Snapbricks

Snapbricks Intelligent IoT Gateway Framework

Stay Connected
Stay Secured

# Intelligent IoT Gateway Framework: Architect your Next-Gen Connected Solutions

IoT Gateway helps in managing and controlling the complex and disparate IoT environment.

Bridges the communication gap between devices, sensors, systems, and cloud, and offers local processing and storage.

Enables customers to securely aggregate, process, and filter data for analysis.

Ensures that the federated data generated by devices and systems can travel securely and safely from the edge to the cloud.

Snapbricks IoT Gateway Software Framework
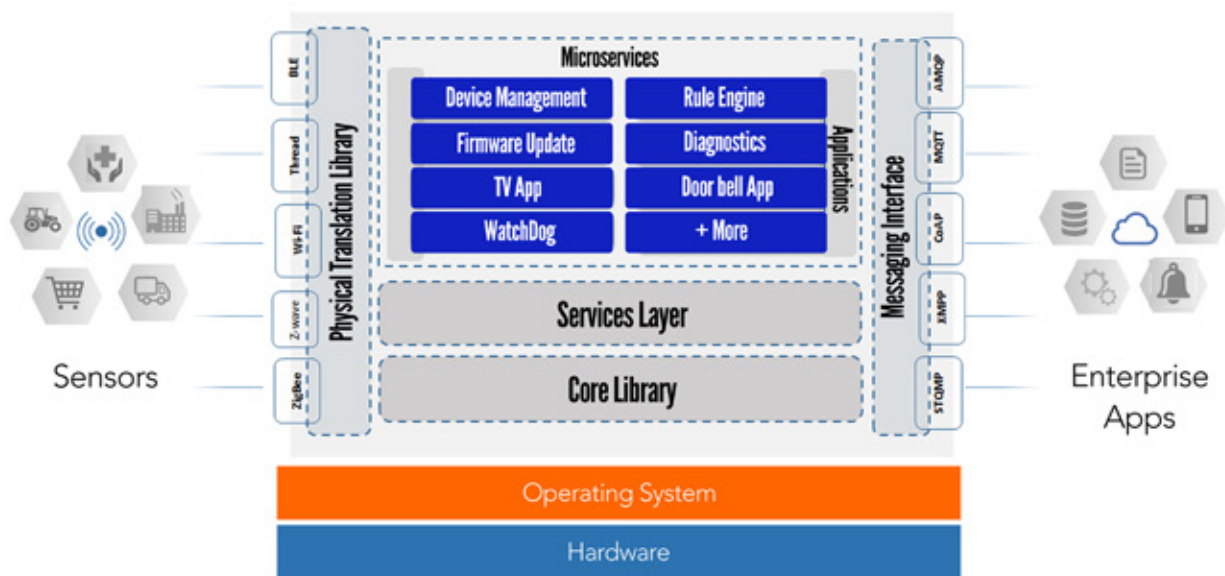
Unique Features:

- Interoperability
- Vertical and Horizontal Scalability
- High Avalibility
- Edge Computing and Dynamic Rule Engine
- Security and Access Management
- Application and Device Lifecycle Management
- Cloud (Edge over API)

Key Outcomes:

- **Faster time to market:**
  Plug and play devices and applications
- **Intelligent connectivity:**
  Compute on the edge and maintain device shadows
- **Common software stack:**
  Stack reuse across gateways and devices
- **Security out of the box:**
  Access controlled and encrypted for end-to-end security

Micro-services Architecture

- Each application container is a Micro-service
- Enables vertical scaling through multiple instances of a Micro-service

Device Lifecycle Management

- Onboarding
- Registering
- Monitoring

End-to-End Connectivity Solution

- Quick on-boarding of devices
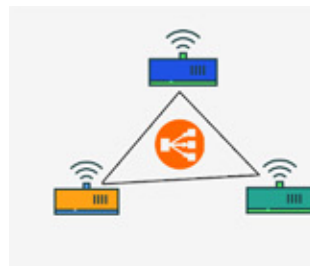- Quick connectivity with Cloud

Application Lifecycle Management

- Cloud Deployed, Cloud Controlled, and Cloud Managed
- Dynamically resource balanced at Gateway and Network level

Common Software Stack

- Multi Infra
- Multi OS
- Multi Hardware

Load Balancing

- Peer-to-peer gateway communication
- Enable horizontal scaling through intra-gateway & inter-gateway transfer of application container

