VIRTUAL PTZ SOFTWARE FOR LAARS INTEGRATION TO 3rd PARTY VMS

LOGIPIX
www.logipix.com
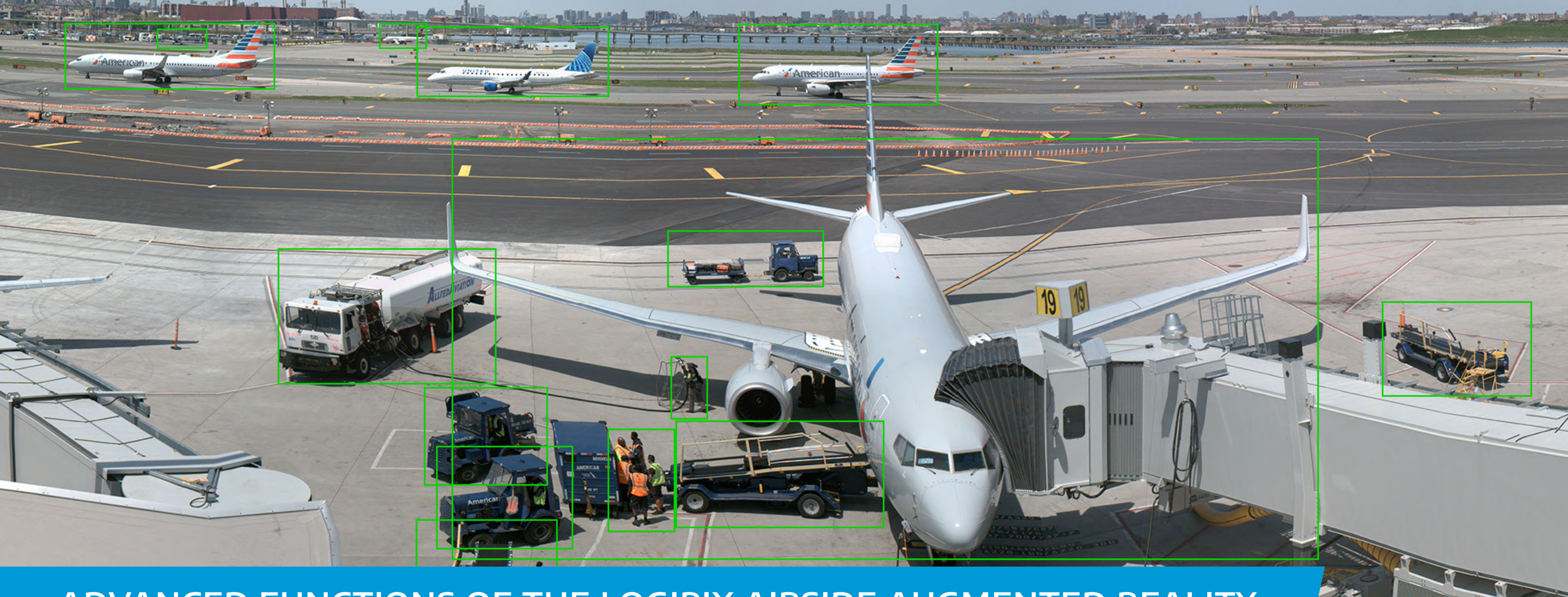
ADVANCED FUNCTIONS OF THE LOGIPIX AIRSIDE AUGMENTED REALITY

The LAARS was specifically developed to fulfill complex monitoring tasks at the airside. Logipix Panorama cameras monitor wide areas with hundreds of megapixel resolution and the day-by-day operation is aided by advanced Video Content Analysis and Augmented Reality functions.

HIGHLIGHTED LAARS CAPABILITIES

- Providing thousands of megapixel coverage with only a few 300 MP panoramic images

- Cross-correlated video and virtual information storage system

- JPEG2000 image compression standard to provide lossless quality at full resolution during monitoring

- Video history – object status and incident-based archive retrieval

- Automatically detecting, tracking and classifying many thousands of objects at the same time

- Geofencing & virtual fence functions to automatically detect airside traffic violations and unauthorized access into forbidden areas

- Automatic Landing & Take-off registration

- Increased situational awareness by proximity alert and collision prediction functions

- Automatic FOD detection

LAARS SYSTEM ARCHITECTURE

Video Wall

Client Workstations

Airside Control

Ground Handling Management Support

1 Gbit

1 Gbit / Client

Optional clients

Security / Fire / ACDM

Disaster management / DAM / etc.

