Open Apereo 2014
Innovate - Incubate - Implement

Brothers in Arms

Frédéric DOOREMONT
Mathilde GUERIN
Alain MAYEUR

Univ. du Littoral Côte d’Opale
Univ. de La Rochelle
Univ. de Valenciennes
The ESUP-Portail Consortium

- Objectives
- Strategy
- Organization & Governance
- Partnership with Apereo
The ESUP-Portail Consortium

Overview

- Since 2002: Project “Digital working space”
  => portal of digital services (ENT in France)
- 6 years since the new organization
  => non profit structure with its own budget
- 70 members in France
- French open source Consortium funding and promoting international collaboration
- 20 conventions with the members
The ESUP-Portail Consortium

**Objectives**

- Facilitate learning and campus life for students... but also the daily work of the staff members
- Pool development of digital services to divide costs between universities
- Share technological developments and new services
- Conceive and plan for the development (or evolution) of portals, collaborative tools and mobile services
The ESUP-Portail Consortium

- Wide range of projects
The ESUP-Portail Consortium

- **Strategy**
  - Solutions are open-source to enable a constant evolution of tools and services
  - Each establishment can adapt the technological groundwork to fit its own strategy and needs
  - Collaborate with other organizations such as Apereo, whose solutions are the basis of the ESUP projects
  - Assure the perpetuity, the adaptability, the technological developments
The ESUP-Portail Consortium

- Give access to the institution’s services depending on the user's profile
- Integrate e-learning platform, provide pedagogical services and documentation components...
- Encourage team brainwork and sharing of experience/feedback
- Support on the standards
The ESUP-Portail Consortium

Organization & Governance

- **9 people**
  - (incl. Consortium Director: Alain Mayeur)
  - from 9 different institutions

- **14 people**
  - from 12 different institutions

- **9 working groups**
  - Authentication
  - Digital desktop
  - Group Management
  - OAE
  - Portal
  - Development
  - EDM
  - Mobility
  - Statistics

- **Countless community people**
  - from 70(ish) member institutions
The ESUP-Portail Consortium

- **Gatherings:**
  - 4 meetings a year
  - annual seminar for global coordination

- **Support of the French Ministry of Higher Education and Research**
  - evolution of digital plans and services for training, employability and academic life
The ESUP-Portail Consortium

A national cause

- E-Portfolio
- Skills Certifications C2I
- ENT Digital services
- Training Teachers
- Education Digital Ressources
- Open Education
- Ministry of Higher Education
The ESUP-Portail Consortium

- ESUP-Portail in practice
  - 9 working groups
  - ESUP-Commons-v2
    - Portlet, web mobile
    - Trainings, Collaborative maintenance
  - GitHub
  - Contribution from universities and engineering schools
  - Lively community, encouraging debate
  - Mailing lists and Wiki
  - ESUP-Days: 2 conferences a year in Paris
    - more than 100 participants each time
    - #17 on Feb. 6th 2014; #18 on Jul. 3rd 2014
    - Live streaming and recorded videos available
The ESUP-Portail Consortium

**Partnership with the Apereo Foundation**
- Oct. 2012: Memorandum of Understanding
- Sept. 2013: Convention to formalize the involvement of the ESUP Consortium in the OAE project
  - Beforehand: Meeting between representatives of the OAE project team, the ESUP Consortium and the Ministry of Higher Education
  - Convention terms:
    - ESUP-Portail takes part in the strategy of the OAE project
    - ESUP-Portail contributes in funding the solution
    - The OAE and the ESUP-OAE development teams work together to provide new functionalities
    - The ESUP-OAE team maintains the French translation of the project
The ESUP-Portail Consortium

- Feb. 6-7, 2014: Joint conference
  - Apereo Europe & ESUP-Days #17 in Paris
  - Large attendance
  - Never-discussed-before topics on the agenda
    - learning analytics,
    - e-portfolios,…
The ESUP-Portail Consortium

- June 2014: Renew convention
- Keep this collaboration growing by...
  - Being active contributors (participate in WGs, work on internationalization matters, etc.)
  - Taking part in the Foundation’s overall strategic decisions (incubation process, board)
  - Assisting Apereo in its European implementation
OAE in France

- History
- Strategy
- French model
- First assessment
OAE in France

History
- Feb. 2012: Beginning of the Nakamura translation
- June 2012: Creation of the ESUP-OAE WG

Objectives:
- Maintain the French version
- Organize thematic conferences to share feedbacks with other partners
- Define a strategy for implementing OAE in France, considering institutions’ needs and requirements
- Develop widgets
Jan. 2013: Launch of a demo instance
Since then, we keep maintaining the French translation

French
approved: 100%

Approved
Sept. 2013: A convention is signed between the Apereo Foundation and ESUP-Portail
OAE in France

OAE in France

- Apr. 2014: Launch of the pilot phase

[Image of website interface with text in French]
OAE in France

- Our strategy?
- “We like to keep what is ours”

