

Smart Streetlight IoT Platform with Intelligent Infrastructure

AWS cloud based advanced data analytics platform that leverages existing infrastructure to make cities smarter, safer, and more connected.

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Turning Streetlights into Smart Assets that Deliver Data Driven Insights



About Customer

- One of the global leaders in creating connected networks and IoT devices and platforms for smart cities
- Offers cities, utilities and mobile operators a smarter, simpler, and cost-effective way to deploy and monitor critical infrastructure
- Deployed its solutions in more than 150 cities across the USA & Canada



Approach / Deliverables

- Multi-tenant portal – which is highly configurable and easy to onboard and manage tenants
- Developed data platform on AWS, supporting thousands of IoT devices for data management & reporting
- Infrastructure consolidation, configuration management and Auto Scaling features on AWS for Improved device management
- Under CI-CD pipeline, achieved zero downtime deployment



Business Challenges / Drivers

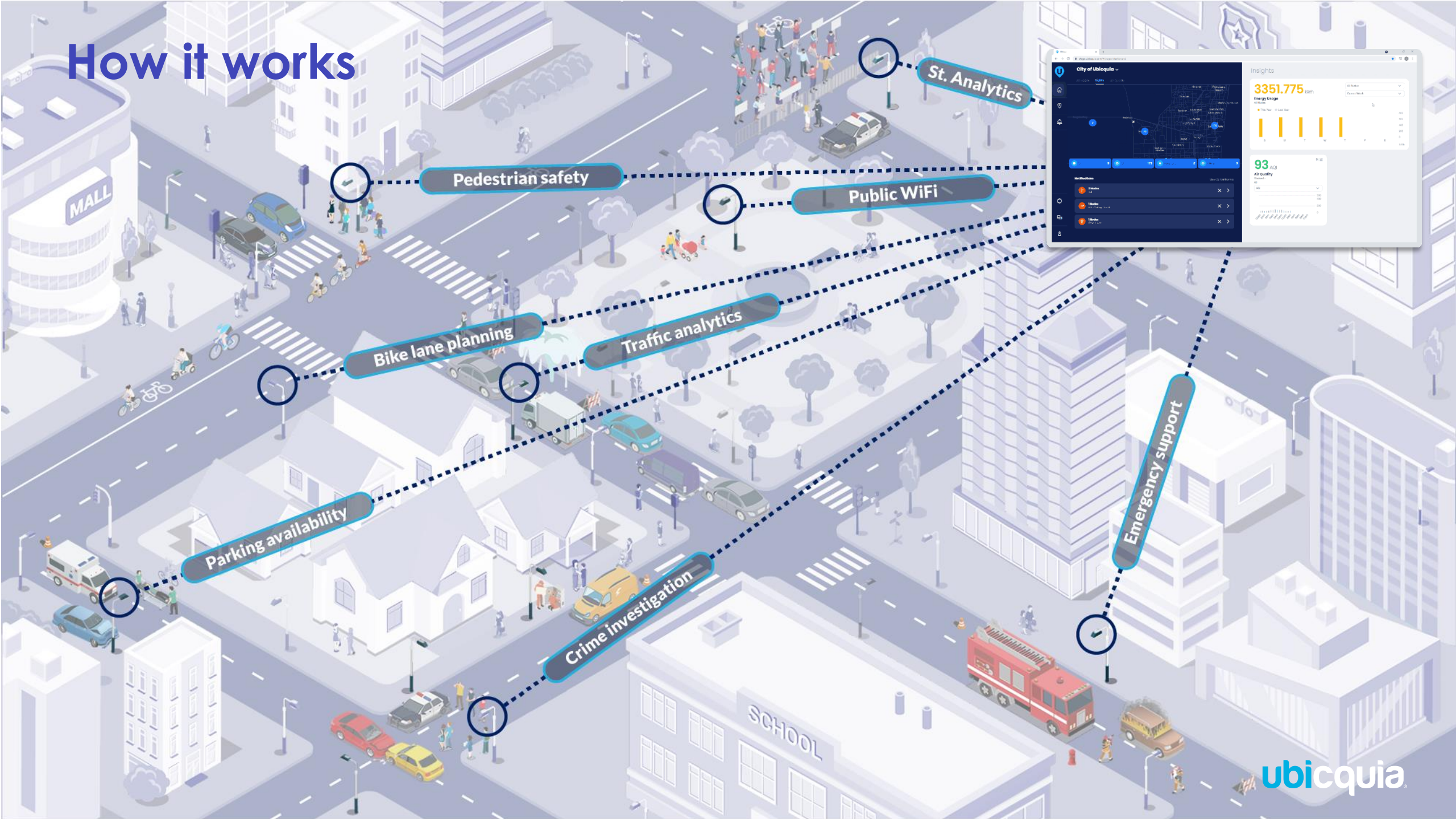
- Lack of multi-tenancy system with 100s of applications and databases, leading to complex deployment and release management
- High infrastructure and maintenance costs
- The system is not scalable to IoT streaming data (for real-time monitoring of IoT devices)



