SWARM ANALYTICS

Parking Insights – Solution Brief

Powered by Swarm Analytics

For gaining reliable and affordable insights into parking, we provide a device for upgrading existing cameras with AI technology. This enables the gathering of real-time data about single-spaces and parking space entries & exits. Next to that, easy integration into your ecosystem is ensured through a plug & play installation and the use of standard data formats. Since the data is extracted directly from the video stream, no pictures are sent at any time, which ensures 100 % GDPR compliance.

✓ For new & existing cameras
✓ Plug & Play deployment
✓ 100 % GDPR compliant

Single-Space Monitoring

Identify vacant and occupied parking spots 24/7 to monitor the parking space capacity and use real-time data to feed parking guiding systems.

– Parking time measurement: Monitor the duration for which a parking space is occupied by a vehicle.

– Vehicle classification: Identify up to 4 classes of parking objects, including cars, vans, motorcycles, and trucks.

Entry & Exit Counting

Use vehicle counting information to monitor the capacity status of a parking space and obtain insights about the vehicle owners.
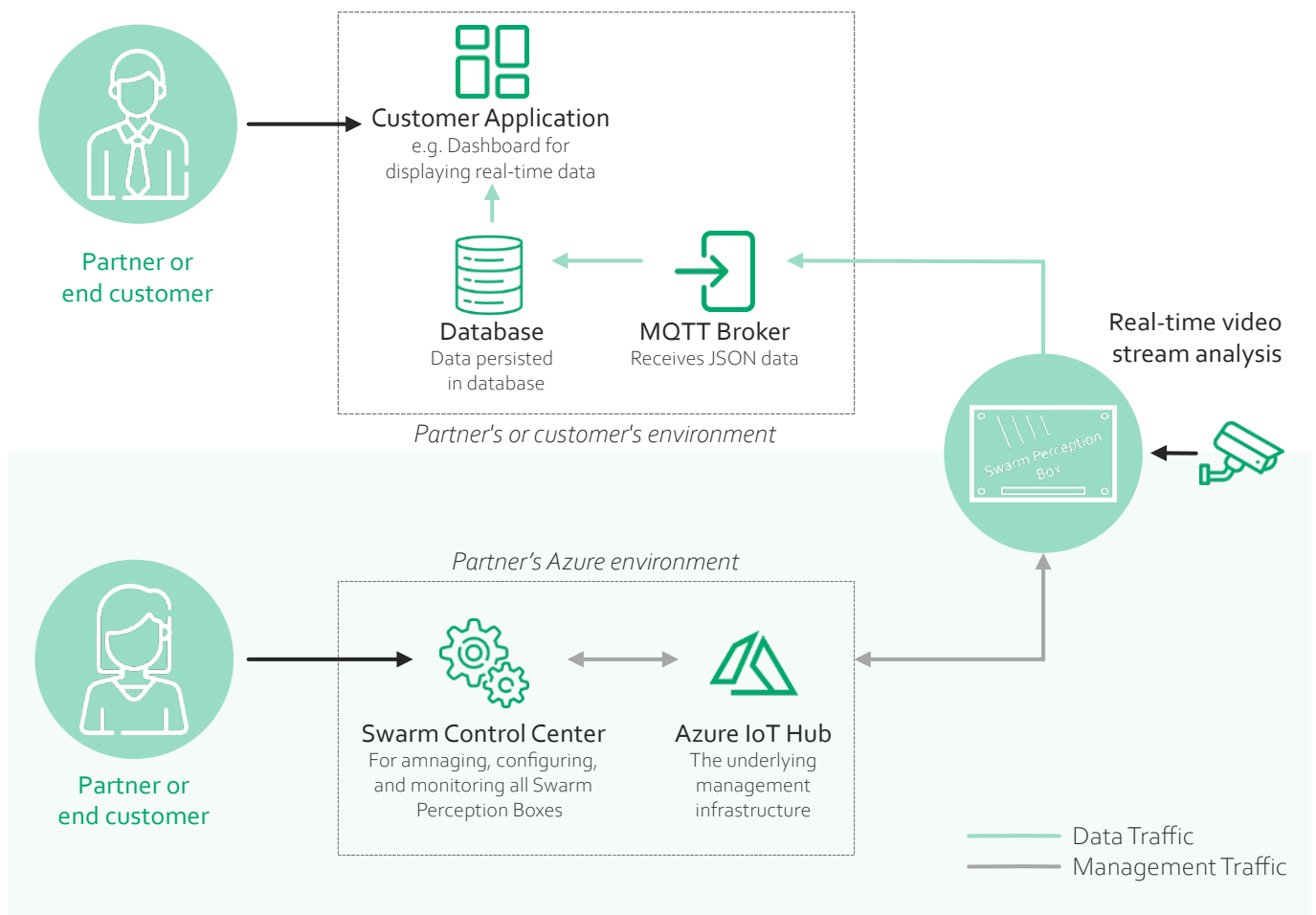
– Number plate recognition: Obtain valuable customer insights by recognizing number plates and city code.

– Frequent parker identification: Use licence plate recognition and visual characteristics of vehicles to identify frequent parkers.

For more information, receiving a live demo presentation, or testing the product at your site, please give us a call or drop us an email.

Oliver Olbrich
sales@swarm-analytics.com
+43 664 8250762

Data & Management Architecture

Partner or end customer

Customer Application
e.g. Dashboard for displaying real-time data

Database
Data persisted in database

MQTT Broker
Receives JSON data

Partner's or customer's environment

Real-time video stream analysis

Swarm Perception Box

Partner's Azure environment

Partner or end customer

Swarm Control Center
For amnaging, configuring, and monitoring all Swarm Perception Boxes

Azure IoT Hub
The underlying management infrastructure

Data Traffic
Management Traffic

How Can You Provide the Data to Customers?

— Partner developed Dashboards (e.g. browser-based display of real-time data)
— Partner produced data reports (e.g. Excel, Word, email, export from the dashboards)

Who Delivers What?

Swarm Analytics	You, as our partner
Hardware (Swarm Perception Box P100)	Camera (if not preexisting)
All Software Updates	On-Site Installation of Swarm Perception Box (P100) (or via other partner)
Central Management Software (Swarm Control Center)	Swarm Control Center deployed on Azure IoT Hub
	MQTT Broker
	Dashboard
	Databases (if needed)
	Alerting System (If needed)