…and no, it’s not (just) an ego thing
OAE in France

- A big challenge…
OAE in France

Strategy implementation

- Phase #1

Université de La Rochelle

Université Pierre & Marie Curie

Université de Valenciennes & du Hainaut-Cambrésis

Université de Lorraine

Université du Littoral Côte d'Opale

ESUP-Portail
OAE in France

- Strategy implementation
  - Phase #2
OAE in France

- French instance
- Hosted by the Université de Lorraine
OAE in France

- Server infrastructure
  - 1 web server (Nginx)
  - 3 app. and preview servers
  - 1 NFS server (storage)
  - 3 database servers (Cassandra)
  - 2 search servers (ElasticSearch)
  - 2 Etherpad servers
  - 1 cache server (Redis)
  - 1 messaging server (RabbitMQ)
  - 1 server for monitoring
OAE in France

- The “OAE-France” team
  - 2 engineers from UPMC
  - 1 engineer from UVHC
  - 1 engineer from ULR
  - 2 engineers from UL
  - 2 engineers from ULCO
OAE in France

First assessments
- Created tenant
  - Apr. 2014: ESUP-Portail
- Soon-to-be opened tenant
  - June 2014: Université du Littoral Côte d’Opale
- 3 new tenants in September 2014
  - Université de Valenciennes et du Hainaut-Cambrésis
  - Université de La Rochelle
  - Université de Lorraine
OAE in France

Teaser
OAE in France

- **Widget development**
The potpourri part

- uPortal in France
- Portlet showcase
- Works in progress
uPortal in France

- Mar. 2013: release of the 1st esup-uportal-v4 package
- Workshop for the community

  **Agenda:**
  - Introduction to Git
    - Basics/concepts
    - Main commands and useful tools
  - The esup-uportal package
    - Package overview
    - Deployment/Configuration
    - HOWTOs
  - 2 sessions
    - May 2013: representatives of 26 institutions
    - May 2014: representatives of 19 institutions
Portlet showcase

- **esup-twitter**
- Display the Twitter timeline of a specific user
Portlet showcase

- esup-filemanager
  - Give users access to their homedirs and other shared file systems
Portlet showcase

- **esup-portlet-sympa**
- Display the mailing-lists the user has subscribed to or is the owner (or moderator) of

<table>
<thead>
<tr>
<th>Listname</th>
<th>Subject</th>
<th>Subscriber</th>
<th>Owner</th>
<th>Moderator</th>
</tr>
</thead>
<tbody>
<tr>
<td>l-design</td>
<td>Liste de diffusion de la DSI (privée)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>personnels@</td>
<td>Information des personnels de l'UR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>support-work@</td>
<td>résolution des soucis informatiques de l'UNR</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

List of your subscriptions
Portlet showcase

- esup-annuaire2

  Search through an LDAP directory for students, staff members or structures
Portlet showcase

- esup-portlet-intranet
- Browse/Search through Nuxeo workspaces
Portlet showcase

- **esup-ecm-dashboard**
- **Display the user’s Nuxeo dashboard**
Portlet showcase

- esup-portlet-bigbluebutton
- Lets the user create and start BBB conferences but also invite people via e-mail
Portlet showcase

- esup-portlet-filex
- Display the user’s Filex account
Portlet showcase

- **esup-papercut**
- Display users’ PaperCut account
- Let the user add credit to their account (Paybox)
Portlet showcase

- esup-dining-portlet (WIP)
- The next-gen DiningPortlet
Portlet showcase

- **esup-news** *(refactoring in progress)*
- Create, manage and publish news for specific group(s) of users
Portlet showcase

- **esup-lecture** *(refactoring in progress)*
- Aggregates XML feeds (RSS, RDF, …) and handles the users' preferences (subscription, (un)read items,...)

Démonstration Esup-Lecture

<table>
<thead>
<tr>
<th>Exemples</th>
<th>Actus de Rennes 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exemple 1</td>
<td>Soutenance de thèses</td>
</tr>
<tr>
<td>Jeudi 22 et vendredi 23 mai</td>
<td>Philippe Rautel, Hamed Saiy</td>
</tr>
<tr>
<td></td>
<td>Campus de Beaulieu</td>
</tr>
<tr>
<td></td>
<td>Habilitation à diriger des recherches</td>
</tr>
<tr>
<td></td>
<td>Vendredi 23 mai</td>
</tr>
<tr>
<td></td>
<td>Vincent Lavuse</td>
</tr>
<tr>
<td></td>
<td>Hôpital Sud - Rennes</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

![Portlet showcase diagram](image)
Portlet showcase

- Plus several portlets based on French institutions’ solutions

- Find all the code on our Github repo
  
  ![GitHub Link](https://github.com/EsupPortail)

- Documentation (mostly in French :/ )
  - [http://www.esup-portail.org](http://www.esup-portail.org)
Responsive Portlets

- Upgrading portlets or developing new ones?
  => Let’s make them responsive!
- Lazy much?
  => Let Twitter Bootstrap handle everything for us
Responsive Portlets

- Bootstrap uses media-queries, so what?!
  - `window.width` != `portletContainer.width`
Responsive Portlets

What we would like to get...

