

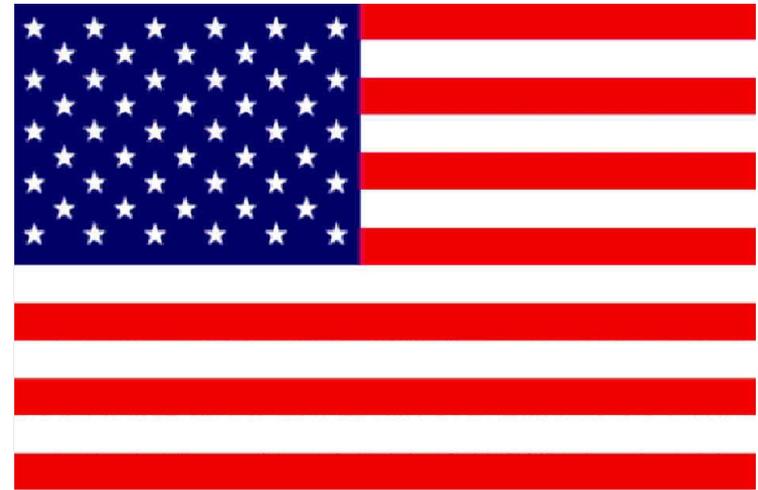


# JBoss Portal

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PV219 Seminář webdesignu, 11<sup>th</sup> March 2009

# Language Selection



# Out tonight's agenda

- What is portal and why use it?
- Java specifications
- Introducing JBoss portal
- Real life use case
- How to obtain and deploy JBoss portal
- Live demo with “hands on”
- Q&A

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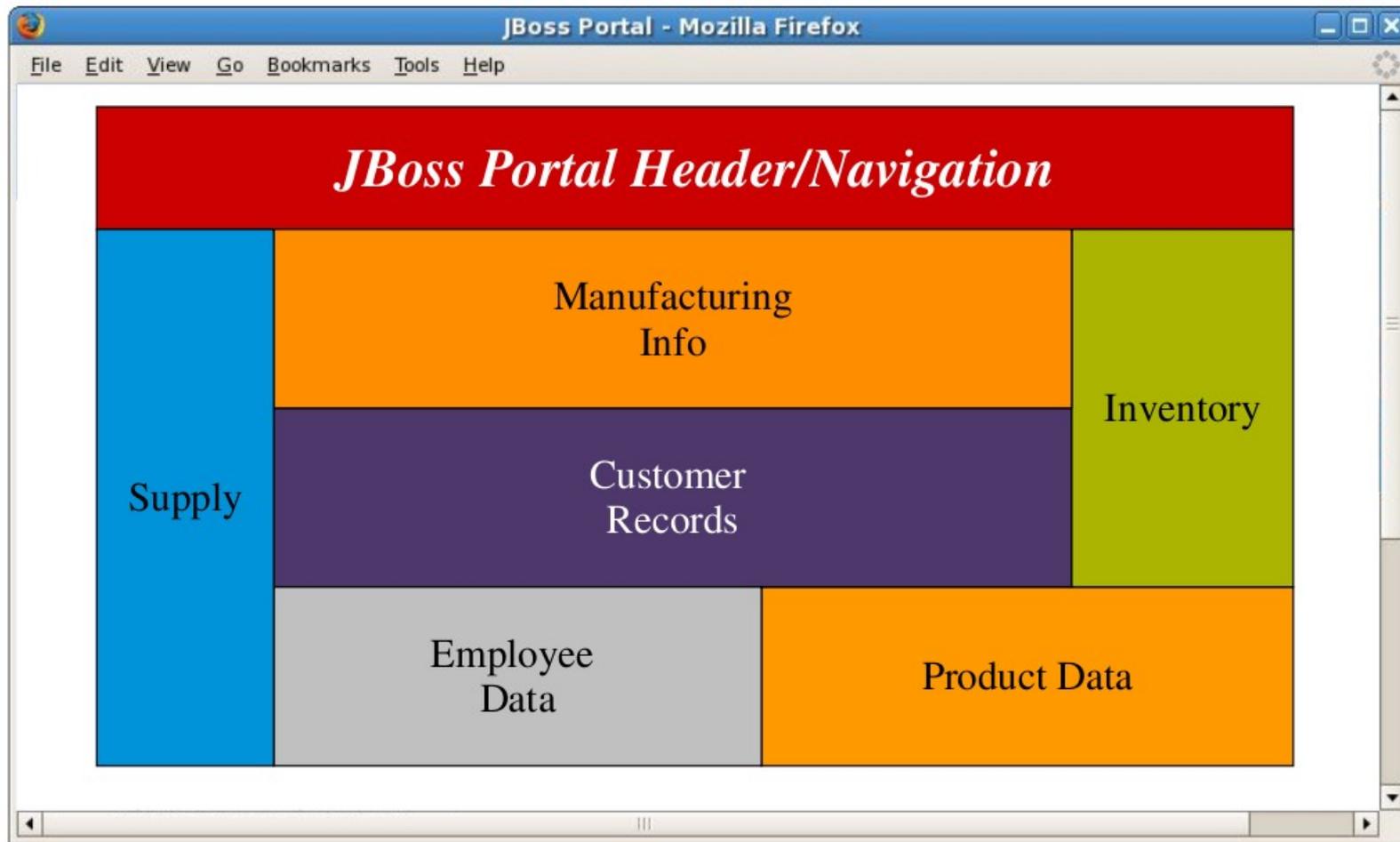
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*Get ready... 40 slides and a demo ahead!*

