

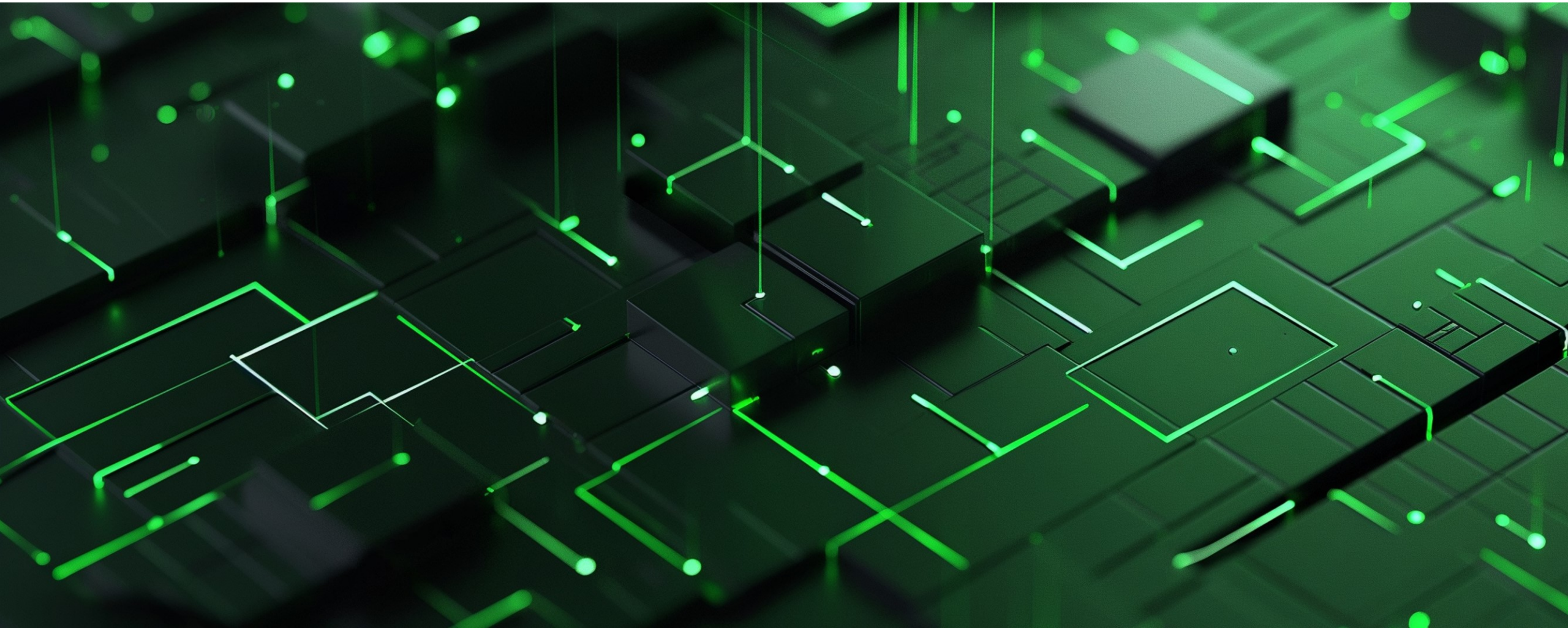
/ Avnet /IOTCONNECT Solutions Suite

Migrate Azure IoT Edge → AWS IoT Greengrass

AVNET®

/IOTCONNECT™

Manage | Secure | Deploy



/ Solution Accelerator & Marketplace Index

/IOTCONNECT enabled solutions

Smart Generator Monitoring

Smart Warehouse Monitoring

Smart City Noise Detection

AWS IoT Greengrass

Smart Asset Monitoring

AWS Physical AI

Smart Facility Solutions

STM32 Amazon Sidewalk

Smart Factory Solutions

Security CRA

Smart Fleet Management

SaaS offering

/IOTCONNECT™

Migrate Azure IoT Edge to AWS IoT Greengrass

Avnet's Azure IoT Edge to AWS IoT Greengrass Migration solution simplifies the transition from legacy Azure IoT Edge deployments to a secure, scalable AWS-based edge architecture. Designed for organizations approaching Azure IoT Edge end-of-life, this solution provides end-to-end migration support - from workload mapping and secure device provisioning to phased fleet rollout and cutover. By leveraging AWS IoT Greengrass V2 and AWS native services, teams can modernize their edge infrastructure, reduce operating costs, and continue scaling edge applications with minimal disruption.

