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Integrating OpenCms and Liferay Portal

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Overview / Background

- Why Integrate?
  - OpenCms infrastructure already in place
  - Existing content
  - Wanted to implement company intranet
  - Chose Liferay Portal Server
  - How to integrate these two?
Goals

- Keep Costs Low = Open Source Platform 100%
- Leverage Existing Content / Infrastructure as much as possible
  - Avoid content migration
  - Allow for re-skin / theming of site
- Use LifeRay for presentation
Integration Approaches

- Option 1 - Tightly Coupled
  - Single Web Application
  - In Context calls
  - Disadvantages
    - Maintenance!
Approach Options…

- Option 2 - Loose Coupling
  - HTTP Interface or custom UI in OpenCms
    - easier to implement
  - Disadvantages
    - No access to local server
Solution - Web Services

- Loose Coupling
- Minimal Impact on Existing OpenCms install
- Bonus: re-usable component
Solution Continued…

- Locating, retrieval done via Web Services
- Plain rendering, elements with DIVs
  - `<DIV class="param" id="element">`
- Style on Client side using CSS, Liferay themes
  - URLs fixed up upon delivery
- Back end protected via Single Sign On
Limitations

- Currently no Editing on Portlet Side
- Web Services API allows it - could be added without too much work (in progress - stay tuned)
- Solution uses xmlpage resource only
- Nothing preventing other resource types from being used, requires render handling
- Simple translation of URLs from relative to local
Portlet Design

- Liferay supports JSR 268
- Liferay Extension Environment
  - Specific to Liferay - can be made generic without too much work
- Struts / Tiles Portlet
  - Easier handling of paths
- Utilizes AJAX / JSON Actions
Portlet Actions / States

- View
- Edit
- Config
- Save
- Read
- Error

Connections:
- JSON
- AJAX
OpenCms Web Services

- 2 Flavors, Source code is the same
  - JAX-WS
    - Newer standard, annotation based generation
  - JAX-RPC
    - Older standard, Apache AXIS 1.0
    - Supported by Liferay
Technical Details

- Web Service API
- Session Handling
- Deployment Details
  - JAX - RPC
    - Install AxisServlet into web.xml
    - Optional AdminServlet, SOAPMonitor, etc
  - JAX - WS
Technical Details...

- JAX-WS
  - Install filter into web.xml
  - Install endpoint service into web.xml
  - Install servlet mappings
  - Add required JAX-WS libraries
Thank you / Questions

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