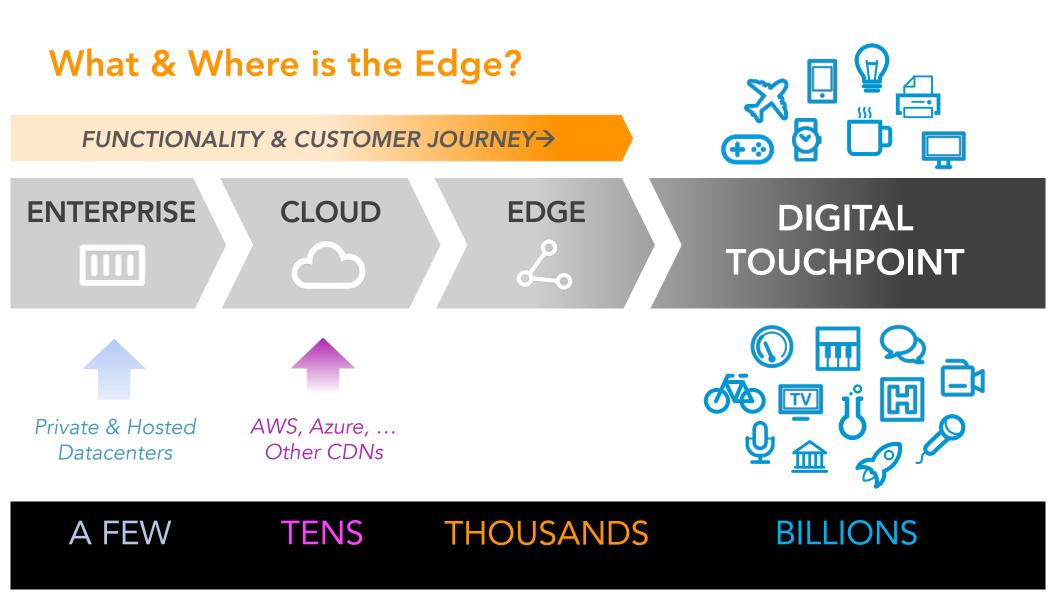
Edge Connecting IOT devices at Scale

Meeting Enterprise needs

Soumitra Bhattacharyya Director Engineering, Akamai Technologies www.linkedin.com/in/soumitra001



Consumer Vs Enterprise IOT needs

Localized data collection



0

Data compliance needs like GDPR

Security needs (privacy and safety)

Transparency of service

Less computational and storage needs

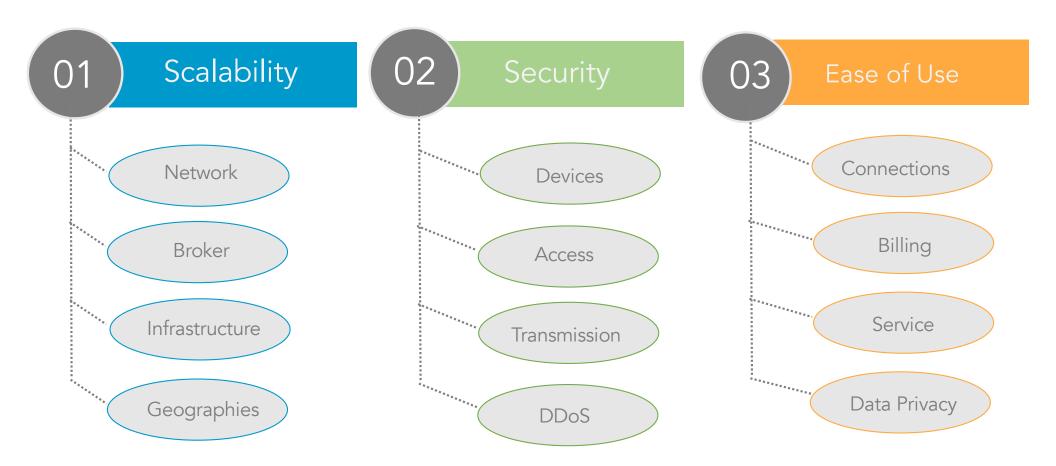
Enterprise IoT Across Industries

Consumer, Commercial and Industrial Connected Devices Markets

Connected devices is about data and how data is used to improve products, reduced costs or improve the customer experience.



