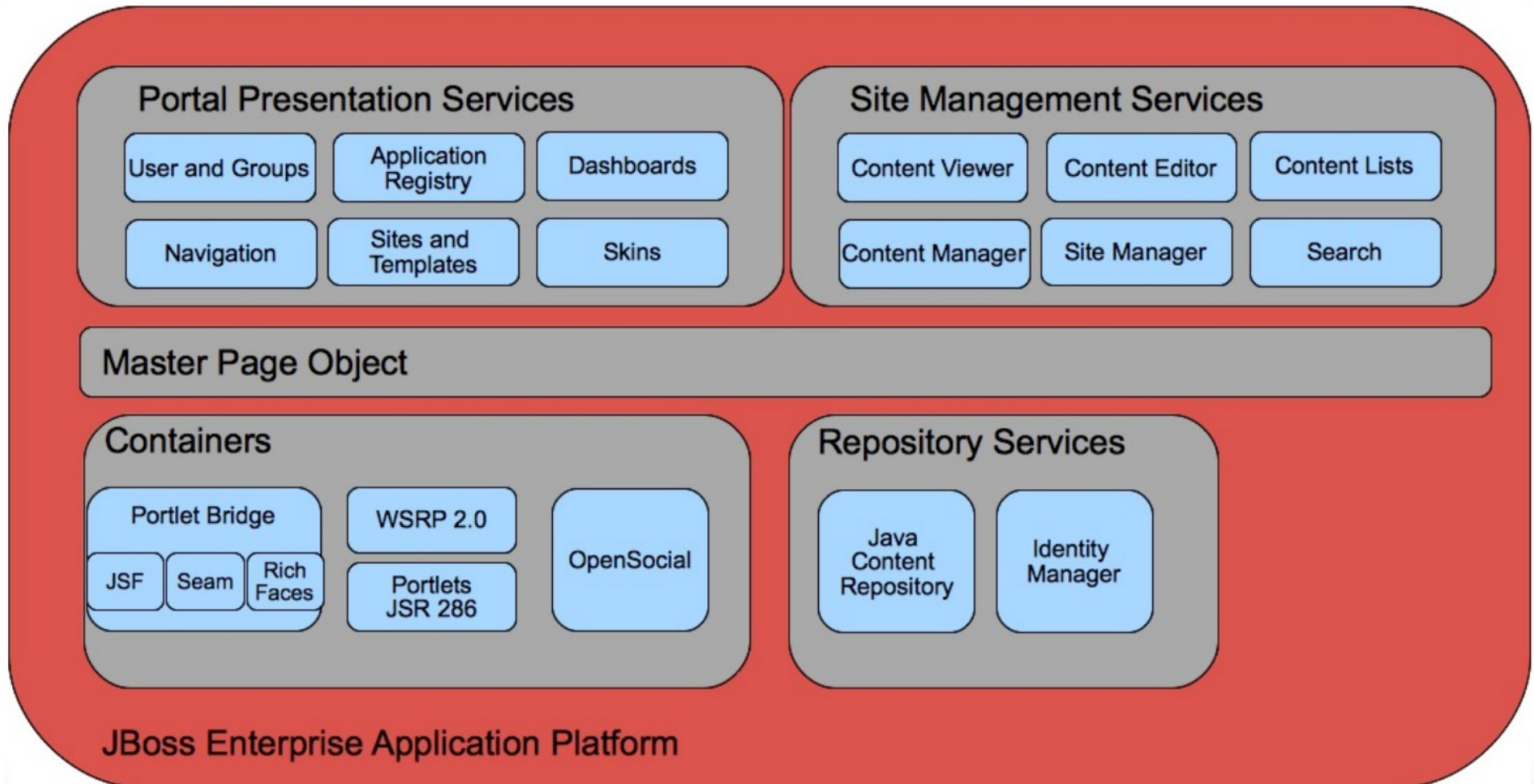
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# GateIn

- Open source portal server.
- GateIn Portal is a merge of two mature projects that have been around for a while, JBoss Portal (Red Hat) and eXo Portal (eXo).
- Based on standards, selected services.
- ...and it's awesome!



