Integrating a videoconference system in a university portal

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EUNIS 2010
Agenda

- Presentation of EVO
- Our goals:
  - A new tool: EVO-Learning
  - Integration in the portal
- EVO-Learning
- Integration
- Demonstration
The basis: EVO-International

A unique real time collaboration tool, stable and efficient, at worldwide scale.
Why EVO?

Three main components:

1. The network
2. The collaboration services
3. The client side
Most difficulties arise from:

1) The client:
   • installation
   • configuration problems
   • use

2) Interruptions and/or traffic congestions in the network
Panda: the EVO server
EVO Architecture

Architecture Centralisée (ancien modèle)

H.323 ou similaire

Peer-to-Peer

servers

Clients

Infrastructure
World topology!

View from MonALISA
NO LIMIT!!

No limits in the number of participants in a meeting!
No limits in the number of simultaneous meetings!

Examples:


198 users participating in the « All CMS Meeting » in February 2009.
EVO : Application Client
The client: the burden

- Full Java application
- Compatible with any platform (Windows, MacOS, Linux)
- No installation, no update
## Comparison

<table>
<thead>
<tr>
<th></th>
<th>H.323/SIP</th>
<th>Tel.</th>
<th>File sharing</th>
<th>Chat</th>
<th>Record</th>
<th>Multipoint video</th>
<th>Webcast</th>
<th>Multi platform</th>
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<tr>
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<td>✓</td>
<td>✗</td>
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<td>✓</td>
<td>✗</td>
<td>3</td>
<td>✗</td>
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F.A.Q. : http://evo.caltech.edu/evoGate/FAQ/

Tutorials videos:  
http://evo.caltech.edu/evoGate/videosTutorials.jsp

Documentation :  

Support : EVOSupport@VRVS.org
**Goals: EVO-Learning**

- System to provide a real time distance learning platform
- **Real Time media**: Text, Audio, Video, Desktop, Whiteboard, Files, Recordings.
- The system is based on the **EVO technologies**
- It is adapted to the constraints linked to learning scenarios: Professor / Students
Goals: integration

- **Use the portal authentication system to identify the participant into EVO-Learning and EVO-International:**
  - Automatic registration into EVO from the university directory
- **Forward the user information from the portal to the EVO learning system:**
  - Full ID and role
- **Retrieve EVO information into the portal:**
  - Class and meeting management
Integration

- Both Evo portlets are compatible with ESUP Portal which is a derived version of U-Portal.
- Authentication via Portal in CAS. A Shibboleth version will come soon
- User information retrieved via local LDAP
Advantages

• Avoid management of the user registration.
• Manage, Control of the lawful users
• No additional Authentication required to join a virtual class.
• The web interface modules (portlets) will become open source soon
Specific EVO Features

New meeting type:  
Class Room

2 specific user types:  
Professor and student

For each user type:  
– Different Abilities  
– Different Graphical User Interfaces
from the Portal

- Create a class room reservation and attach some students to it
- Modify, Duplicate, Cancel a class room
- Add a moderator to the class room
- Protect a class room via a password
- Join any ongoing class room
Professor (2)

in the class room (virtual)

- Send / receive: audio / video
- Broadcast the desktop
- Send files to students
- Allow a student to speak via a dedicated "Raising Hand" widget
- Ban a student from the class room
- Increase the class room duration

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Student (1) from the Portal

- Ongoing Class rooms (can be joined)
  - Public classes (with no list of attendees)
  - Classes in which he/she is attached to (previously by the professor)

- Calendar
  - List of all the class rooms that he/she will be able to join per month
  - Calendar view (cells) of the class per month

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Student (2)

In the class room (virtual)

• Receive: audio / video
• Receive professor desktop
• Access to files
• Interactive Chat
• Can raise hand, when request is accepted:
  – Send audio, video, desktop to the class room
  – Send file to the professor

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Digital Raising Hand

A simple interface to require to speak

Students

A simple widget to moderate a class

Professor

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Request to Speak

The student can cancel his/her request at any time via a click on the same button.
Allow / Deny Request

A powerful widget to manage the requests

Block any Raising Hand

Professor

Professor

Refuse

Accept
A shared System

• Up to 5 universities can use a unique EVO-Learning server.
• Each university has to set the dedicated Portlet to access the service.
• 1 media router (or more) can be added to the infrastructure to handle more real-time traffic.

The start
EVO-Learning

- Tests with students and teachers validated end of April 2010
- Starts next semester i.e. September 2010
EVO-Learning

Ce service a été mis en place avec l'aide de la ville de Paris dans le cadre de l'UNIR Paris IDF.

Classes en cours  Calendrier  Gérer mes classes virtuelles

Classes virtuelles du mois :

Afficher sous forme de liste

<table>
<thead>
<tr>
<th>DIMANCHE</th>
<th>LUNDI</th>
<th>MARDI</th>
<th>MERCREDI</th>
<th>JEUDI</th>
<th>VENDREDI</th>
<th>SAMEDI</th>
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<td>6</td>
<td>7</td>
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<td>15:00 binzila</td>
<td>16:00 cours</td>
<td>16:00 cours</td>
<td>10:00 classe publique du jour</td>
<td>12:00 PIPO</td>
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<td>10:00 classe publique du jour</td>
<td>12:00 PIPO</td>
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<td>15:00 Démonstration</td>
<td>18:00 TipTop</td>
<td>09:40 My first try</td>
<td>09:35 1 2 3</td>
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<td></td>
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<td>10:16 Reduced Moderation</td>
<td>15:18 test tuto</td>
<td>09:35 1 2 3</td>
<td>08:00 hebdo Van/sam</td>
<td>08:00 hebdo Van/sam</td>
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</tbody>
</table>
EVO-International

- Opened since September 2009
- 470 users in the UPMC community
- Use for virtual meetings as well as link to “real” videoconference rooms
- Part of the UPMC strategy: increase in the number of rooms as well as in the use of EVO
## Réservations en cours

<table>
<thead>
<tr>
<th>Intitulé</th>
<th>Type</th>
<th>Accès</th>
<th>Communauté</th>
<th>Descriptif</th>
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<td>pour prototype Evo-Learning</td>
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<td>Universe</td>
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</table>
And now?
A European Infrastructure?

• EVO-Learning: one university, one server
• For European studies (Tempus…) build a European MonaLisa infrastructure
• Cooperation with National NREN and TERENA?
With a grant from the city of Paris to the universities Paris 2 and UPMC-Paris 6 through UNR Paris IdF
EVO-Learning

- Start: September 2010
  - Software + initial installation 15 000$
  - Additional server (more than 100 simultaneous links) 10 000 $
  - Portlet installation and fee 10 000 $/y
  - + local Linux server

Contact: Philippe Galvez
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EVO-International

- A Panda server for each university unless agreement through NREN: in France infrastructure supported by RENATER
- Software installation 15 000 $
- Additional server installation 10 000 $
- Portlet and connectivity 10 000 $/y

Contact: Philippe Galvez
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