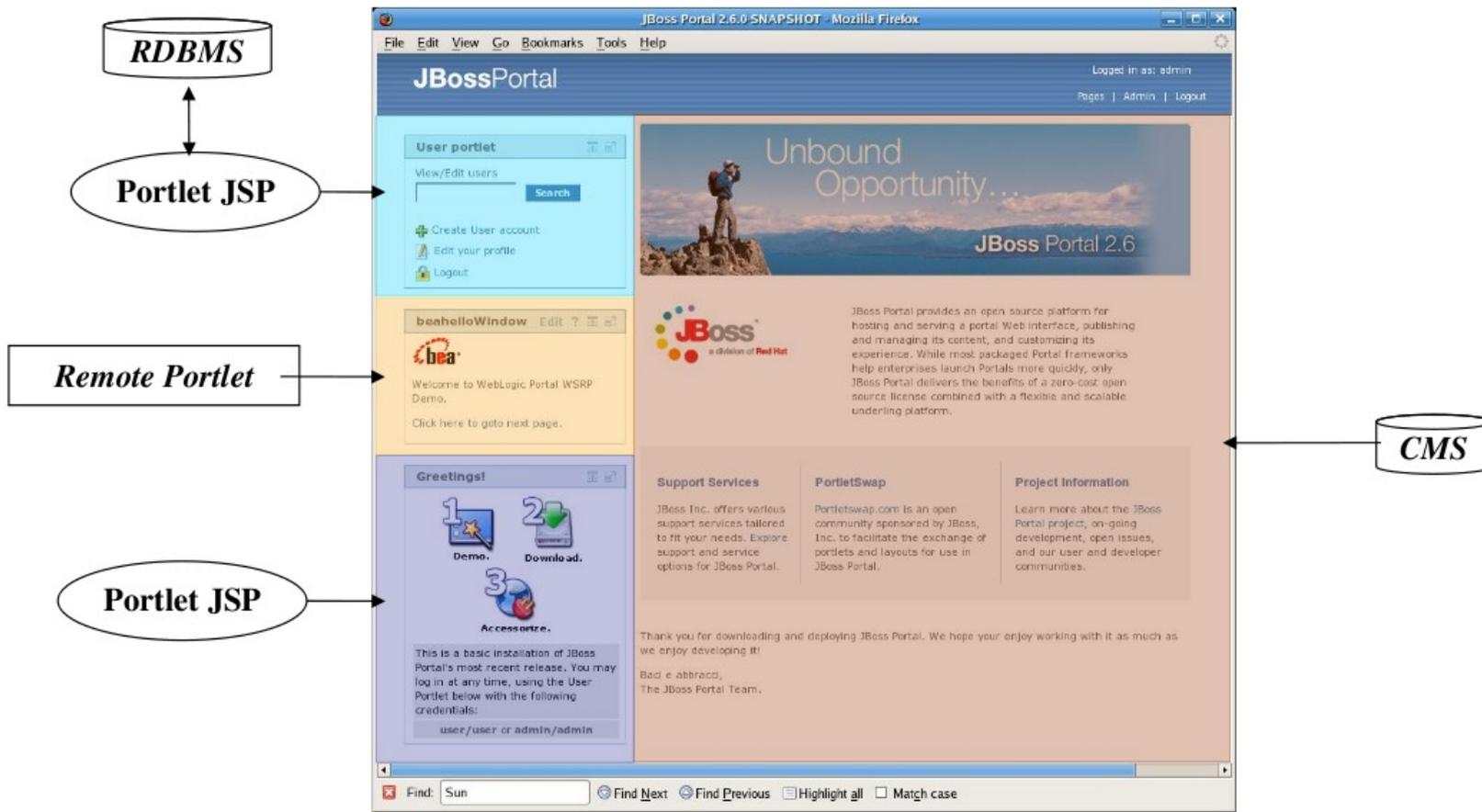


# Portals in general

# Portals provide Integration & Aggregation



# Portal consumption



# Why use a portal?

## Why not just use a “regular” web framework?

- Requires all components to be written using the same technology
- Enterprise environments, soon or later, deal with multiple technologies
- Some web frameworks have support for portals

## Speed up deployment of a portal

- Existing standard portlets
- Build-in authentication (with SSO)

# Integration of different technologies

### User portlet

Welcome

You are currently not logged in.

You can create an account.

I'm a CMS file ! With a JBosslogo under



### Greetings!

1  **Demo.**   2  **Download.**   3  **Accessorize.**

This is a basic installation of **JBoss Portal 2.6.3-GA**. You may log in at any time, using the *Login* link at the top-right of this page, with the following credentials:

**user/user or admin/admin**

If you are in need of guidance with regards to navigating, configuring, or operating the portal, please view our online documentation.

### Programme TV

Mardi 22 Janvier 2008

	<b>La Cauetienne</b> 17:35 - 40 mn.	X