Support for a Variety of Secured Messaging Protocols

- MQTT
- CoAP
- DDS
- STOMP
- AMQP
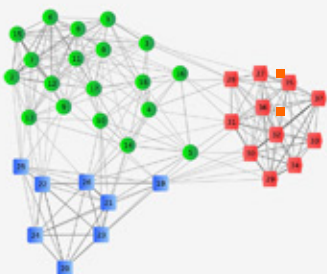- XMPP

Support for Multiple Device Protocols

- Zigbee
- BLE
- Thread
- Z Wave
- OPC-UA
- Wi-Fi

Enabling Collaborative Edge Computing

- Dynamic rule engine
- Adaptive rule engine
- Sharing / off-loading

Gateway Clustering

- Clustered gateways provide high availability
- Geographically-correlated auto resilient gateway feature ensures uptime by auto transferring the devices
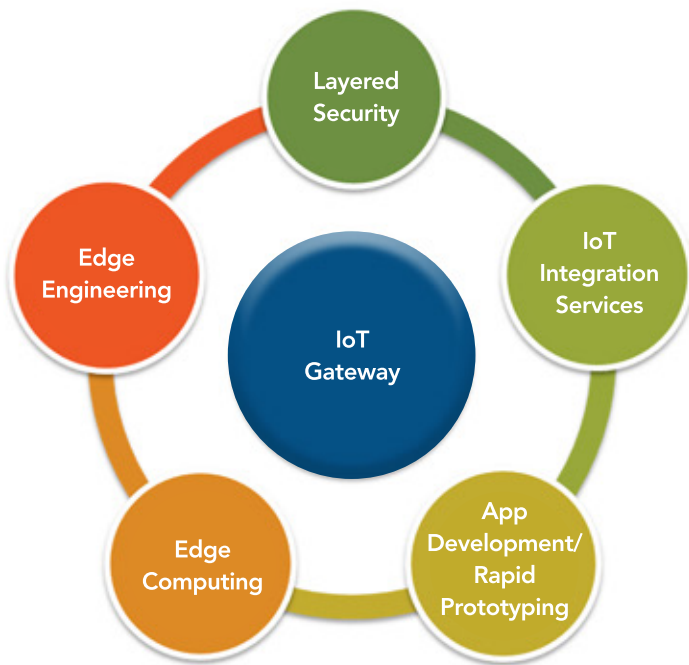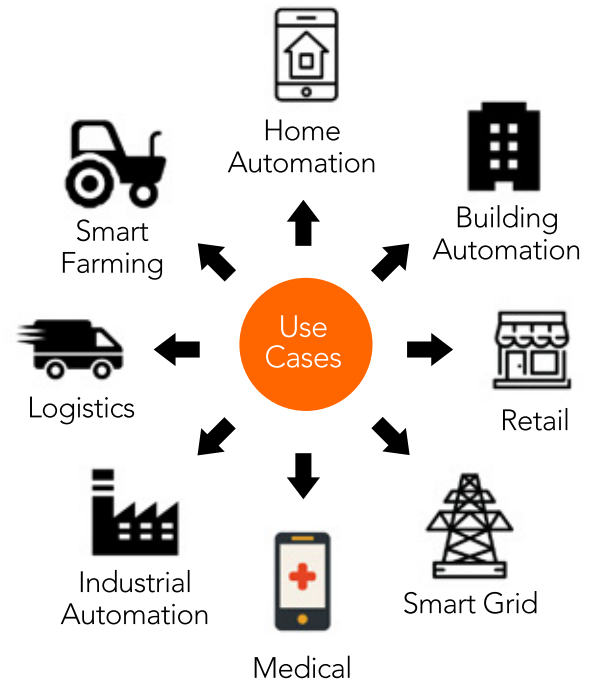
Layered IoT Security

- Adaptive "Chain of Trust"
- Trusted Platform Management
- Role and attribute based Access

IoT Gateway: Engineering Services

- Layered Security
- IoT Integration Services
- App Development/Rapid Prototyping
- Edge Computing
- Edge Engineering
- IoT Gateway

IoT Gateway: Use Cases

- Home Automation
- Building Automation
- Retail
- Smart Grid
- Medical
- Industrial Automation
- Logistics
- Smart Farming
- Use Cases

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Gartner, Frost & Sullivan, NASSCOM and Zinnov recognize the company for technology leadership. eInfochips has contributed to 500+ products for top global companies, with more than 40 million+ deployments across the world.

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We continuously invest and fuel innovations in the areas of Product Engineering, IoT Device Lifecycle Management, DevOps for IoT, IoT & Cloud Frameworks, Intelligent Automation, and Video Management.