Visit Our Marketplace Listings



AVNET [Connected UAV Drone Platform by Indeema](#)
By [Avnet](#) | [AWS Specializations](#)
Indeema Software is an engineering services company specializing in custom IoT solutions, combining deep expertise in both hardware and software. Indeema delivers end-to-end development that transforms connected devices into intelligent systems, helping companies accelerate innovation and bring...

AVNET [/IOTCONNECT | IoT Device Connectivity](#)
By [Avnet](#) | [AWS Specializations](#)
[Deployed on AWS](#) [Free Trial](#) [Vendor Insights](#) [Free Tier](#)
Avnet's /IOTCONNECT is a comprehensive solution accelerator software that facilitates IoT monitoring, and advanced analytics. It provides native support for AWS Greengrass and AWS IoT Core, enabling seamless device integration, robust security, and...

AVNET [/IOTCONNECT™ - Pay-As-You-Go | IoT Device Connectivity](#)
By [Avnet](#) | [AWS Specializations](#)
[Deployed on AWS](#) [Free Trial](#) [Free Tier](#)
Avnet's /IOTCONNECT™ is a comprehensive solution accelerator software that facilitates IoT monitoring, and advanced analytics. It provides native support for AWS Greengrass and AWS IoT Core, enabling seamless device integration, robust security, and...

AVNET [Avnet's Smart Warehouse Monitoring powered by IoT and AI](#)
By [Avnet](#) | [AWS Specializations](#)
Avnet's Smart Warehouse Monitoring Solution powered by /IOTCONNECT, built on AWS and modern warehouses into dynamic, efficient hubs. As warehouses shift from being simple storage centers, organizations are adopting IoT-enabled...

AVNET [Avnet's Smart Fleet Management powered by IoT and AI](#)
By [Avnet](#) | [AWS Specializations](#)
The Smart Fleet Management Solution powered by /IOTCONNECT, built on AWS, offers cost and management capabilities designed to enhance efficiency, safety, and compliance for fleets. The solution leverages cloud-based analytics, IoT...

AVNET [Avnet's Smart Asset Monitoring powered by IoT and AI](#)
By [Avnet](#) | [AWS Specializations](#)
Avnet's Smart Asset Monitoring solution is a comprehensive IoT-based system designed to reduce lifecycle costs for asset-intensive industries such as manufacturing, oil & gas, logistics, and rental, powered by /IOTCONNECT, built on AWS, this...

AVNET [Avnet's Smart Generator Monitoring powered by IoT and AI](#)
By [Avnet](#) | [AWS Specializations](#)
Avnet's AI-based Smart Diesel Generator Monitoring solution, powered by /IOTCONNECT, provides an approach to safeguarding your business continuity. This end-to-end system provides centralized monitoring of multiple industrial diesel generators, allowing you to...

AVNET [/IOTCONNECT | IoT Device Connectivity](#) info
Sold by: [Avnet](#) [↗](#)
[Deployed on AWS](#) [Free Trial](#) [Vendor Insights](#) [AWS Free Tier](#)
IOTCONNECT™ offers IoT device connectivity with real-time monitoring, advanced analytics and data visualization for seamless operations.
☆☆☆☆☆ [10](#)

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Overview [Try agent mode](#) [Create proposal](#) [Ask question](#)

/IOTCONNECT Platform

Video 1

Avnet's /IOTCONNECT is a comprehensive solution accelerator software that facilitates IoT device connectivity, real-time monitoring, and advanced analytics. It provides native support for AWS Greengrass and AWS IoT Core, enabling seamless device integration, robust security, and easy and clear methods to gain valuable insights for businesses to optimize operations and drive innovation. With diverse connectivity options, strong data protection measures, and true scaling capabilities, /IOTCONNECT empowers organizations to leverage the full potential of IoT technology and accelerate digital transformation.