	<b>Rex</b> 17:10 - Serie de 45 mn.	X
	<b>Des chiffres et des lettres</b> 17:35 - 25 mn.	X
	<b>L'île des âmes perdues</b> 16:25 - Film de 105 mn.	X
	<b>L'Europe, les pieds dans l'eau</b>	X

### WSRPWindow



Welcome to WebLogic Portal WSRP Demo.

[Click here to goto next page.](#)

### HelloWorld JSF Portlet

First Name:

Last Name:

### PHP Poll Portlet

Which Portal do you prefer ?

- JBoss Portal
- The portal of JBoss

[View Results](#)

### Bart Simpson Phrases

**Die Simpsons - Der Film**  
Das Kinoabenteuer auf DVD. Nur 19,95 Fr!  
Lieferbar ab sofort.

Ads by Google

 **Hey, it's a teddy bear...Ew! Gross! It's probably diseased or something...Here Maggie.**

[View More Bart Simpson Phrases](#)

### Struts MailReader Demo

# CMS, JSF, JSP, PHP, Netvibes, Google...

**User portlet**

Welcome

You are currently not logged in.

[MyFaces JSF Portlet](#)

**Greetings!**

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**JSP Portlet**

**WSRPWindow**



Welcome to WebLogic Portal WSRP Demo.

[Click here to goto next page.](#)

**WSRP Content**

**HelloWorld JSF Portlet**

First Name:

Last Name:

**Sun RI JSF Portlet**

**PHP Poll Portlet**

Which Portlet do you prefer?

