



Intrada® Parking is a full video-only alternative for tag, transponder, or ticketed parking with 100% identification. In many facilities video security is already standard equipment. Take advantage of the available infrastructure and use video-only based identification to increase throughput and improve visitor experience. Intrada® Parking is suitable as on premise or cloud based solution and is agnostic to camera and back office infrastructure. It makes the switch to video based access painless and provides a significant saving on physical entry infrastructure and processes. Intrada® Parking is offered as on-premise or cloud-based software combined with manual review service to convert all vehicle passages into billable transactions.

#### DROP-IN REPLACEMENT

Parking operators require an impeccable identification rate and trustworthy passage information. As a result, video-based access control is often deployed in combination with token-based methods even when video entry/exit surveillance is present. Q-Free changes this and has proved it can make reliable, centralized, video-only access control deployments possible with Intrada® Parking with 100% identification.

Entry and exit based on a physical token infrastructure, with all the

manual logistical processes to support it, come with a high upfront and operational cost. This includes placement of readers and ticket machines, tag personalization and replacement, maintenance of ticketing machines, lost tickets, among others.

Intrada® Parking offers an alternative for tag or ticket infrastructure and can integrate with any camera and back office infrastructure. With 100% identification of vehicles there is no need for a secondary access mechanism. Intrada® Parking makes it easy to replace your entire token-based infrastructure by transparently replacing existing infrastructure and connecting it seamlessly to your back office. Intrada® Parking interfaces with back office services such as billing and customer as well as local physical access mechanisms, information signage and camera surveillance for immediate customer feedback.

# OPERATIONAL EXCELLENCE

Successful implementations have shown that the cost per vehicle can be reduced and at the same time increase customer satisfaction and parking revenue. Intrada® Parking identifies 100% of vehicles even with minimal technical infrastructure and investment. Intrada® Parking offers a much smoother parking experience for visitors compared to ticket or tag based systems. Q-Free is committed to delivering a high level of service for

both operator and customer as part of the service level agreement.

Automation for video-based access control is offered by Intrada® Synergy Server. Intrada® Synergy Server has been deployed in large scale tolling projects, parking and loyalty applications. The cloud or on premise server combines multiple analytics engines, proprietary identification methods and manual review.

Regardless of how identification is performed, it will not interfere with entrance and exit experience. Customers get an immediate response at the exit in both barrier and barrier-free environments. Intrada® Parking employs a secondary mechanism for the direct response and finalize the entire passage and transaction based on the primary identification process.

## LEADING RECOGNITION TECHNOLOGY

The video image processing system utilizes several concurrently operating Optical Character Recognition (OCR) engines together with optimized business rules to produce high-confidence automated read results of license plates. Intrada® Synergy Server utilizes Intrada® Automatic License Plate Recognition (ALPR) together with Intrada® Vehicle Signature Recognition (VSR) and other Q-Free proprietary techniques.

Intrada® ALPR achieves high accuracy rates in all supported countries and states. With many large installations using Intrada® ALPR, Q-Free trains their engine and country modules using real-world data. A dedicated license plate codification team and internal benchmarking process ensures that the quality of the engine is continuously improved and extended.

Another feature that makes Intrada® stand out is the ability to accurately

read plates even in challenging circumstances. These can be external factors, such as weather conditions, but also camera noise and image blurring, among many others. With over 20 years of experience in video and image analytics Q-Free can counteract undesirable artefacts before reading the license plate.

#### **Automation Performance**

Intrada ALPR
Intrada VSR
Grouping
Multiple OCR engines
Trusted plates and signatures
Selective sampling

## **Robustness and Scalability**

Vertical and horizontal (dynamic) scalability Persistance Crash-tolerant Automated backups

#### **Identification Options**

List-based identification and queuing
First-N-seen assurance
Use roadside ALPR results and metadata
Pass-through and enriching of received metadata
People / driver masking
User configurable identification options

#### **Extended Video Analytics**

Car model and make recognition (MMR) Vehicle color recognition Vehicle class identification

## Reporting

Audit trail per passage Operations performance System performance Image quality monitoring

#### **Information Security**

Single Sign-On (SSO) compatible
SSL encryption
Authentication and password enforcement
LDAP support
One-way password encryption
Confgurable retention policy
Vulnerability and patch management program
SaaS escrow agreement

# ACTIONABLE REPORTING

Real-time reporting is an integral part of the solution. It provides all the necessary information for operators, integrators, toll agency personnel, and Q-Free to monitor the health and service level of all facets of the operation. This makes it a valuable tool in identifying issues in the tolling infrastructure and whether contractual obligations are being met for proper video toll collection

operation. In addition, it provides real-time into traffic flow and usage.

The technical status of the system is closely watched to identify potential bottlenecks or opportunities for further performance improvements. Intrada® Parking provides the means for system integrators and Q-Free to both closely monitor and tune their respective parts of the video toll

system for maximum stability and throughput without hindering live toll system operation.

## **BENEFITS**

- Lowest operational cost.
- · Improve customer parking experience and easily offer incentives for regular users and guests alike.
- Significant savings on capital and operational expenses compared to a similar sized physical access token infrastructure with 100% video identification.
- Reduced infrastructure complexity through seamless and transparent integration with any camera surveillance and back office system.
- · Attractive pricing model that scales with traffic volumes and install base, without up-front costs.
- Able to meet local privacy and information security regulations and corporate policies with secure on-premise and cloud deployment options.
- · Proven technology based on Intrada® Insight used around the world in large scale tolling and charging applications.
- Outsource ALPR recognition and manual review possible with cloud based installations.

# **FEATURES**

- Highly vertical and horizontal scalability based on Microsoft Azure architecture.
- Supports over 160 states and countries worldwide including all plate types issued in North America.
- Customizable business rules and business logic to integrate with existing business systems, processes and 3rd party interfaces.
- · Camera and back office vendor agnostic.

## TECHNICAL SPECIFICATIONS

Interface SOAP (XML)

Image format (direct) Base-64 encoded JPG or TIF

Image resource URL FTP, HTTP(S), SMB

Data storage Volatile (normal operation)

Configurable retention policy (manual review)

**Deployment** Cloud

Virtual / Native On-Premise



## **CONTACT US**

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For more information, contact **sales.intrada@q-free.com** Specifications are subject to change without prior notice.

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