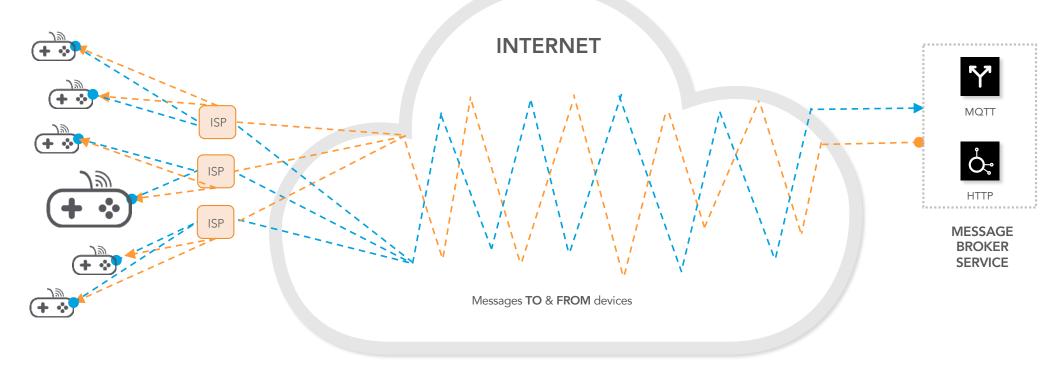
Enterprise IOT Challenges



Centralized Messaging

Not Optimized for Latency

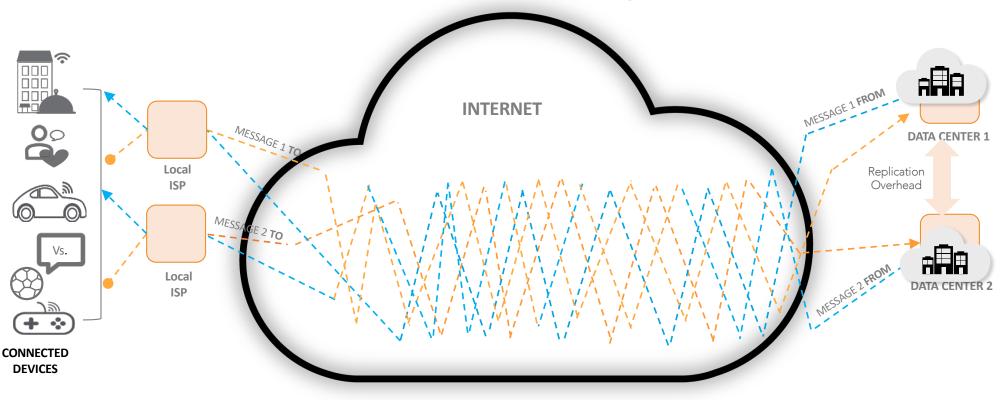
In centralized messaging, messages traverse the Internet to reach devices, causing congestion, latency & additional bandwidth consumption.