# Anatomy of GateIn portal





# Main features

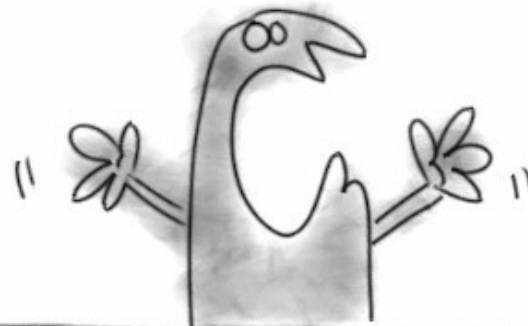


- rich user interface, internationalization
- dynamic navigations and page creation (DnD), intuitive administration
- support for portlet specifications, bridges
- dashboards, gadgets
- IDM
- SSO & LDAP support, OS-JVM & DB compatibility
- content stored in JCR, extensions
- WSRP.

# Imagine implementing these by yourself...



Now What?!!



# GateIn live...



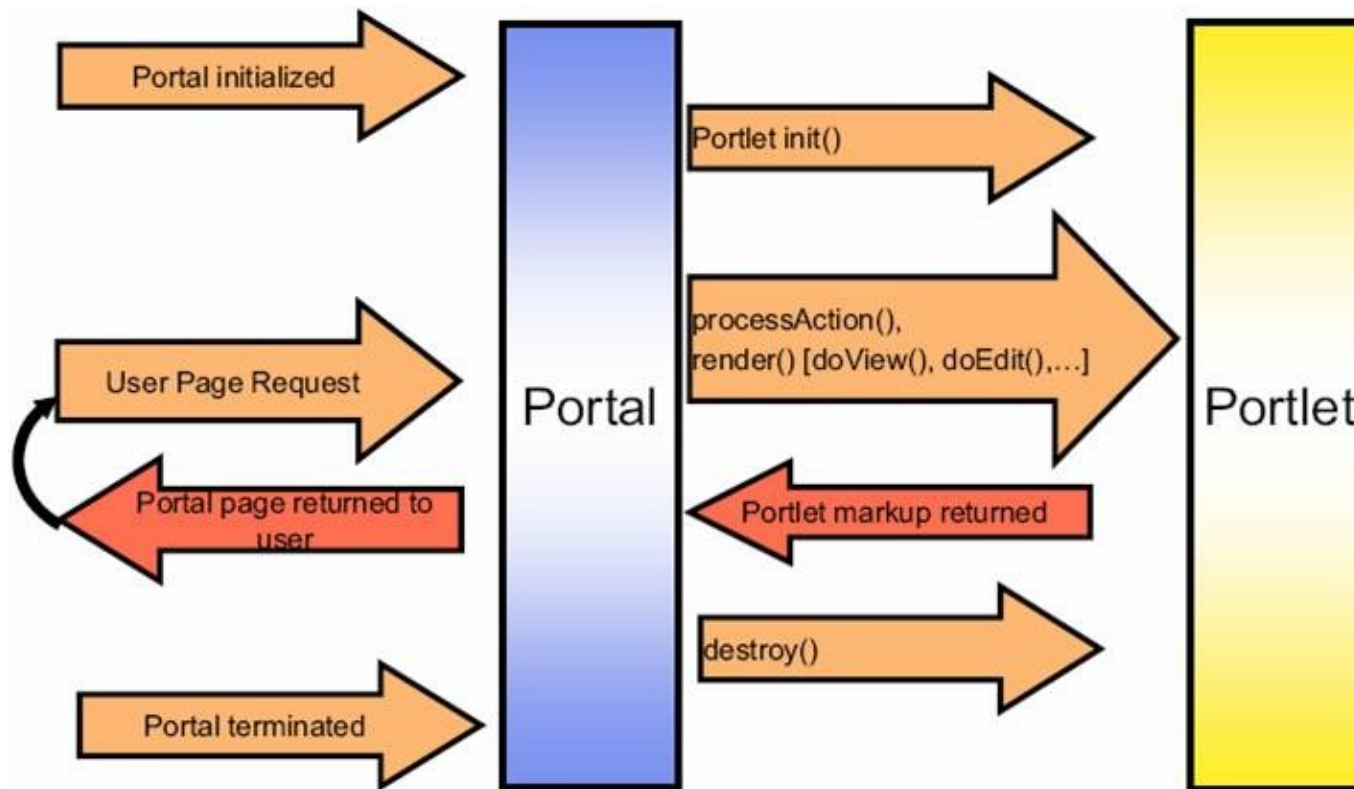
# Portlet development

# JSR-168

- Portlet vs. Servlet
  - common features:
    - generate dynamic content
    - components based on Java
    - lifecycle managed by container
    - request/response model
  - portlet specific features:
    - generate fragment of pages
    - not bound to URL
    - communication via portal
    - more complex request processing and behavior
