

# AVITRACK



## Deliverable 5.2

### Video Process Module

Abstract: This document describes the Video software module used in the Avitrack framework for recording and replaying video sequences.

# 1 Objectives of the Video Process Module

The objective was to design a software architecture for video acquisition, recording and delivery being proposed for the Avitrack prototype.

The module integrates necessary functions to replay recorded video sequences. The module has to make synchronization of video of the same scene from different sensors.

## 2 Video Encoding and Recording

The software modules for encoding and recording sequences contain a complete description of the tools used in the prototype.

These tools allow to:

- Setup encoding parameters for recording.
- Record video shots for the 8 channels at the same time.
- View the eight video channels in live mode.
- Extract video sequences from the video.

## 3 Video delivery

The module named "Video Delivery Module" will be responsible for providing to all other software modules (video clients) access to video frames.

The Video Delivery module should be able to:

- Access pre-recorded shots and deliver them
- Or deliver live videos being acquired at the same time
- Deliver all frames from all 8 sensors
- Provide time stamp for every frames
- Be integrated in the network-distributed architecture
- Be integrated in the heterogeneous environment

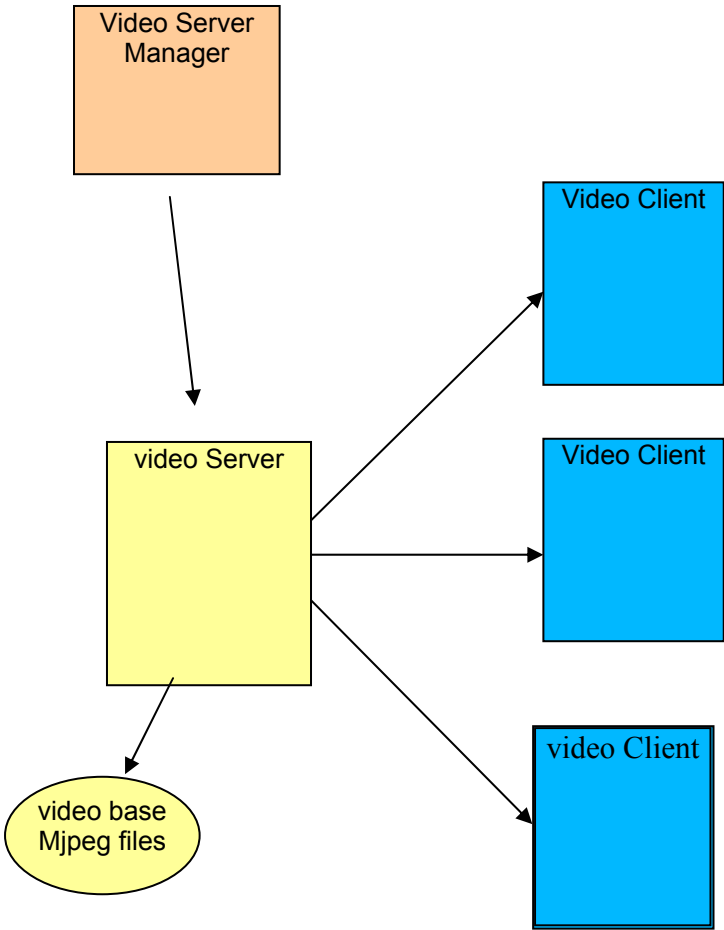
For the moment, two servers will be realised. One running on Linux will be used during the development phase and the other running on Windows will be used during the future validation phase at the airport. More over the video server should work with two modes.

### 3.1 Internal communication implementation

The communications are based on CORBA in the prototype, it has been decided to implement a CORBA based solution to transfer videos on Windows.

### 3.2 Linux video server and tools for development

Operation of the video delivery: (it's only for the testing, optimisations and modification will be added during the project).



### 3.3 Windows video server

The Windows server will be used for delivering recorded FRM files and for live streaming while the Linux server described above is used during the development phase.

Thus, the Windows server will be used later in the project and should be deployed for the future integration at Toulouse airport.