/IOTCONNECT's comprehensive ecosystem and pre-built solutions reduce the time and effort required to bring IoT products and services to market.

Pre-connected device enablement: Easily connect and manage IoT devices without complex configurations.

Highlights

- Simplified IoT deployment: /IOTCONNECT offers a user-friendly interface that simplifies the deployment of IoT solutions, enabling businesses to quickly connect and manage devices without complex setup processes.
- Scalability and flexibility: With /IOTCONNECT, businesses can seamlessly scale their Global IoT deployments to accommodate growing needs. The enablement suite supports a wide range of devices and protocols, allowing for flexibility and interoperability across diverse environments.
- Powerful data insights: /IOTCONNECT provides robust analytics and data visualization tools, empowering businesses to gain valuable insights from their IoT devices. Real-time monitoring and predictive analytics enable proactive decision-making and optimization of operations.

Details

Sold by [Avnet](#) [↗](#)

Categories [Applications](#) [↗](#)
[Device Connectivity](#) [↗](#)
[Device Management](#) [↗](#)

Delivery method [Software as a Service \(SaaS\)](#)

Deployed on AWS [Yes](#)

All Avnet Listings



Migrate Azure IoT Edge to AWS IoT Greengrass

Avnet's Azure IoT Edge to AWS IoT Greengrass Migration solution helps organizations transition from legacy Azure IoT Edge deployments reaching end-of-life support to a modern AWS-based edge environment. Using a phased, low-risk approach, the solution enables customers to adopt AWS IoT Greengrass V2 while maintaining operational continuity. With Avnet expert guidance and /IOTCONNECT providing centralized visibility, customers can modernize their edge infrastructure securely and at lower cost.



Phased, Low-Risk Migration Approach: Moves devices in stages to minimize downtime and risk



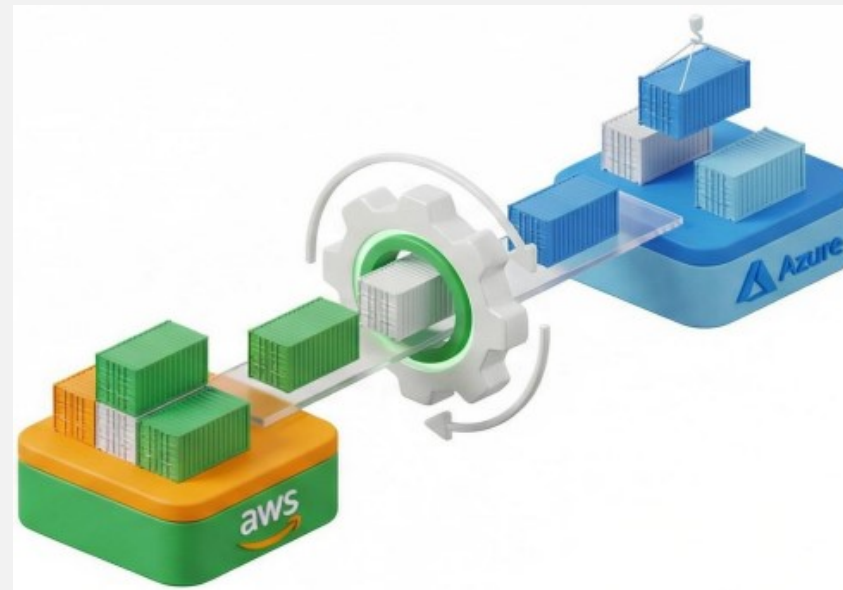
Application Continuity: reserves existing workloads with proven migration pattern



Modern Security: Uses open, standards-based mTLS with automated credential management



Lower Operating Costs: Maintains edge processing to reduce cloud and messaging needs



