

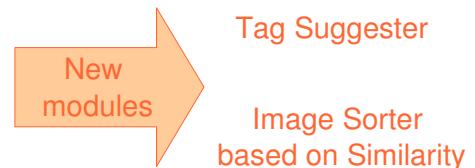
DIGIMATGE, A RICH INTERNET APPLICATION FOR VIDEO RETRIEVAL FROM A MULTIMEDIA ASSET MANAGEMENT SYSTEM

Xavier Giró-i-Nieto, Technical University of Catalonia (UPC)

Ramon Salla and Xavier Vives, Catalan Broadcast Corporation (CCMA)

Goal

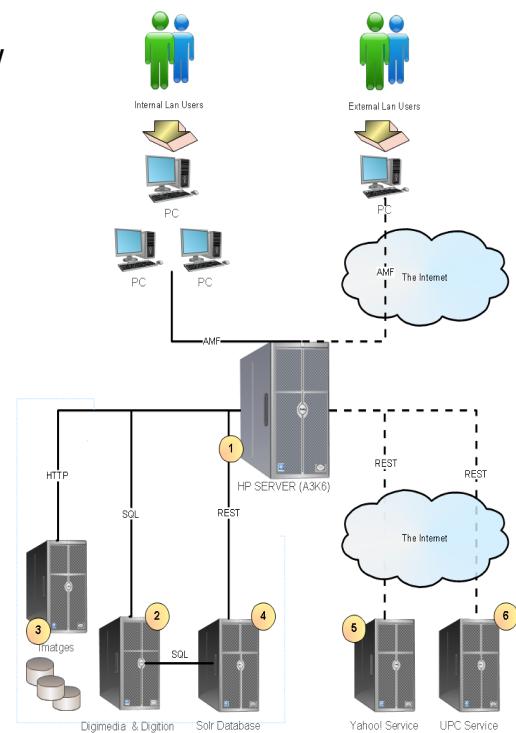
Enhance video retrieval from a TV broadcaster archive with text+image queries.



System Architecture

Existing system has been adapted to access new modules (5 & 6) as web services:

- (1) Main server and communications hub
- (2) Old textual metadata database (too slow)
- (3) Keyframes generation and storage
- (4) Solr, search and indexing of textual metadata
- (5) Tag Suggester by Yahoo!
- (6) Keyframes Sorter based on Similarity by UPC



User interface

Implemented in Adobe Flex. Accessible via web browser or as stand-alone application.

The screenshot shows the DIGIMATGE user interface. At the top, there is a search bar with the text "bush" and a "Search" button. Below the search bar, a list of assets is displayed with titles like "TAIÀNIA: GEORGE BUSH, PRESIDENT DELS EUA, FA UN DISCURS DE PROTESTA CONTRA LA FALTA DE LIBERTAT A LA VIDA GOVERN XINES", "XINA: GEORGE BUSH ARRIBA A PEQUÍN PER ASISTIR A LA CEREMONIA D'INAUGURACIÓ DELS JOCS OLÍMPICS DESQUANTS LES CONDICIONS DE PAU AMB GEORGIA QUE POSIÓ AL CONFICTE D'OSSETIA DEL SUD", and "GEORGIA: RÚSSIA BOMBARDEJA GORI COM A RESPUESTA A L'ATAÇ SOBRE OSSETIA DEL SUD, REACIÓ DEL PRESIDENT NORD-AMERICÀ GEORGE BUSH". To the right of the asset list is a "Textual Information" panel. Below the asset list is a "Keyframes" section showing a grid of thumbnail images. A blue bracket on the left side groups the search bar and the asset list under the heading "Query formulation". Another blue bracket groups the asset list and the keyframe thumbnails under the heading "Keyframes from retrieved video assets". A blue arrow points from the "Textual Information" panel to the "Keyframes" section, with the text "A double-click on an asset shows its metadata and associated keyframes". Another blue arrow points from a specific keyframe thumbnail to the "Keyframes" section, with the text "A double-click on a keyframe sorts all by similarity".