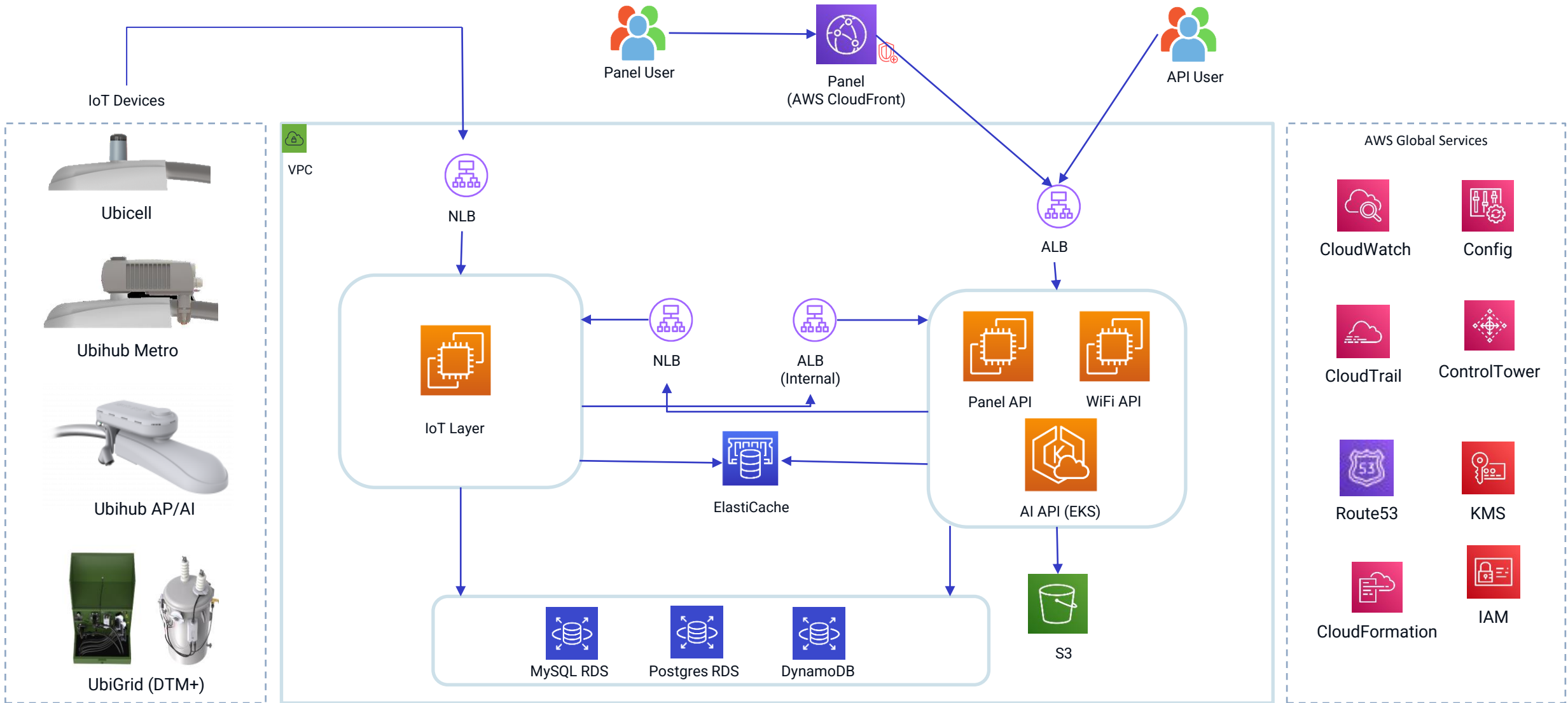
Outcomes / Benefits

- New customer onboarding time reduced to couple of hours from weeks
- **70%** savings of infrastructure and maintenance costs due to multi-tenant panel design on AWS & Anblicks managed services
- Highly scalable and high-performance system leading to more business opportunities