Features

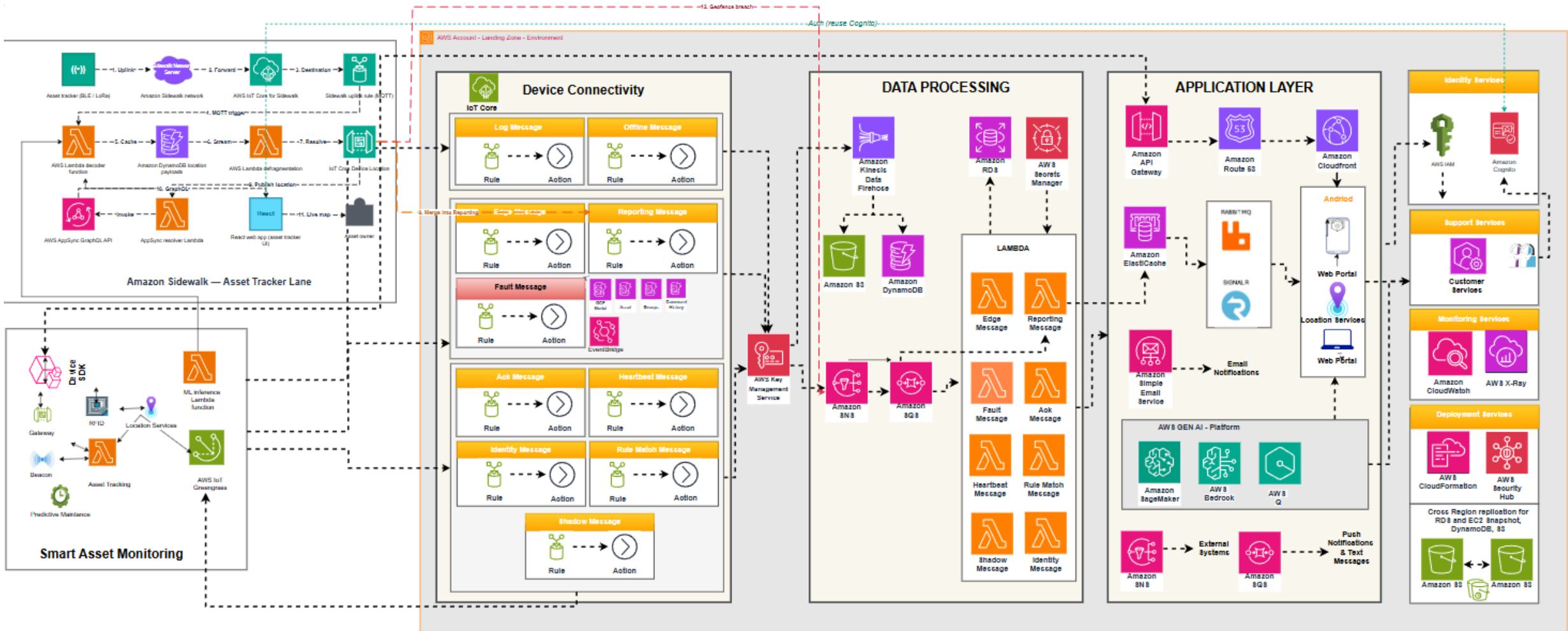
Avnet's Azure IoT Edge to AWS IoT Greengrass Migration solution enables a smooth, low-risk transition to a modern edge platform by preserving existing applications and operating costs while strengthening security. Customers benefit from a phased migration approach that minimizes downtime, utilizing open standards-based security that avoids cloud lock-in, and a scalable AWS foundation—supported by /IOTCONNECT for centralized visibility and device management.