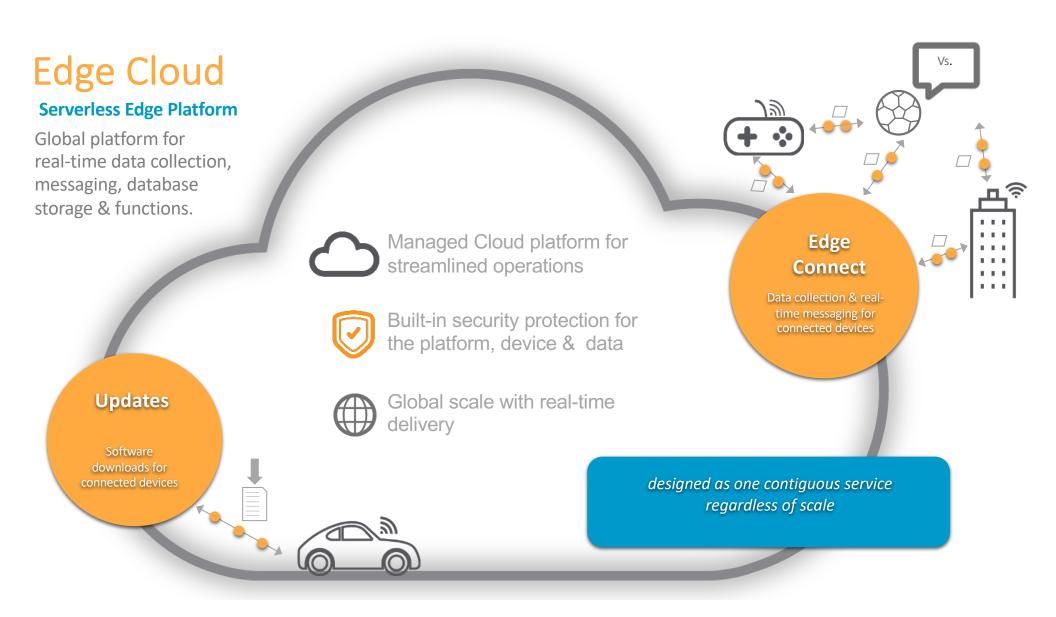


Centralized Data Collection

Not optimized for distributed connected devices

Data consistency is difficult & expensive across multiple data centers at scale without incurring extra client traffic





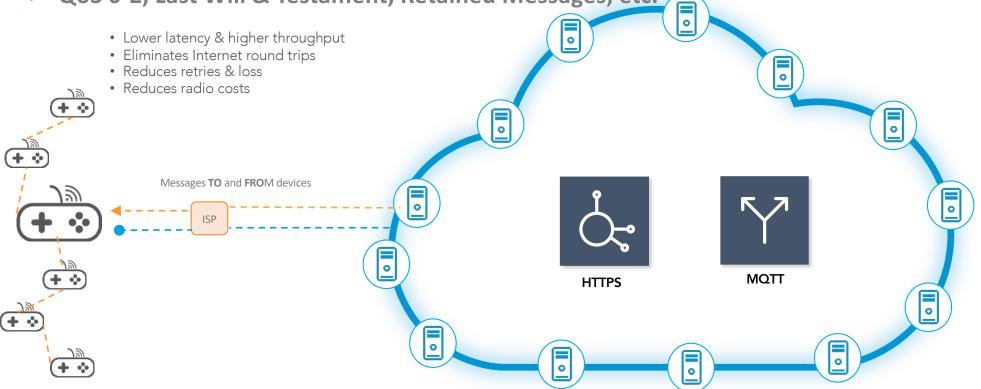
Edge Cloud Architecture Overview



Edge Messaging

Global Messaging Fabric

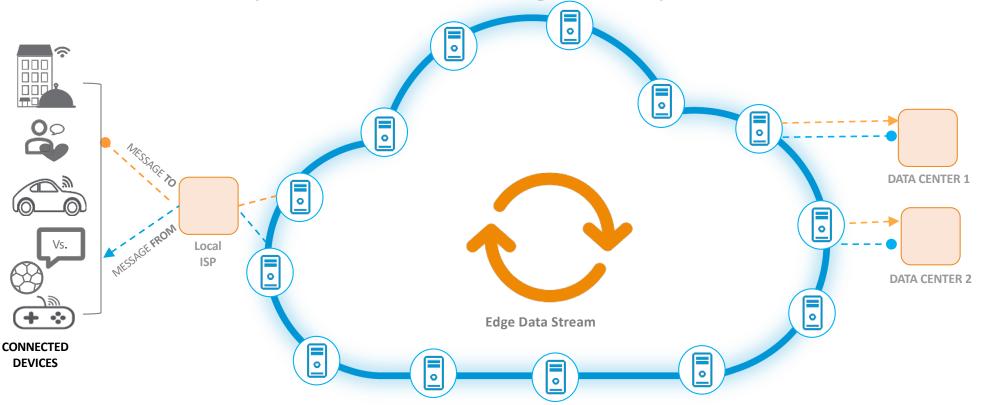
- Only 100% ISO-compliant MQTT cloud broker from a major cloud provider
 - No client SDK required!
- QoS 0-2, Last Will & Testament, Retained Messages, etc.



Edge Data Stream

Decentralized data collection

Each message can now be written once to the Edge Cloud and read twice by each data center, reducing cost on expensive access networks.



Edge Cloud Advantages

Connected devices and in-application messaging's exponential growth *demands infrastructure and operations that deliver...*

- Faster more reliable messaging and processing times in a distributed architecture.
- Decrease in infrastructure costs due to local traffic processing and storage offloading
- Dynamic scalability and mapping to handle peak traffic loads.
- Distributed workloads reduce cost and load of moving data,
- Improved system performance, reliability and stability.

Device/Data Security Message Processing Authentication Load Balancing Uploads

Firmware updates

Workloads at scale:

Edge Servers Edge Connectivity Edge Locations Edge Management Software

Thank You

www.linkedin.com/in/soumitra001