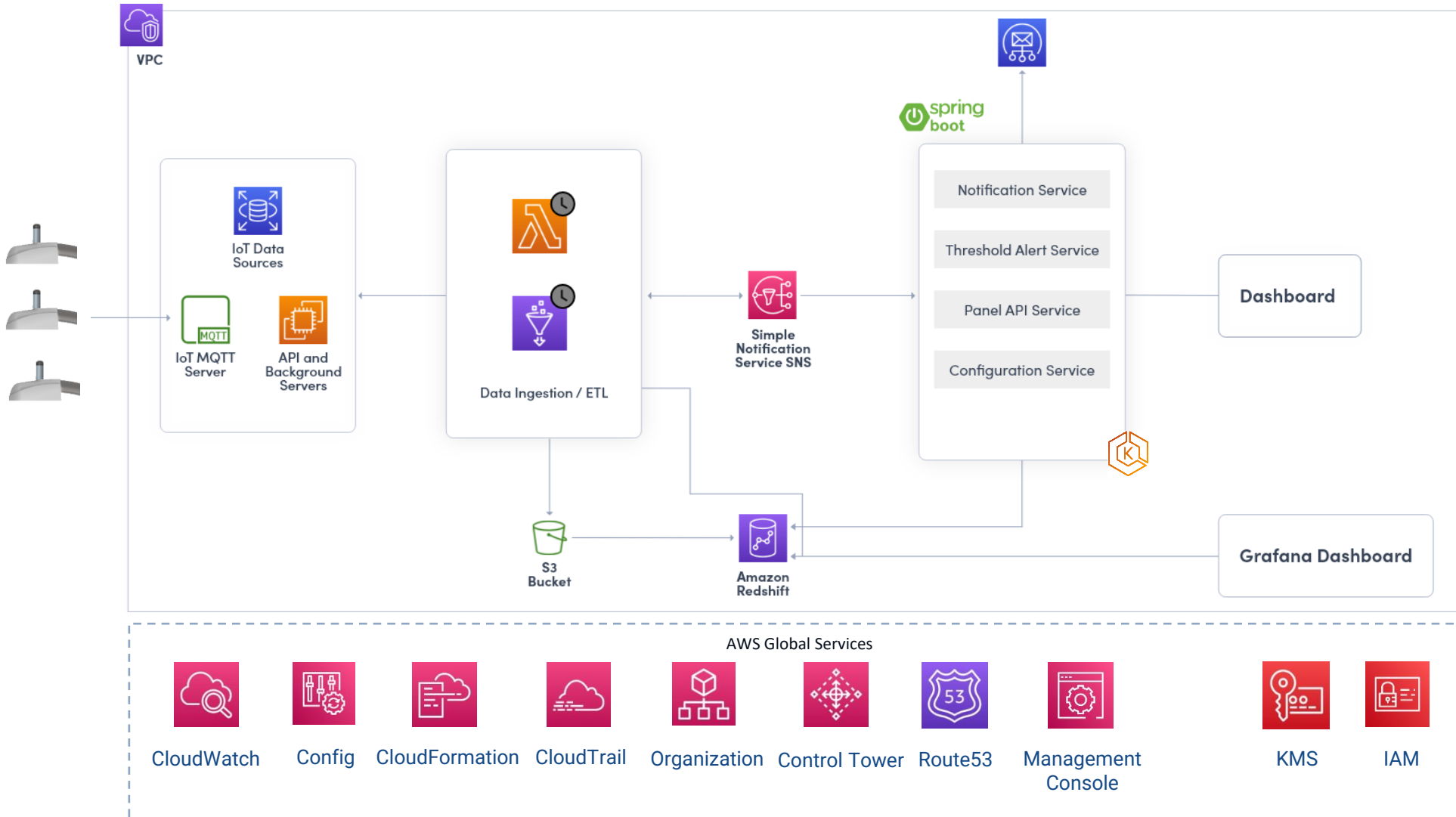
How it works



IoT Platform High-level Architecture



Real-time IoT device monitoring - NOC (Network Operations Center)



IoT Device Monitoring

- 400,000 devices, each sending 24 data points/day
- 15% Alerts, ACK signals
- Process ~12 million transactions per day

Control Center

- Admin Panel for config
- Grafana based BI solution

AWS Cloud Platform

- DWH = RedShift
- Data Lake = S3
- Services = AWS SQS, Lambda, AWS SES