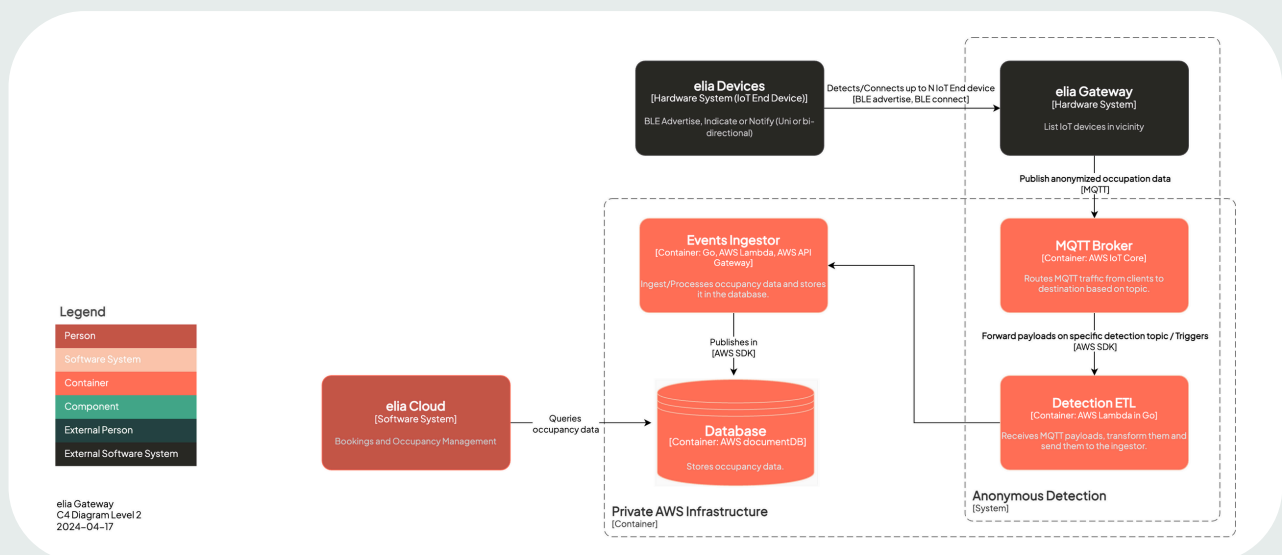# elia

Spot

Desk Occupancy Sensor

elia Spot is an occupancy sensor that detects the presence of an individual at a workstation. The Spot communicates the collected information to the elia platform via a gateway. Through the elia platform, you can access your data and analyze the occupancy of your workspaces to make more informed decisions about them.

elia Spot is wireless, and its battery has a lifespan of 5 years. The installation and deployment of the sensor are simple and quick. You simply need to stick it under the work surfaces and connect it to our web platform. It is also possible to make the solution completely independent from your internal infrastructure by deploying a separate network.

Diagram C4– Level 2

elia Devices
[Hardware System (IoT End Device)]
BLE Advertise, Indicate or Notify (Uni or bi-directional)

Detects/Connects up to N IoT End device
[BLE advertise, BLE connect]

elia Gateway
[Hardware System]
List IoT devices in vicinity

Publish anonymized occupation data
[MQTT]

Events Ingestor
[Container: Go, AWS Lambda, AWS API Gateway]
Ingest/Processes occupancy data and stores it in the database.

MQTT Broker
[Container: AWS IoT Core]
Routes MQTT traffic from clients to destination based on topic.

Forward payloads on specific detection topic / Triggers
[AWS SDK]

Publishes in
[AWS SDK]

elia Cloud
[Software System]
Bookings and Occupancy Management

Queries occupancy data

Database
[Container: AWS documentDB]
Stores occupancy data.

Detection ETL
[Container: AWS Lambda in Go]
Receives MQTT payloads, transform them and send them to the ingestor.

Private AWS Infrastructure
[Container]

Anonymous Detection
[System]

Legend

Person
Software System
Container
Component
External Person
External Software System

elia Gateway
C4 Diagram Level 2
2024-04-17

elia is powered by   gphy   visit www.elia.io

Spot

Technical Specifications

Usage		Real-time occupancy by thermal signature detection
Performance	Range	1 workspace per sensor
	Precision	99%* *In a controlled environment
Mechanics	Height	50mm
	Width	50mm
	Thickness	11.5mm
	Weight	15g
Technology	Communication	BLE
Battery and Power	Power	100µW (500 ms)
	Lifespan	5 years (500 ms)
Casing	Attachment	Double-sided adhesive
	Protection	IP 52
Environment	Temperature	0°C to 40°C
Warranty		1 year

To find out more about elia Spot, visit www.elia.io/desk-occupancy-sensor

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