[Learn more](#)

[Marketplace Listing](#)

AVNET

Solution Architecture – AWS IoT Greengrass



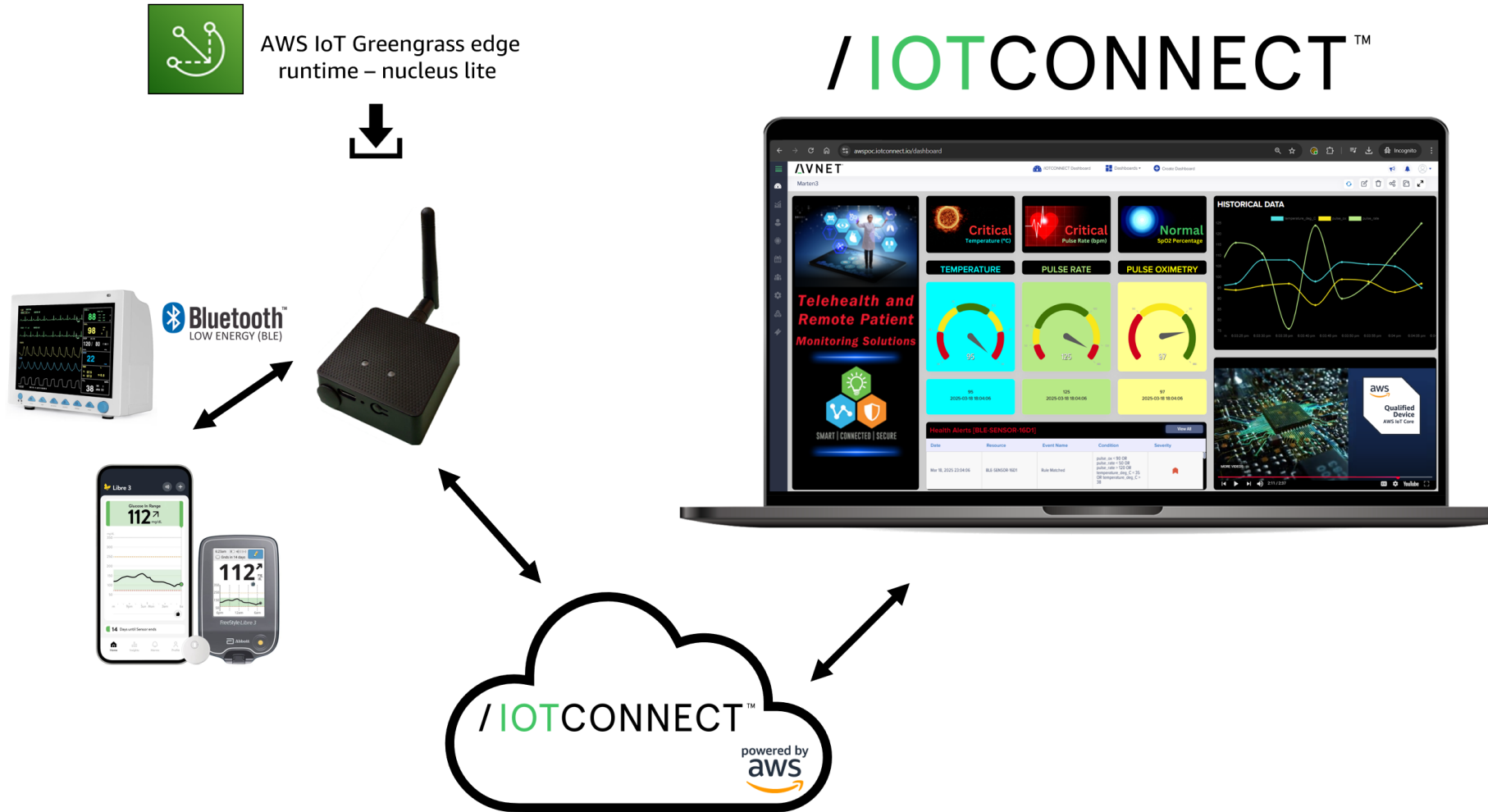
/ Use Cases

Greengrass can be installed on new and existing medical devices enabling asset monitoring and remote configuration capabilities. The lite runtime allows it to operate on a number of legacy HW platforms without requiring costly FDA (re)certification efforts. Device health monitoring and ease of remote control enable large cost savings.

Health Care

Smart Home Energy Management

Manufacturing Modernization



/ Use Cases

Thanks to the new lite runtime, Greengrass can now be installed on resource-constrained devices where previously the dependency on Java technology prevented its use.