JBoss Portal

The portal of JBoss

**PHP Portlet**

I'm a CMS file ! With a JBosslogo under



**Programme TV**

Mardi 22 Janvier 2008

	<b>La Caetidienne</b> 17:35 - 40 mn.	<input type="button" value="x"/>
	<b>Rex</b> 17:10 - Serie de 45 mn.	<input type="button" value="x"/>
	<b>Des chiffres et des lettres</b> 17:35 - 25 mn.	<input type="button" value="x"/>
	<b>L'île des âmes perdues</b> 16:25 - Film de 105 mn.	<input type="button" value="x"/>
	<b>L'Europe, les nids dans l'eau</b>	<input type="button" value="x"/>

**Netvibes Widget**

**Bart Simpson Phrases**



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Ads by Google

Hey, it's a teddy bear...Ew! Gross! It's probably diseased or something...Here Maggie.

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**Google Widget**

**Struts MailReader Demo**

# Portals and SOA

## **Split your services**

- Maintenance
- Lifecycle
- Technology independent

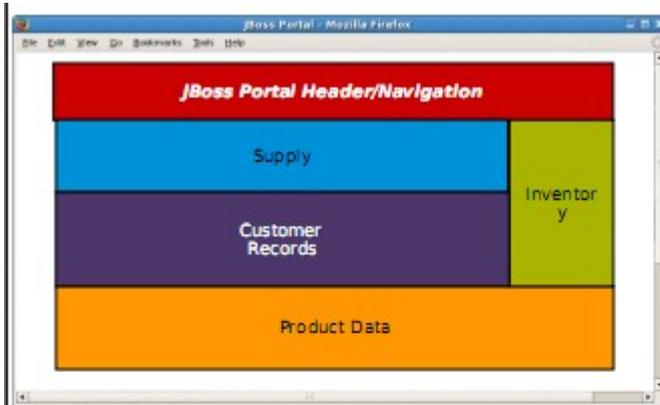
## **Split your web applications**

- Maintenance
- Lifecycle
- Technology independent
- Don't split the user interface !

## **The user doesn't like to have to deal with multiple applications**

- *A portal is a window on the services - Unify access to your web applications*

# Multiple users – Multiple views



CSR Portal



Manager Portal



Customer Portal

# When to use a portal?

- Simple application like a web blog – No?
- Intranet, Insurance Portal, Banking & Finance Portal – Yes!
- Have aggregation and integration of content from different sources?
- Need more than simple personalization?



# **JBoss Portal**

## **in general**



# JBoss Portal

## **Focus on core portal functionality**

### **Aggregation**

- Provides a standards-based environment for serving a portal's web interface and publishing/managing portal applications and content
- Consistent look and feel