LOGIPIX

3rd PARTY

3rd party VMS

ONVIF
2MP H.264 PTZ

1 Gbit / Client

1 Gbit

1 Gbit

Virtual PTZ

Virtual PTZ

Field

0.5 Gbit / Camera

4 - 6.4 Gbit / Panorama camera

0.5 Gbit / Camera

Network

10 Gbit / LNVR

LNVR
up to 160 TB

Storage Extender
up to 160 TB

Storage Extender
up to 160 TB

Server

10 Gbit

Redundant Server

Virtualization

NAS
Additional Storage Archive

GPS
Positioning Interface

AIS
Interface

ADS-B   MLAT   A-SMGCS   Airport information sources
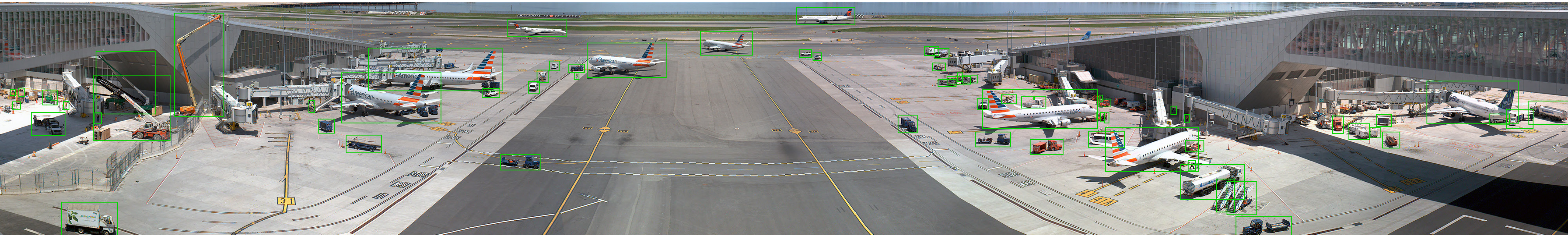
Server Room

THE LOGIPIX VIRTUAL PTZ SOFTWARE

How the high-level LAARS functions can appear in a third-party VMS?

Logipix developed the Virtual PTZ software to fulfill this purpose.

Preserving cross-correlated virtual information

Augmented Reality visual information is not part of the native video streams.

The LAARS performs the VCA and also collects additional information on the objects of the airside. It layers these information on the LAARS interface.

In order to transmit both video and AR visualization, LAARS fuses these information together and generates a standard ONVIF stream from them.

Data transmission

The LAARS can manage cameras with resolutions up to 300 MP. It is difficult to transmit this heavy stream to a third-party VMS. The well-known third-party Video Management Solutions are not capable to compress and display this resolution.

Logipix transforms its cross-correlated video and virtual information into an interactive, Full HD ONVIF video stream.

The third-party VMS can receive and seamlessly display this video stream.

THE LOGIPIX VIRTUAL PTZ SOFTWARE

Interactivity, smooth control

Operators can navigate within the full resolution panoramic video as if they were controlling a real PTZ camera with their joystick keypad.

The Virtual PTZ software recognizes joystick movements and decodes keypad shortcuts to access special LAARS functions.
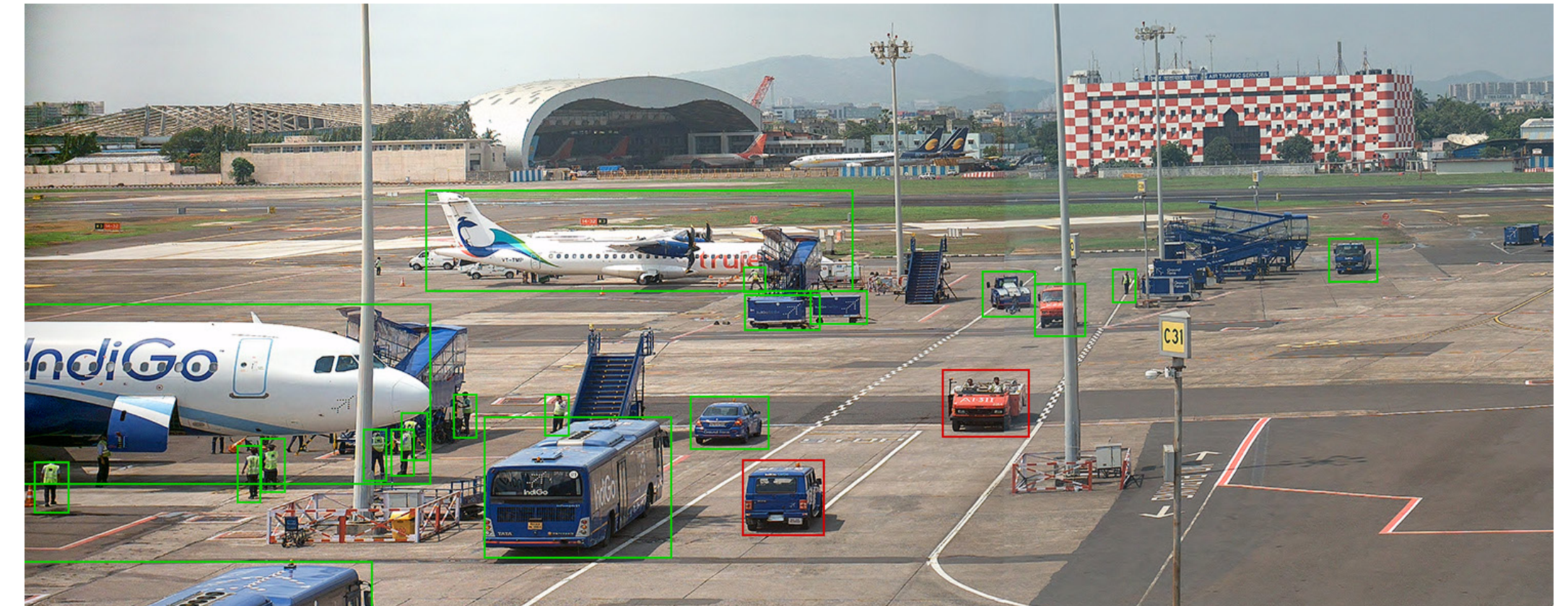
Available interactive functions