    - multiple instances on page

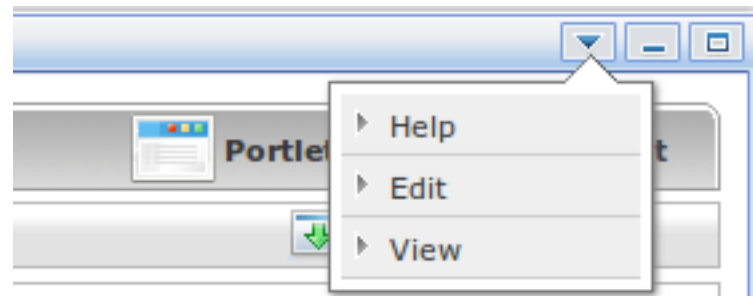
# Portlet container & lifecycle

- Manages lifecycle of portlets
- Distributes requests among portlets



# Portlet modes & window states

- Modes indicate current portlet function.
- 3 common modes: VIEW, EDIT, HELP.
- Window states determine the amount of space on the page available to the portlet.
- 3 common states: NORMAL, MAXIMIZED, MINIMIZED.
- Custom states & modes.





# PortletPreferences & PortletSession

- Session is temporary storage of data to share among portlets.
- Preferences are used to persist attributes (user-specific key-value pairs). Typically set in EDIT mode during processAction phase.

# JSR-286

- Extends JSR-168 ( + backwards compatible)
- Inter-porlet communication:
  - public render parameters
  - events
- Resource serving
- Filters, annotations support, advanced AJAX handling.