### **Performance and scalability**

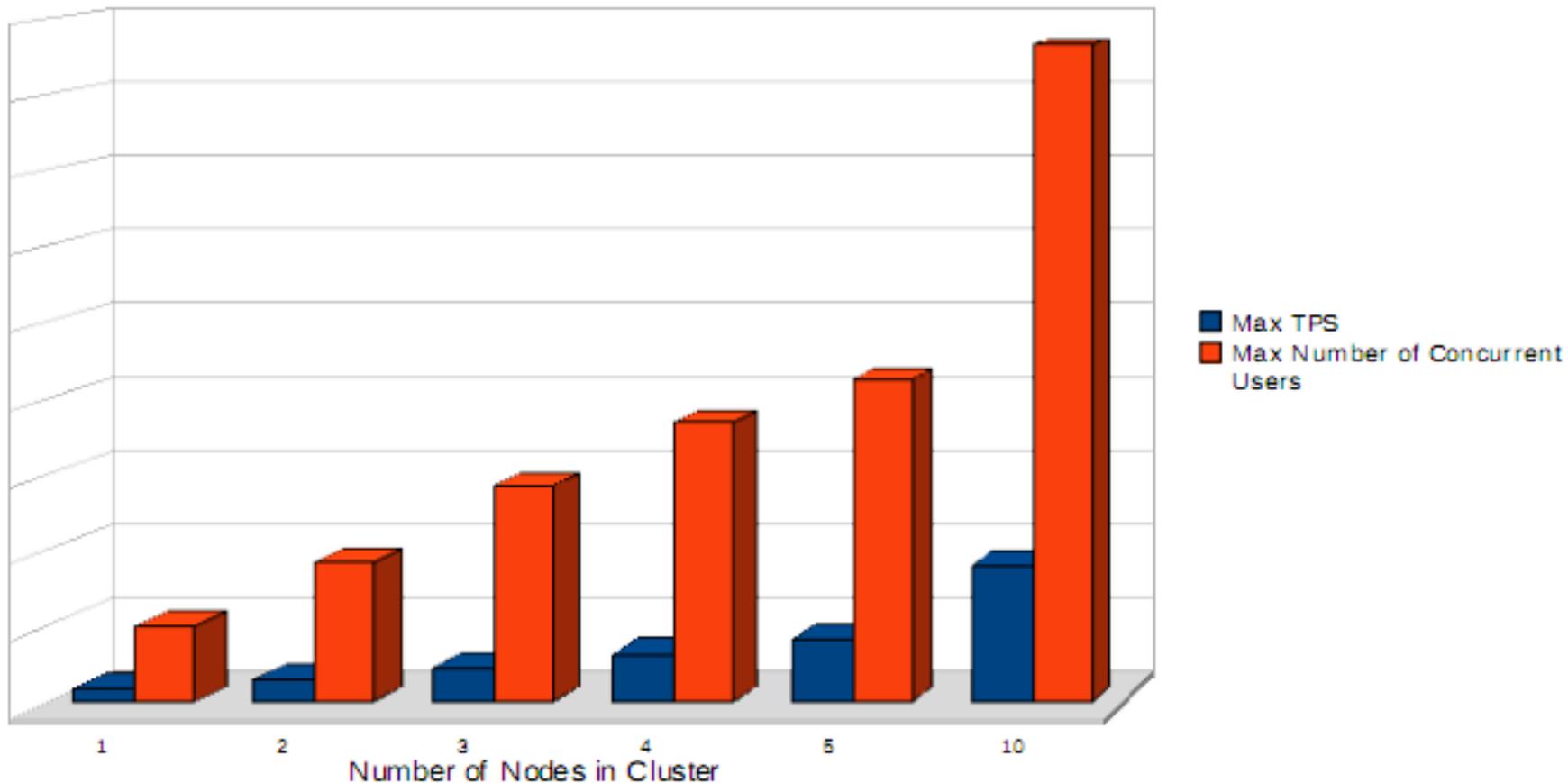
### **Centralized security**

- Single Sign On across elements of the portal
- Identity manager

### **Presentation framework (Portal vs Portlet level)**

# Scalability

- JBoss Enterprise Portal Platform scales well
- Don't forget you still need to scale other resources (e.g. database)



# Standards based

- JSR-168: Portlet Specification  
(Final release: Oct 27th, 2003)
- JSR-286: Portlet Specification 2.0  
(Proposed Final Draft: Dec 13th, 2007)
- JSR-301: Portlet Bridge Specification for JavaServer Faces  
(Early Draft Review 2: Sep 10th, 2007)

# What is a Portlet?

**User interface component targeted at the portal ecosystem**

- implementing given interface
- standardized

**Similar to web applications in**

- Deployed in a portlet container
- Can better focus on single task
- Can delegate common (→ shareable) concerns
- Reusable



# What is new in JSR-286 Portlet Specification 2.0

- Better interaction with a portal in a various manners

**Public render parameters** feature (to show improved interoperability)

- Use cases

Several portlets on the same page share the same zipcode, and are able to display informations related to the geographic location

