

# BUILDING LIFERAY PORTLETS WITH Vaadin }>

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Profile



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#### Profile Information

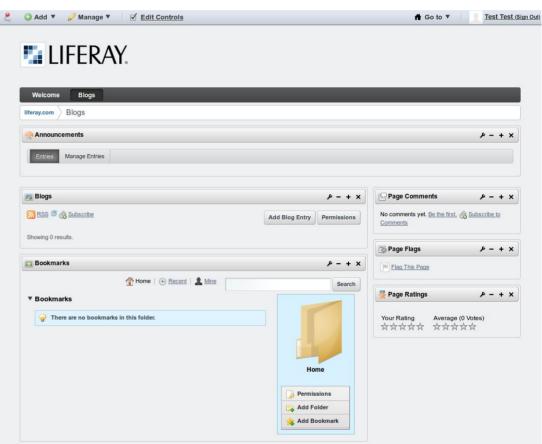
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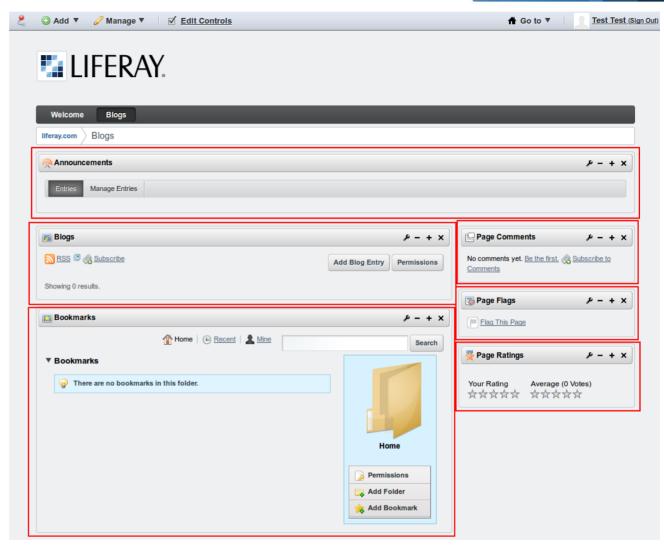
#### WHAT IS LIFERAY PORTAL?

- Web application plaform.
- Liferay is JSR-168 / JSR-286 compatible portlet plaform portal
- Liferay portal is open source project started year 2000, company 2004
- Liferay is Vaadin compatible platform
- Enterprises are using Liferay to build robus business solutions that deliver results:
  - Self-Service Portals
  - Knowledge Sharing Workspaces
  - Dynamic Web 2.0 Websites
  - Revenue-generating Social Networks
  - Enterprise Application Integration





# WHAT ARE PORTLETS?





#### WIKIPEDIA:

Portlets are pluggable user interface software components that are managed and displayed in a web portal. Portlets produce fragments of markup code that are aggregated into a portal. Typically, following the desktop metaphor, a portal page is displayed as a collection of non-overlapping portlet windows, where each portlet window displays a portlet. Hence a portlet (or collection of portlets) resembles a web-based application that is hosted in a portal. Some examples of portlet applications are email, weather reports, discussion forums, and news.

Portlet standards are intended to enable software developers to create portlets that can be plugged into any portal supporting the standards.



#### LIFERAY EDITIONS, EE AND CE

- Community edition, CE version
  - Open source
  - Developed at git hub http://github.com/liferay
  - Community supported
- Enterprise Edition
  - Source code available for the clients
  - Guaranteed SLAs up to 24/7/1 with regular service packs and a five-year EOSL policy
  - Fix packs
  - EE only plugins



#### **LIFERAY - COMPATIBLE WITH YOUR IT**

- Compatible with your IT
  - Runs on your existing application servers, databases and operating systems to eliminate new spending on infrastructure