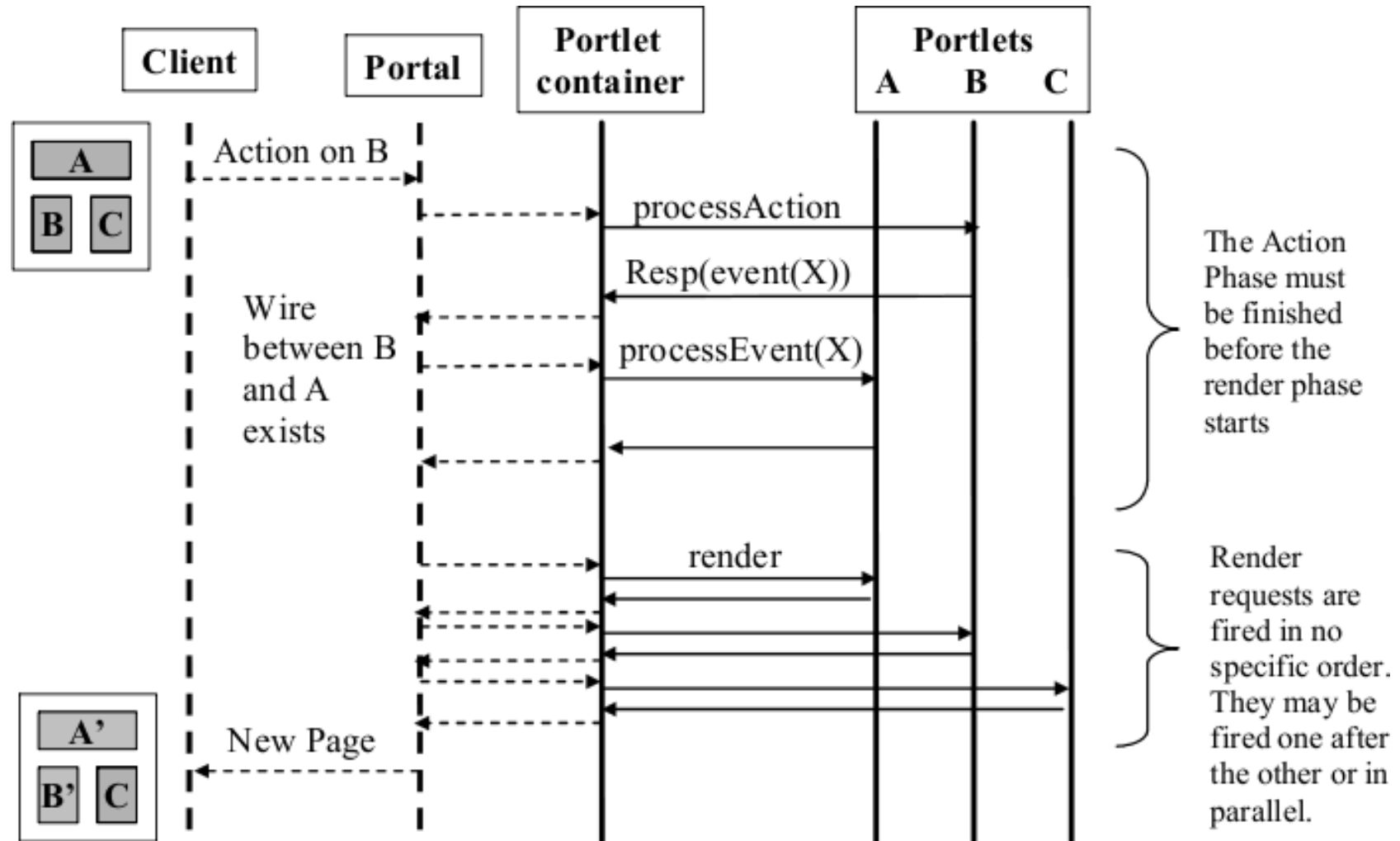
# Tag library

- Used in JSP pages
  - `<% taglib uri="http://java.sun.com/portlet_2_0" prefix="portlet" %>`
- Allow access to portal specific request/response objects
  - `<portlet:defineObjects />`
- Is used in JSP pages to generate links (actionURL, renderURL, resourceURL)
- request/response objects can be accessed in scriptlet or EL expressions

```
<portlet:renderURL var="invoiceRenderUrl">  
  <portlet:param name="view" value="invoice"/>  
  <portlet:param name="id" value="42"/>  
</portlet:renderURL>
```

```
<a href="{invoiceRenderUrl}">Show invoice 42</a>
```

# Request handling (with action & event)



# Portlet descriptors

- WEB-INF/web.xml
- WEB-INF/portlet.xml
  - Contains definitions of portlets, its parameters, modes, events, PRPs, etc.

```
<portlet-app ...>
  <portlet>
    <description>Simple Porlet Decription</description>
    <portlet-name>SimplePortlet</portlet-name>
    <display-name>Simple Portlet</display-name>
    <portlet-class>org.jboss.vut.systemintegration.SimplePortlet</portlet-class>
    <supports>
      <mime-type>text/html</mime-type>
      <portlet-mode>VIEW</portlet-mode>
    </supports>
    <portlet-info>
      <title>Simple Portlet</title>
    </portlet-info>
  </portlet>
</portlet-app>
```



**Let's have some fun!**

# Workshop details



- Generate dynamic web project in JBDS with Portlet facet
- Generate simple portlet & deploy
- Update portlet to render content from JSP
- Create form in JSP & implement processAction
  - add another JSP which displays value from form + use renderURL to return
- Create help mode & display information about signed user
  - add link to switch back to view mode (using renderURL)
- Advanced: create edit mode & implement storing and display of PortletPreferences

# Important links

- <http://jcp.org/en/jsr/detail?id=286>
- <http://www.jboss.org/gatein/>  
(Download page, User & Reference Guides)
- <http://www.jboss.com/products/platforms/portals/>

## Contact

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Q & A TIME

**Thanks for your attention!**

**See you next week on advanced portlet  
development session.**