- Weather
- Map
- Address

# Public render parameters use case - XML

```
<portlet-app>
  <portlet>
    <portlet-name>GoogleMap</portlet-name>
    ...
    <supported-public-render-parameter>zipcode</supported-public-render-parameter>
    ...
  </portlet>

  <public-render-parameter>
    <identifier>zipcode</identifier>
    <qname xmlns:g='urn:google'>g:zipcode</qname>
  </public-render-parameter>
</portlet-app>
```

## Public render parameters use case - Java

```
public void render(RenderRequest req, RenderResponse resp)
{
    String zipcode = req.getParameter("zipcode");
    render(zipcode, resp);
}

public void processAction(ActionRequest req,
ActionResponse resp) {
    String newZip = req.getParameter("zipcode");
    resp.setRenderParameter("zipcode", newZip);
}
```



# Leverage of other JBoss Enterprise Middleware Software components

## **JBoss SX**

- JAAS based domain security subsystem

## **JBoss Cache**

- Performance
- Fault tolerance

## **Hibernate**

- ORM
- database independence
-



# Leverage of other JBoss Enterprise Middleware Software components 2

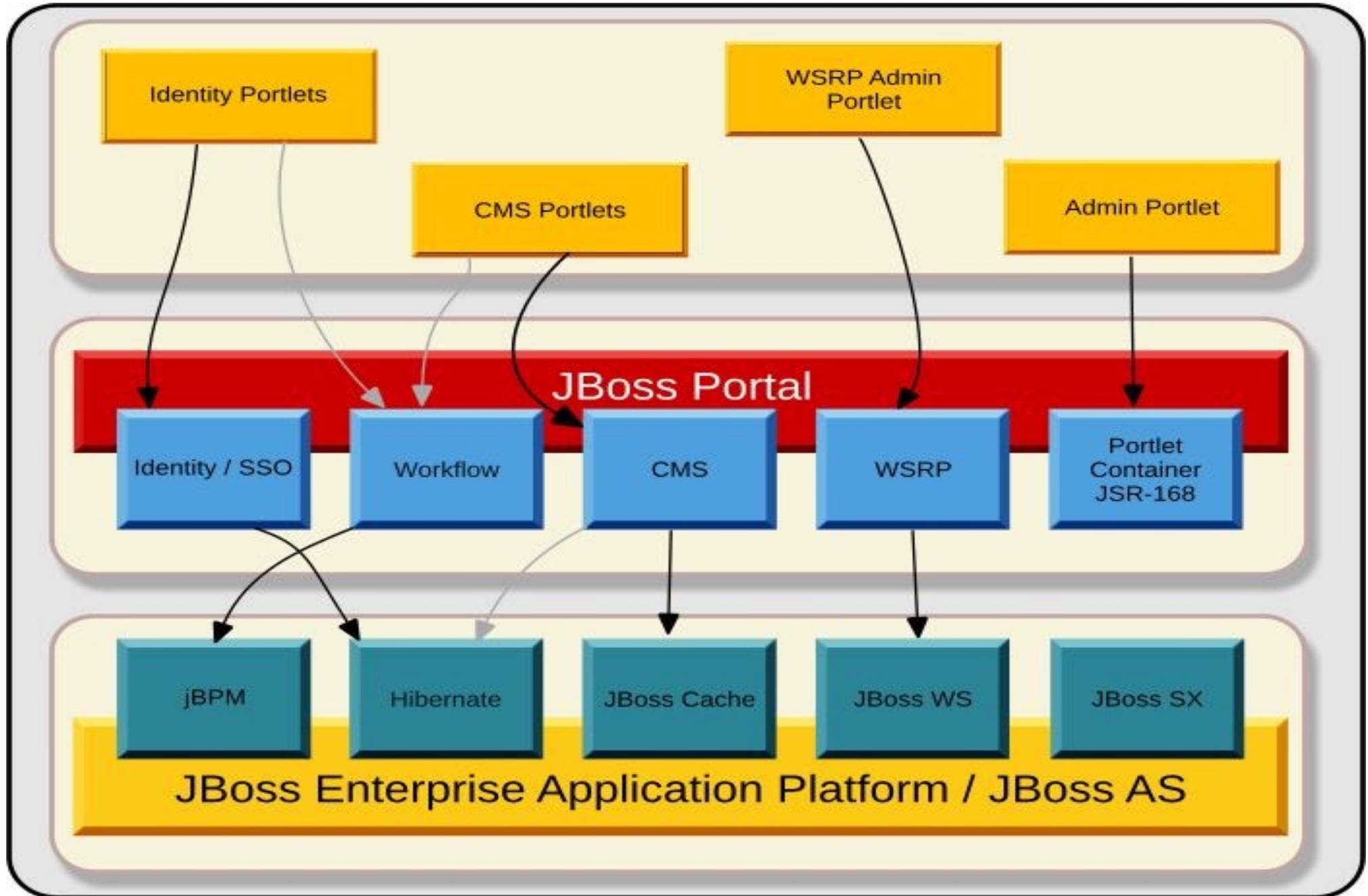
## **jBPM**

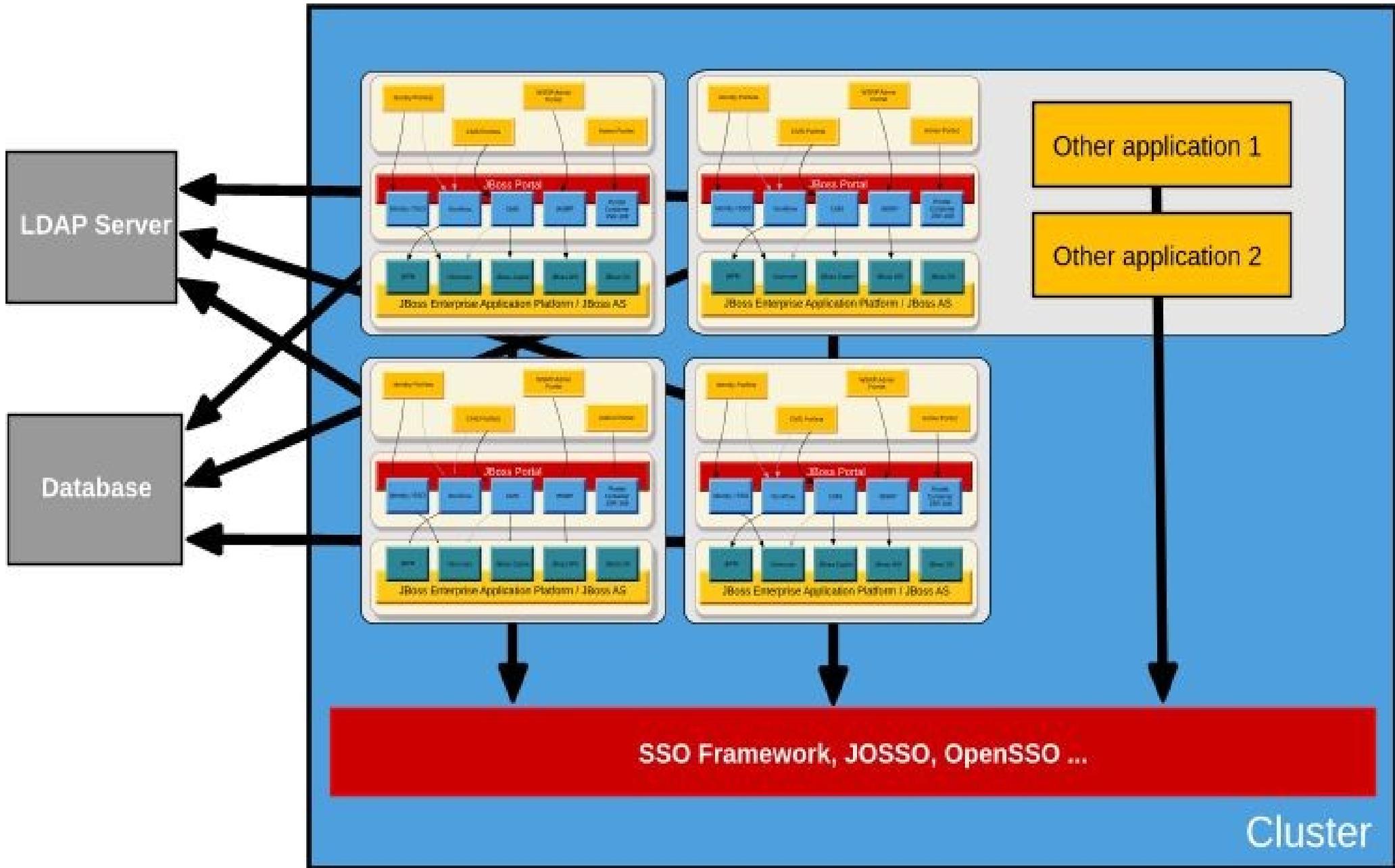
- Business process
- Better flexibility

## **JBoss Web Services**

- WSRP
- REST

*...because it runs in JBoss Application Server*





# Identity Server integration

**A set of interfaces to integrate with any identity server:**

- OpenLDAP
- Red Hat Directory Server
- OpenDS
- Sun Directory Server
- Microsoft Active Directory
- others