Health Care

Smart Home Energy Management

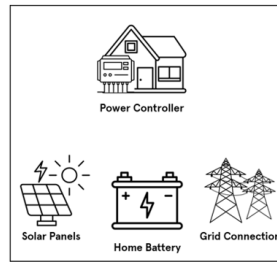
Manufacturing Modernization



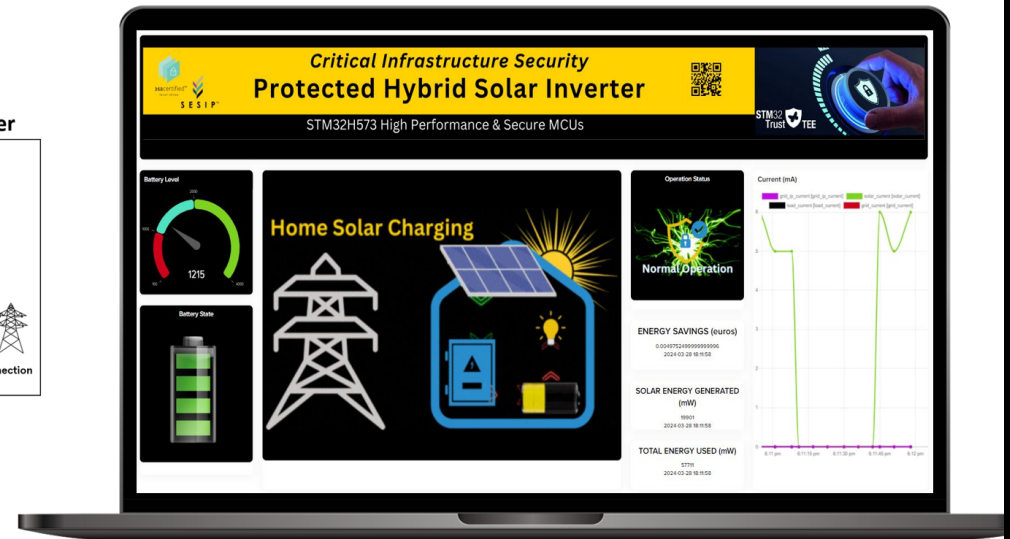
AWS IoT Greengrass edge runtime – nucleus lite