- Header
- Navigation
- Portlet A
- Portlet B
- Portlet C
- Footer

100% = 1600px \([\text{LARGE}]\)

66% = 1066px \([\text{MEDIUM}]\)

33% = 533px \([\text{SMALL}]\)

Boostrapp “modes”
- \(w < 768px\) (X-SMALL)
- \(768px \leq w < 992px\) (SMALL)
- \(992px \leq w < 1200px\) (MEDIUM)
- \(1200px \leq w\) (LARGE)
Responsive Portlets

How to do that? *scratching head*

=> Make Bootstrap @media-less!

Ok......... and HOW to do THAT and still be responsive?

- Use CSS classes (xs, sm, md, lg) instead of media-queries

```
@media screen and (max-width : 768px) {
  .something {
    display: none;
  }
}
@media screen and (min-width : 992px) {
  .something {
    display: block;
  }
}
```

Add JS snippet to set/update CSS classes on-the-fly
Responsive Portlets

- Everything else (grid system, etc.) remains the same
  => col-lg-4, col-md-4, col-sm-4, col-xs-4...
Responsive Portlets

- What we’ve done so far...
  - Generated a custom Bootstrap using CSS classes instead of @media
  - Automated this task for next releases of Bootstrap (Grunt)
  - Tried our solution in existing and new portlets

- Talked about this on the Apereo mailing-lists

https://github.com/mbelmok01/bootstrap-uPortal/
Responsive Portlets

- Remaining issues :
  - When drag-and-dropping portlets:
    the JS is not called, therefore no new calculation of CSS classes
  - In Respondr theme:
    conflicts between our custom Bootstrap (imported by portlets)
    and the original version (imported by uPortal)

```
> bootstrap.css (uPortal)
@media screen and (min-width : 992px) {
  .something {
    display: block;
  }
}
```

```
> bootstrap-custom.css (portlet)
.portletContainer.xs .something {
  display: none;
}
```
Objectives

- Enhance the Cordova version of uMobile

How?

- Fixing remaining bugs and cleaning code
- Implementing Push Notifications
- Adding native modules
  - Modules using device features (camera, contacts, etc.)?
Implementing Push Notifications

- Use AeroGear UnifiedPush Server and AeroGear Cordova Push Plugin

1. Developer
   - Registers a Push Application
   - Adds iOS, Android and/or (Hybrid) Web variants for the Push Application

2. Installations
   - Installations on devices register themselves using a token

3. Push Networks
   - SimplePush
   - Google Cloud Messaging
   - Apple Push Notification Service
   - Message is delivered via push networks

4. AeroGear Unified Push Server
   - Application Registration
   - Sender API
   - JBoss AS backend server
   - Event on server occurs and invokes Sender API
   - query details for receiving apps
   - write Push Application details

5. Develop UI (portlet) to send notifications
Authentication

- Objectives
  - Improve authentication mechanism for mobile users

- How?
  - Lengthening the session
    - Just activate the RememberMe feature!
  - Implementing ticket revocation
    - Store additional data about users (@IP, UserAgent,…)
    - Create UI to manage tickets
Authentication

- Proof of Concept
- CAS add-on

Ticket Granting Ticket revocation interface

<table>
<thead>
<tr>
<th>Username</th>
<th>Creation time</th>
<th>Last time used</th>
<th>User Agent</th>
<th>IP Address</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>admin</td>
<td>12 mai 2014 11:50:32</td>
<td>2 minutes ago</td>
<td>Chrome, OS X 10.9 Mavericks</td>
<td>10.13.8.150</td>
<td>Révoquer</td>
</tr>
<tr>
<td></td>
<td>12 mai 2014 11:50:27</td>
<td>2 minutes ago</td>
<td>Chrome, OS X 10.9 Mavericks</td>
<td>10.13.8.150</td>
<td>Révoquer</td>
</tr>
<tr>
<td></td>
<td>12 mai 2014 11:50:32</td>
<td>2 minutes ago</td>
<td>Chrome, OS X 10.9 Mavericks</td>
<td>10.13.8.150</td>
<td>Révoquer</td>
</tr>
</tbody>
</table>

Cas webapp admin - Université de La Rochelle

https://github.com/gsouquet/cas-token-manager
Things to look forward to...

- Portlets
  - Develop new services
  - Upgrade existing ones (JSR-268, responsiveness, …)

- Authentication
  - Finalize PoC
  - Perform benchmark testing
  - Collaborate with the CAS working group to integrate this work in a future release

- uMobile
  - Add new features (PUSH Notifications, native modules, …)
  - Integrate work on authentication

- OAE
  - Develop new widgets
  - Extend ESUP instance to other institutions
Things to look forward to...

- **uPortal**
  - Provide a package for uPortal 4.1.x
- And so many other things like...
  - Open up an ESUP-Portail *marketplace*
  - Keep developing apps in incubator
  - Release the new version of AGIMUS (statistics)
  - …
Thank you for your attention!

Questions?