**...it's all about integration!**

# Single Sign-On integration

## **Several applications but a single login challenge to the user**

- Single sign-on (SSO) is a method of access control that enables a user to log in once and gain access to the resources of multiple software systems without being prompted to log in again. Single sign-off is the reverse process whereby a single action of signing out terminates access to multiple software systems.

## **Provided set of interfaces to integrate with any SSO framework**

- CAS
- JOSSO
- Open SSO
- others



# **JBoss Portal**

## **as a community driven OSS**



# Community

- a large base of users
- active forums
- multiple environments, OS, database... supported
- user input
- early feedback
- helps OSS to anticipate needs before final releases
- 10,000 downloads a month



# Strong points given by users: Why use JBoss Portal?

- Modularity
- Seamless integration
- Reduced costs
- Scalable architecture
- Professional support quality

# Related projects

## **JBoss Wiki**

- Wiki portlet

## **JBoss Forums**

- Forums portlet
- More portlets on portletswap.com (being revamped)
- Increasing number of portlets available globally



# JBoss Portal as a product

- Open Source with LGPL license – use freely, business friendly licence
- Backed up to 24x7 by “Support from the Source”
- Many JBoss certified partners (HP, Cap Gemini, Alfresco, Atos Origin, Unisys...) – solution you can trust!

# Future plans

- **Server agnosticism** – run everywhere!
