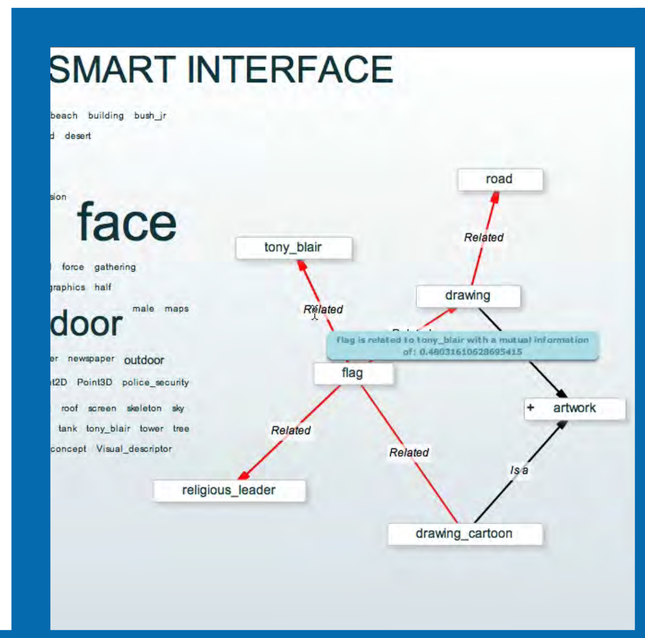
# VIDIVIDEO

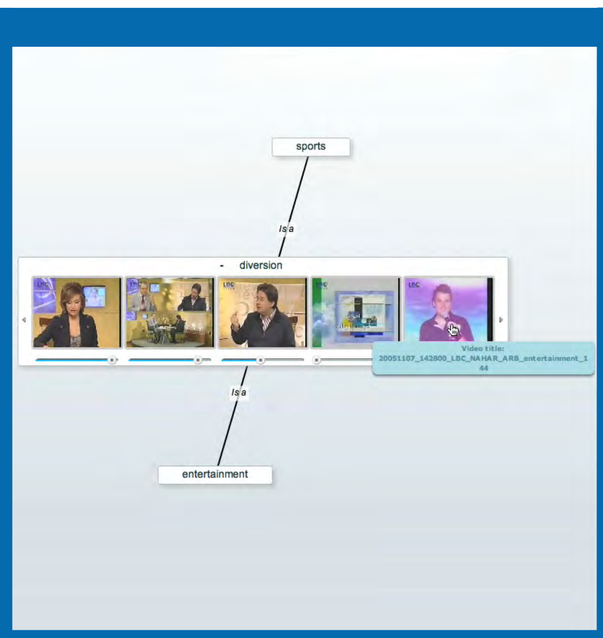
# improving the accessibility of video

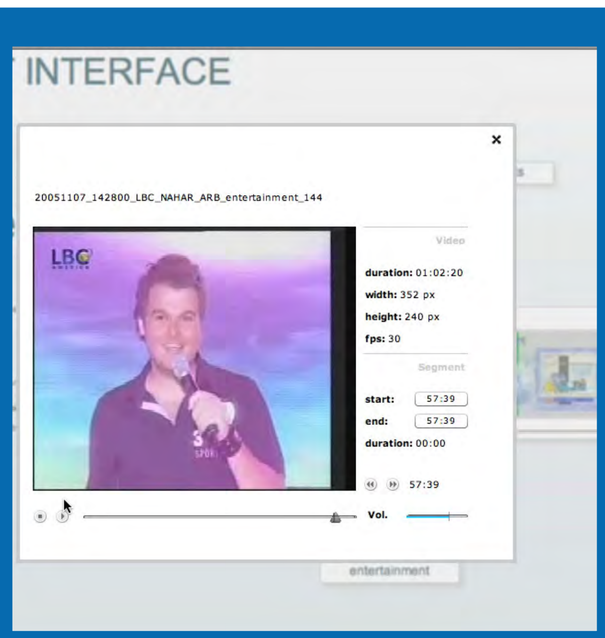
European Commission

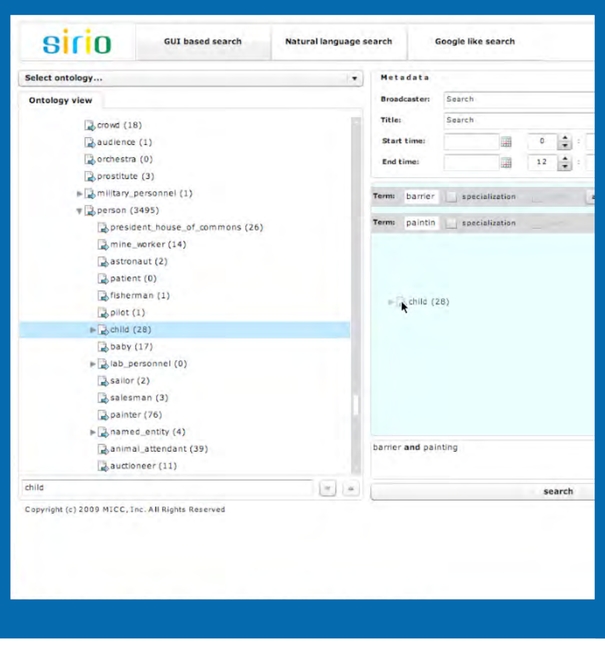
**The Vidi-Video project takes on the challenge of creating a substantially enhanced semantic access to video.**

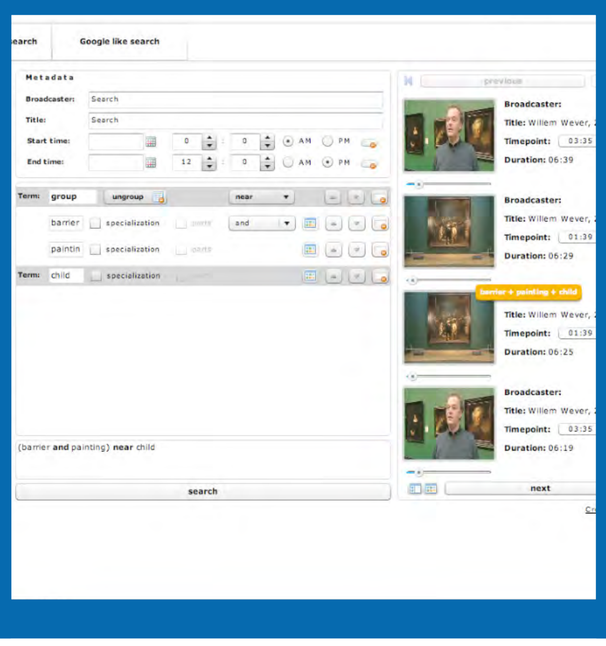
The outcome of the project is an audio-visual search engine, composed of two parts: an automatic annotation part, that runs off-line, where detectors for more than 1000 semantic concepts are collected in a thesaurus to process and automatically annotate the video, and an interactive part that provides an advanced video search engine. The automatic annotation part of the system performs **audio and video segmentation, speech recognition, speaker clustering and semantic concept detection.**

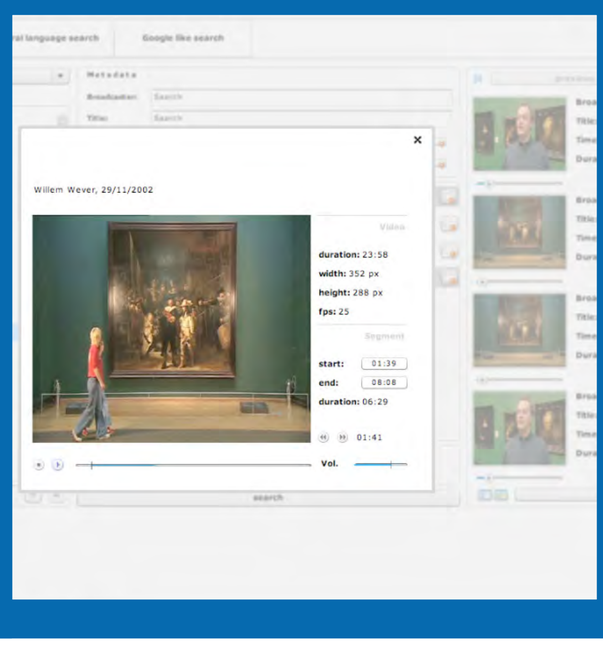



The system permits different query modalities (free text, natural language, graphical composition of concepts using boolean and temporal relations and query by visual example), resulting in an advanced tool for retrieval and exploration of video archives. In addition **the use of ontologies permits to exploit semantic relations between concepts through reasoning**, extending the user queries.

The off-line annotation part has been implemented in C++ on the Linux platform, and takes advantage of the low-cost processing power provided by GPUs on consumer graphics cards. The web-based system is based on the Rich Internet Application paradigm, using a client side Flash virtual machine, and implements a visual querying mechanism with a very fast response. The Vidi-Video system has achieved the highest performance in the most important object and concept recognition international contests (PASCAL VOC and TRECVID).

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**www.vidivideo.eu**