XProtect™ Analytics – LPR 1.5

Product Presentation
Product Presentation - Analytics

- Introduction
- Positioning
- XProtect Analytics – LPR 1.5
- Licensing and Packages
- Summary
Product Presentation - Analytics

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Introduction

• XProtect Analytics-LPR (License Plate Recognition) reads, detects, alerts and stores license plate information from a video stream.

• XProtect Analytics-LPR is used for Vehicle Access Control - registration, recognizing and detecting vehicle license plates.

• Typical areas of application are:
  • Traffic surveillance and law enforcement
  • Toll and parking management
  • Gas stations
  • Transportation
  • Hospitality
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Positioning

Parking Gates

Protect and Prevent
LPR enables you to tie parking tickets to specific cars, thus ensuring that a car enters and leaves using the same ticket. A non-match can be set up to trigger an alarm to security and keep the gate closed.

Gas Stations

Improve Loss Prevention and Customer Service
Charge fuel directly to each account based on the license plate and a pin code, thus avoiding misuse of company fuel cards.

Integrating LPR with the transaction system automates the process of detecting and tracking "drive-offs."

Toll Gates

Improve Efficiency
Automatic registration of license plates with credit card transaction data provides a strong tool for preventing rush-hour traffic jams and other incidents at toll gates. Imagine how smoothly traffic can flow when vehicle owners who pre-pay online and enter license plate details can use a fast lane.

Hospitality & Retail

Enhance Customer Experience
Free customers from the parking hassles by enabling them to drive directly into your parking facility. Enabling customers to pre-register their cars improves the overall customer experience.

It is a growing trend to charge for parking in shopping malls. Why not reimburse the parking fee automatically for visitors spending over a certain amount?
Positioning...

- **Protect and Prevent**
  - **Environments**
    - Airports
    - Defense facilities
    - Parking facilities
    - Ports
    - Shopping malls
    - Residential areas
  - **Applications**
    - Tie parking tickets to specific cars
    - Registrations of vehicles – Enter and Exit

**Parking Gates**

Protect and Prevent

LPR enables you to tie parking tickets to specific cars, thus ensuring that a car enters and leaves using the same ticket. A non-match can be set up to trigger an alarm to security and keep the gate closed.
Positioning…

- **Improve Loss Prevention and Customer Service**
  - **Environments**
    - Gas stations
    - Drive in’s
  - **Applications**
    - Avoid misuse of company fuel cards
    - Identify accounts
    - Prevent “Drive-offs”
    - Integrate LPR with POS
    - Loyalty programs

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**Gas Stations**

**Improve Loss Prevention and Customer Service**

Charge fuel directly to each account based on the license plate and a pin code, thus avoiding misuse of company fuel cards.

Integrating LPR with the transaction system automates the process of detecting and tracking “drive-offs.”
Positioning...

- **Improve Efficiency**
  - **Environments**
    - Law enforcement
    - Traffic analytics
    - Toll Gates
    - Parking Facilities
  
- **Applications**
  - Mobile license plate look-up
  - Fast lane subscription
  - Check car at border

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**Toll Gates**

*Improve Efficiency*

Automatic registration of license plates with credit card transaction data provides a strong tool for preventing rush hour traffic jams and other incidents at toll gates. Imagine how smoothly traffic can flow when vehicle owners who pre-pay online and enter license plate details can use a fast lane.
Positioning...

- **Hospitality & Retail**
  - Environment
    - Hotels
    - Shopping malls
    - Restaurants

- **Applications**
  - Business intelligence
  - Pre-allocated parking
  - Reimburse the parking fee in malls

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**Hospitality & Retail**

*Enhance Customer Experience*

Free customers from the parking hassle by enabling them to drive directly into your parking facility. Enabling customers to pre-register their cars improves the overall customer experience.

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XProtect Analytics – LPR 1.5

- **Capture, Process, Decide and Action**
  - **Capture** license plate via IP based or Analog camera
  - **Process** each frame and detect license plate and license number
  - **Decide** which action to be taken based on Positive/Negative List(s)
  - **Action** is performed, such as trigger a gate to open via an I/O event
XProtect Analytics – LPR 1.5

- **XProtect Analytics – LPR 1.5. Basis Package**
  - XProtect Analytics Server – LPR 1.5 Basis Package
    - XProtect Transact (minimum 2.5 included)
    - LPR license for 1 x camera

- **Additional XProtect Analytics License Plate - license can be purchased in any number**

XProtect Analytics – LPR 1.5 Base Package
XProtect Analytics – LPR 1.5

- Recognition with extremely low error rate
  - High efficiency
  - Less labor intensive
  - Better quality
XProtect Analytics – LPR 1.5