Operating Systems	Application Servers	Databases
<ul> <li>Linux (CentOS, RHES, SUSE, Ubuntu, and others)</li> <li>Unix (AIX, HP-UX, Mac OS X, Solaris, and others)</li> <li>Windows</li> </ul>	✓ Apache Geronimo ✓ Sun GlassFish ✓ JBoss ✓ JOnAS ✓ OracleAS ✓ SUN JSAS ✓ WebLogic ✓ WebSphere	✓ Apache Derby ✓ IBM DB2 ✓ Firebird ✓ Hypersonic ✓ Informix ✓ InterBase ✓ JDataStore ✓ MySQL ✓ Oracle ✓ PostgresSQL ✓ SAP ✓ SQL Server ✓ Sybase
Servlet Containers		
✓ Jetty ✓ Resin ✓ Tomcat		



#### **DEVELOPMENT TOOLS FOR LIFERAY**

- CE developers
  - IDE/Editor agnostic
  - Plugins-SDK (ant based)
  - Liferay IDE, Eclipse based IDE
  - Maven SDK
- EE developers
  - IDE/Editor agnostic
  - Plugins-SDK (ant based)
  - Liferay Development Studio, Eclipse based IDE
  - Maven SDK



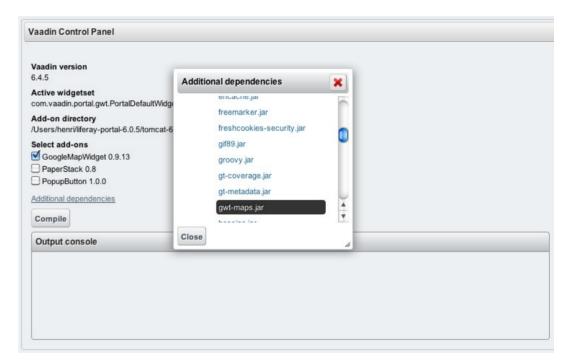








- Since Liferay version 6.0, out of the box Vaadin support."
- "Transparent" portlet development.
- "Vaadin Control Panel for Liferay" \*
  - Downloadable the add-on(s) from Vaadin Directory
  - Change Vaadin version used with Liferay plugins
- At Liferay all Vaadin applications are using same version of Vaadin
- Liferay has 3 properties for Vaadin configuration



https://vaadin.com/directory/-/directory/addon/vaadin-control-panel-for-liferay

\* provided by Vaadin Oy



#### portal.properties (portal-ext.properties)

```
#
# Specify the location of the portal wide Vaadin themes and widget set
# (client side JavaScript).
vaadin.resources.path=/html
#
# Specify the base Vaadin theme to load automatically for all Vaadin
# portlets. A portlet can include an additional theme that is loaded after
# the shared theme.
vaadin.theme=liferay
#
# Specify the shared widget set (client side JavaScript) that is used by all
# Vaadin portlets running in the portal.
vaadin.widgetset=com.vaadin.portal.gwt.PortalDefaultWidgetSet
```

#### LIFERAY AS YOUR VAADIN APPLICATION PLATFORM

- Liferay marketplace to distribute your applications\*
- Liferay has useful services out of the box
  - Authentication
  - Account management
  - Asset management
  - Caching
  - Categories and Tagging
  - Document and media storage
  - Permission management
  - Servicebuilder

- Social collaboration
- Single sign-on integration
- Unified look and feel by theming
- User management
- Web content management
- Workflow

\* at this point only free applications are supported



#### **VAADIN PORTLET DEVELOPMENT STRATEGIES**

- Make many portlets instead of one.
- Think how your application can fit to Liferay's architecture
- If you can Liferay services instead of creating your own. eg. Permission management, Web Content, Dynamic datalist, Workflow



#### **DEMO - USE CASE**

#### Product:

Reindeer Registry 1.0, state of the art Vaadin application

#### Business case:

Customer used to host their application, but now they would like to get it available from internet and some would like to buy it as service.