- **Federated search** – is the simultaneous search of multiple online databases or web resources and is an emerging feature of automated, web-based library and information retrieval systems. It is also often referred to as a portal or a federated search engine.
- **WSRP 2.0** – Web Services for Remote Portlets (WSRP) is an OASIS-approved network protocol standard designed for communications with remote portlets.
- **New presentation framework**
- **Improved content framework**
- **Our needs!**

# Standards/OSS in enterprise in general

## What are standards?

- uniform engineering or technical criteria, methods, processes and practices that *everyone* follows

## Why use them?

- easy to start using
- easy to stop using
- easy to migrate to different solution provider
- shareable components

## As a developer?

- You are getting the entire budget because you don't have to pay for the license!



# JBoss Portal

live demo



# “Installation”

## **JBossAS/Portal Bundle**

- Zero Installation Required (this is Java life!)
- Get supported Java (JDK 4, JDK 5)
- Start Server (`./run.sh -c default`)
- Point your browser to <http://localhost:8080/portal>

## Standalone JBoss Service Archive (SAR)

- `jboss-portal.sar` – Core framework code
- `portal-core.war` – stores layouts/themes
- `portal-server.war` – portal server root context

# Database to use

- Get your favorite (RDBMS) database
- Get JDBC driver (copy to `./server/default/lib`)
- Hibernate DDL/DML executed on initial startup
- HSQL embedded (this is not for production!)



# Q&A