- Pan/Tilt/Zoom on the panoramic image

- Switch between cameras and views

- Live/archive switch

- Automatic zoom on alerting object

- Object lock, tracking
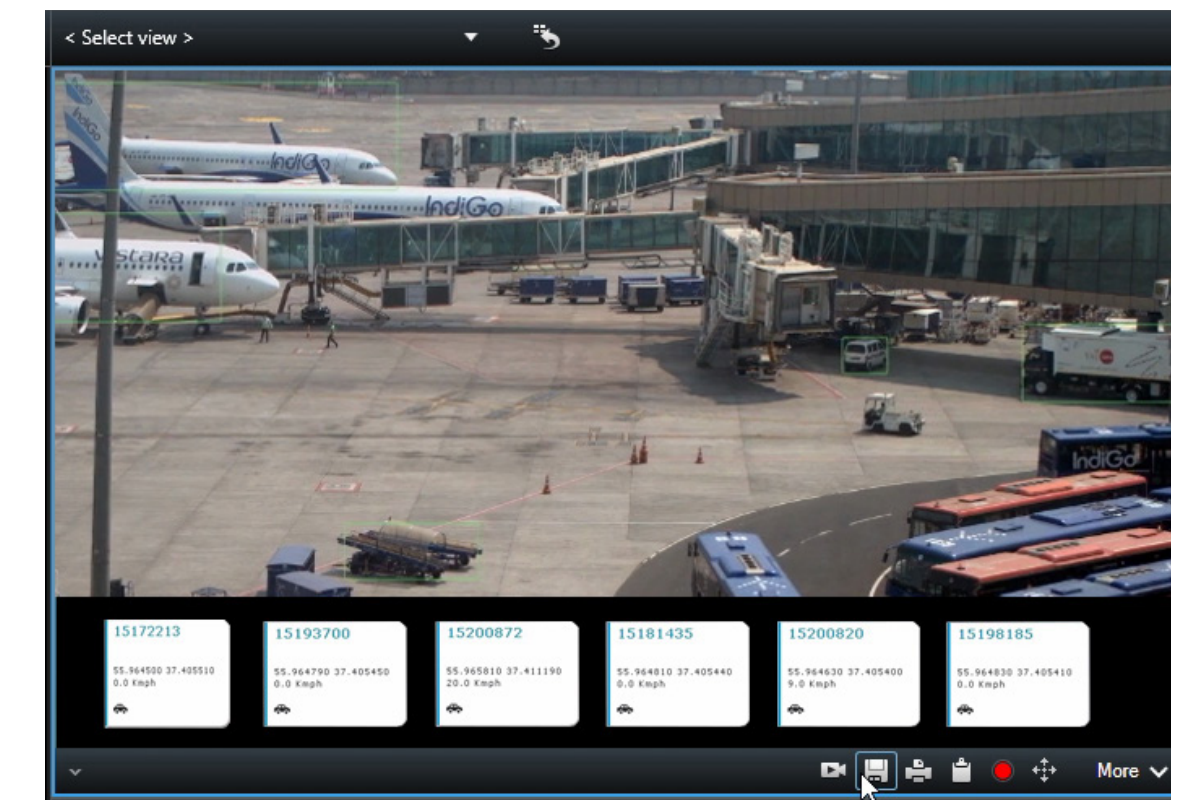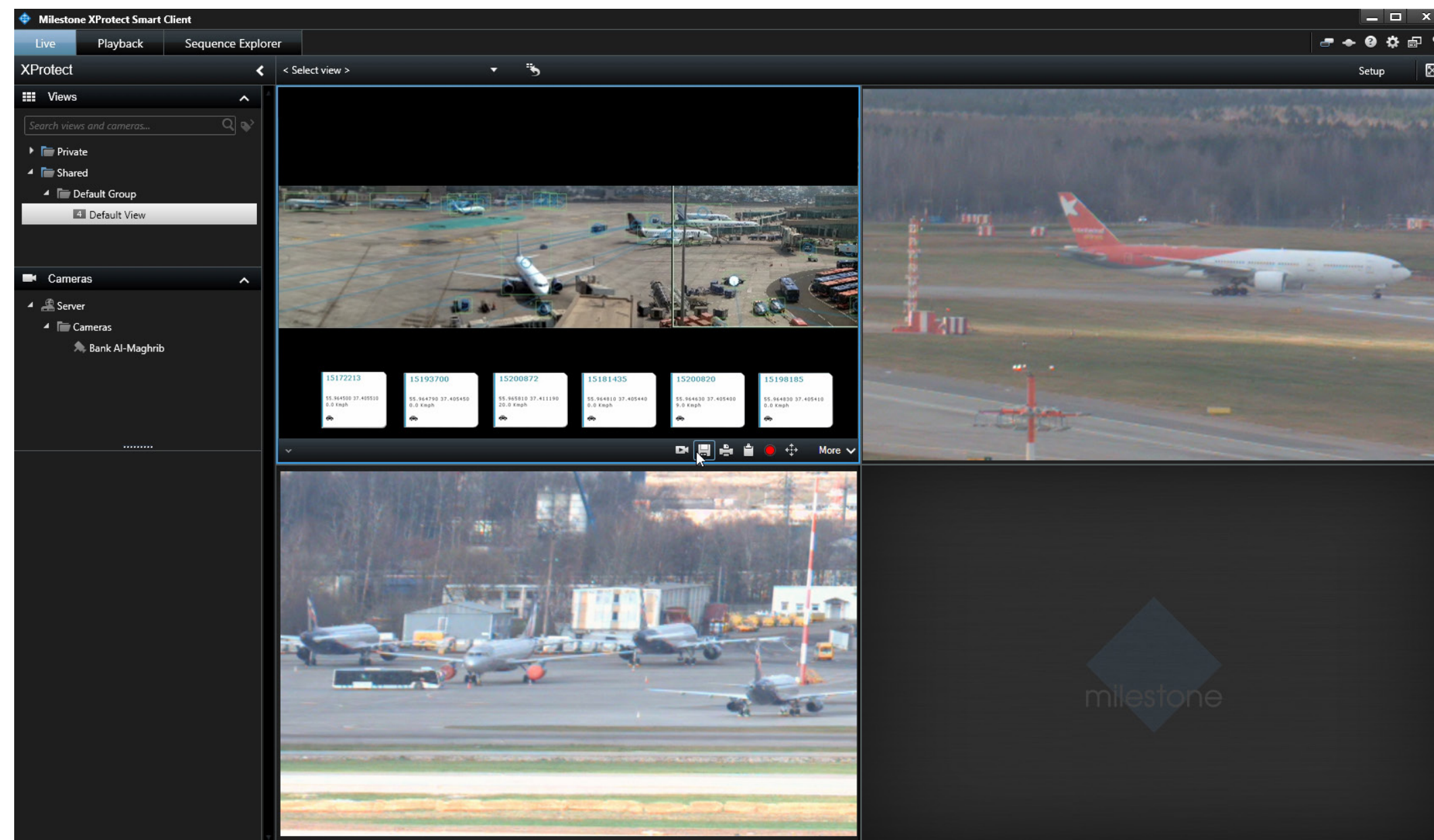
BENEFITS OF USING THE VIRTUAL PTZ FOR INTEGRATION

- No third-party VMS development is necessary.

- This integration technology does not restrict the capabilities of the LAARS.

- Even a single camera license of third-party VMS is sufficient to cover the entire multi-panoramic camera view.

- Multiple Virtual PTZs can be deployed simultaneously in order to feed multiple workstations.

- All that is needed to apply this integration technology is a client computer and the Virtual PTZ software itself.

9V-SQN
Singapore Airways
Boing 777-212(ER)
19.093343, 72.872785
3.5 mph

Human
-
Non-cooperative
19.093361, 72.873834
0.7 mph

F396
MIAL
Pushback truck
19.093373, 72.872782
3.5 mph

ABOUT LOGIPIX

Logipix Technical Development Ltd. is a privately held company established in 1996 in Budapest, Hungary. Since then, Logipix has grown into the international company that it is today – one of the most innovative, end-to-end video surveillance solution developers and manufacturers. Today the main profile of the company is to provide specially designed, high-end video surveillance solutions considering the various characteristics of different application areas.

CONTACT US

H-1158 Budapest, Késmárk u. 11-13.   •sales@logipix.com   •+36 20 480 5933   •+36 1 410 0556

www.logipix.com