We need also remote interface to our integration to our mobile clients

#### Challenges:

- Easy to setup new customers
- We need permission management
- Remote interface



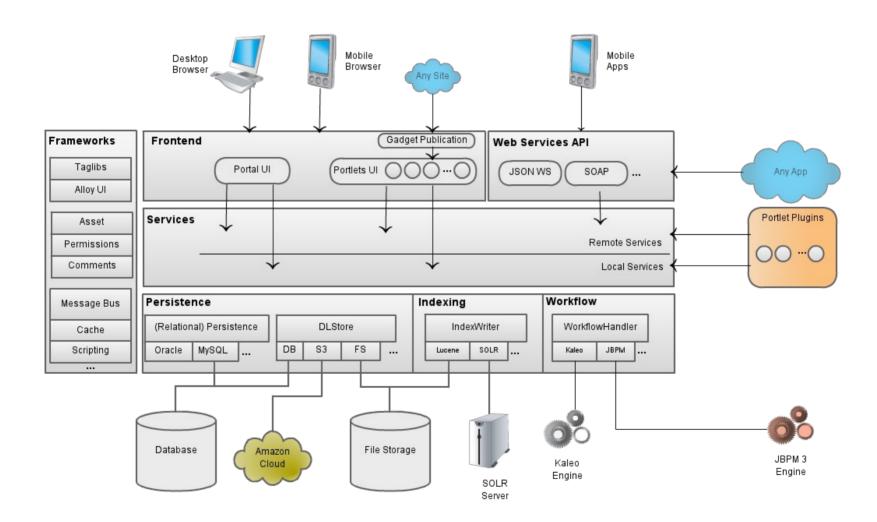


#### **DEMO - OUR DEVELOPMENT STRATEGY**

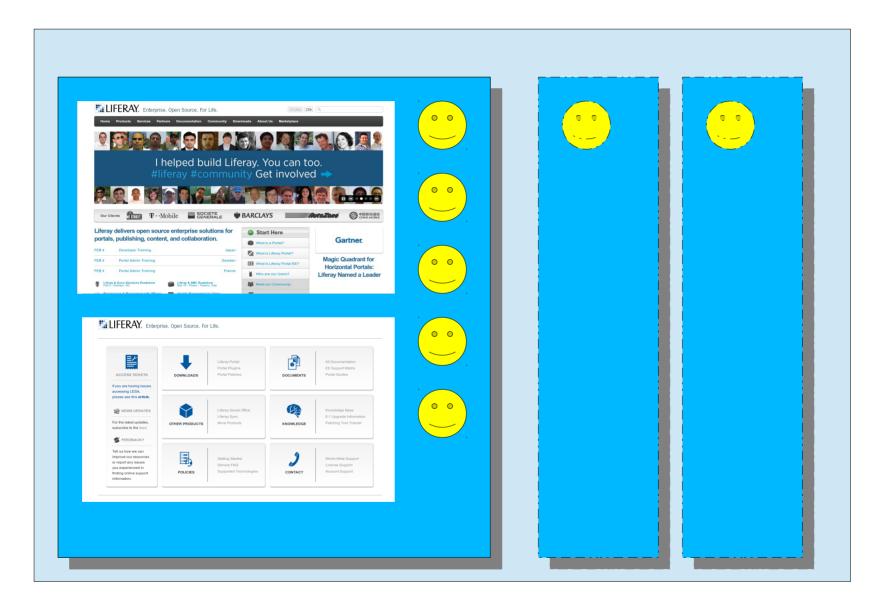
- Convert the application to support work with multiple Liferay site's
- Talk to database though ServiceBuilder and for we can fetch and update our data to our mobile client through jsonws api
- Implement permission management.



#### LIFERAY ARCHITECTURE



#### LOGICAL ARCHITECTURE OF LIFERAY



# Hey, Dude!!! Enough, stop the slide show! Do the demo! Start coding!

#### WHAT WE JUST DID?

- We did add portlet and Liferay specific configuration files
- We did create persistence layer to use Liferay service builder.
- We make sure that application fits well to Liferay site structure, by adding group id and company id to our data.
- We did add permission management to our application
- We did access also remotely to our data



## Thanks, guys!

### **Questions?**

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