- **Decide which action to take**
  - License plates are detected and registered
  - Information is compared against pre-defined lists one at a time
  - Each list triggers a specific action
  - If the license plate is listed, then the corresponding action is initiated
XProtect Analytics – LPR 1.5

- **Flexible in usage and applications**
  - Place camera in front, rear or angled
  - Define area of interest in image
  - Correct perspective disorders
  - Add more country modules
XProtect Analytics – LPR 1.5

- **User friendly and easy search in data**
  - Smart Client Plug-in
  - Browse and search for historical video data
XProtect Analytics – LPR 1.5

- **Connect to existing devices – unlimited possibilities**
  - Positive and Negative list and Events – unlimited number of lists
  - No limitations as compared to many shrink-wrapped solutions

```
DECIDE

Positive/ Negative Lists

ACTION

- I/O Event
- Alarm
- E-mail / SMS
- User Defined Event
- No Action
```
**XProtect Analytics – LPR 1.5**

- **Integration with POS**
  - Combine data from POS and LPR systems

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**GasOnline**

- **Date**: 10/10/08.
- **Name**: John Doe
- **License Plate**: XY 23 456

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**THANK YOU**

**HAVE A NICE DAY**
XProtect Analytics – LPR 1.5

• **Support of large variety of layout**
  
  • Support for Single-line, Double-line, Black on White, White on Black or Multicolored license plates
XProtect Analytics – LPR 1.5

• **More then 60 countries supported**
  • Handling of multiple libraries simultaneously
  • On request additional modules can be implemented on a project basis

Andorra  Austria  Belgium  Croatia  Cyprus  Czechia  Denmark  Estonia  Finland  France  Germany  Great Britain  Greece  Hungary  Italy  Lithuania  Luxembourg  Netherlands  Norway  Poland  Portugal  Romania  Slovakia  Slovenia  Spain  Sweden  Switzerland  Canada  Mexico  USA  Malaysia  Taiwan  Turkey  United Arab Emirates  Australia (Victoria)  Australia (New South Wales)  Argentina  Brasil  Chile  Algeria  Morocco  Israel
Minimum System Requirements

• **XProtect Analytics Server – LPR**
  - **CPU:** Intel® Pentium® 4 or compatible, minimum 2.4 GHz
  - **RAM:** Minimum 2 Gbyte
  - **Network:** Ethernet (100 Mbit recommended)
  - **OS:** Microsoft® Windows® XP Professional, Microsoft Windows Server 2003 or Microsoft Windows Vista®
  - **Software:** Microsoft .NET 3.0 Framework required. Milestone XProtect Corporate 1.5 or higher, Milestone XProtect Enterprise 6.0 or higher and Transact 2.5 or higher.

• **XProtect Analytics – LPR Client (Smart Client plug-in)**
  - **CPU:** Intel Pentium 4 or compatible, minimum 2.4 GHz
  - **RAM:** Minimum 512 Mbyte
  - **Network:** Ethernet (100 Mbit recommended)
  - **Graphics Card:** AGP or PCI-Express, minimum 1024 x 768
  - **OS:** Microsoft Windows XP Professional, Microsoft Windows Server 2003 or Microsoft Windows Vista.
  - **Software:** Microsoft .NET 3.0 Framework. Milestone Smart Client 3.0
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- **Considerations when implementing LPR**
  - Lighting conditions
  - Camera quality, resolution, shutter
  - Day and night vision, the lens etc.
  - Position of camera and the correct angle
  - Speed of the cars
  - Camera housing
  - Area of interest in the frame/picture
  - Minimum and maximum distance to the object
  - Country library modules
  - Compression
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**Licensing and Packages**
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Licensing and Packages

• **Base Package Analytics - LPR**
  - XPA - Server
    - 1 Transact Base Server Pack
    - 1 XPA feed
  - XPA – LPR analytics Behavior
    - 1 LPR license
    - 1 License Plate Library

• **Additional XPA- LPR Analytics Behavior licenses**
  - Additional XPA- LPR Analytics Behavior licenses and XPA-feed can be purchased in any numbers
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Summary
Summary

- Based on Open Platform
- **Targets a wide range of applications** - *not a shrink-wrapped solution*
- Support for a large number of cameras
- **ROI - flexible and scalable**
  - Use of existing XProtect platform
  - Enable Analytics on existing cameras
  - Integrate to existing devices
- **Business enabler - new revenue streams**
- Improves Quality of Surveillance
- Less labor intensive