The SAVASA Project: Standards Based Approach to Video Archive Search and Analysis

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ABSTRACT

The objective of SAVASA project is to enable the effective exploitation of video surveillance systems and to overcome several important existing limitations:
- Installing and operation of diversified and non-interoperable video archiving systems;
- Use of diverse, proprietary technologies;
- Solving security issues when accessing and exploiting remote video archives.

The project will exploit the current trends in computer vision, video retrieval and semantic video analysis and will ensure that its results can be deployed in distributed systems and as software services.

PROPOSED ARCHITECTURE

SAVASA system:
- SAVASA local node: Software (SW) and hardware (HW) module installed at the facilities of each producer that applies video pre-processing algorithms, detection of objects specific to the related scenario, privacy masking, etc.
- SAVASA cloud: the set of modules that provides the main functionalities of the system: Semantic Video Analysis; Search index update; Metadata database; Search engine; Web interface.

The SAVASA system can be split into two parts related to Offline and Online data flows.
- Offline subsystem: modules involved in the generation of information of the video archives (e.g. the video analytics and semantic annotation)
- Online subsystem: modules that make possible that a user perform a semantic query and gets the requested information on time.

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