Residential Solar Inverter



/ IOTCONNECT™



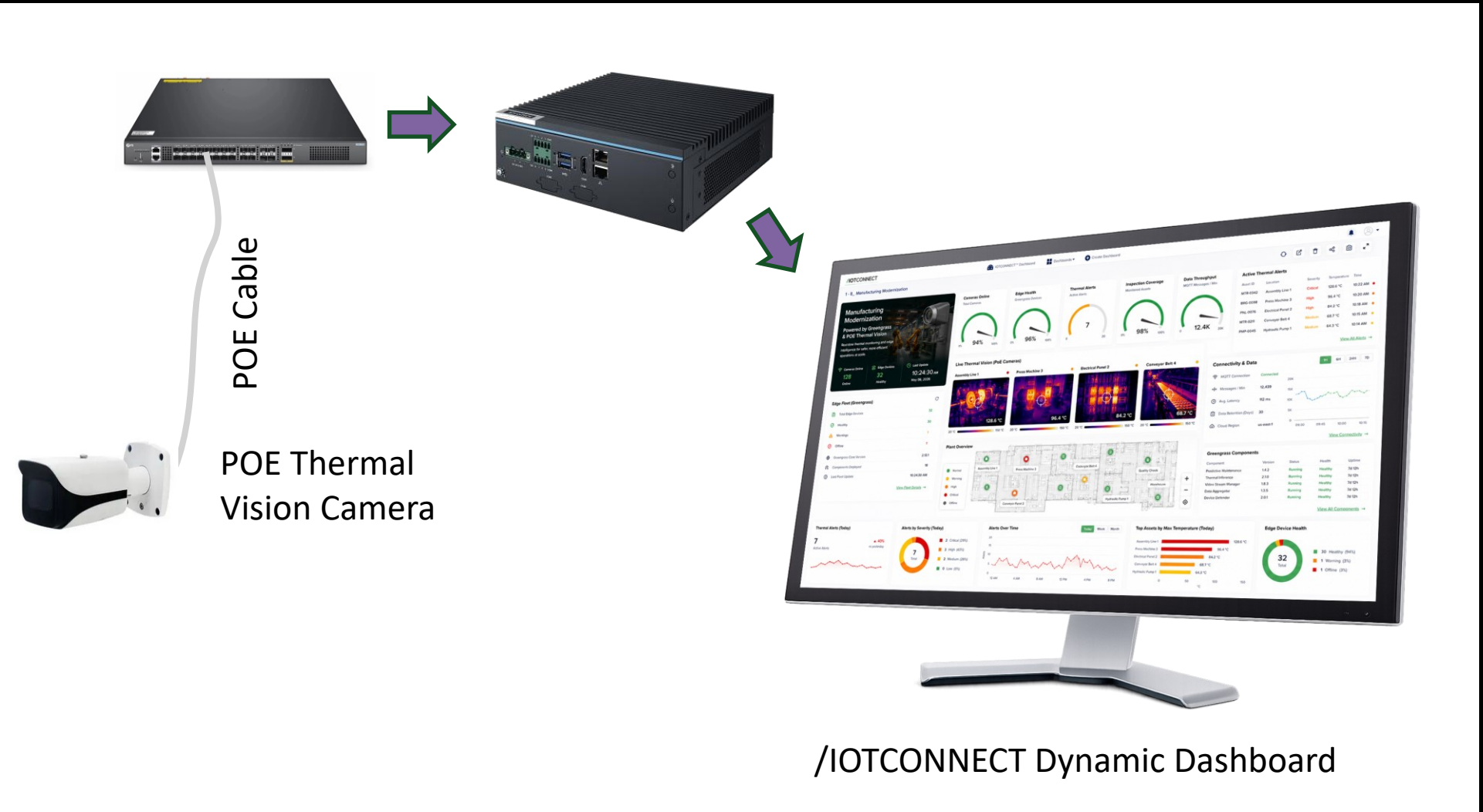
/Use Cases

Greengrass can be installed on CPEs *inside containers*, allowing application developers to quickly build applications that connect to AWS IoT Core, sharing an MQTT connection, managing extensions/components, monitoring health and controlling their life cycle on individual devices or large fleets *without requiring TELCOs mediation*.

Health Care

Smart Home Energy Management

Manufacturing Modernization



/ Summary & Next Steps

Benefits

1. **Secure/Flexible:** By using open, industry-standard X.509 mTLS security, AWS enables greater portability and long-term flexibility.
2. **Value:** With AWS IoT Core's low-cost, pay-as-you-go messaging model, customers can scale device connectivity more affordably, achieving up to 5× cost savings compared to Azure IoT Hub.
3. **EOL Risk:** As Azure IoT Edge LTS versions reach end of life, security updates and long-term support are retired, increasing operational risk for existing deployments.

Outcomes

1. **Reduced Risk:** Avoids Azure IoT Edge end-of-life exposure while maintaining continuous edge operations.
2. **Improved Flexibility:** Enables a more open, portable edge architecture without cloud lock-in
3. **Lower Long-Term Costs:** Decreases messaging and operational expenses as device fleets scale.

Next Steps

Let's Modernize Your Edge Without Disrupting Your Business

Contact us: IoT@Avnet.com

More About Avnet /IOTCONNECT & Softweb Solutions (an Avnet company)

/ About Avnet

Quick facts

- Founded in 1921
- Headquartered in Phoenix, Arizona
- AVT listed on the NYSE since 1960
- AVT listed on NASDAQ since 2018
- #181 on FORTUNE 500 (US) in 2025

14,500+

Employees
worldwide

2,000+

Engineers around
the world

3.3M+

Engineering
community members

450K

Customers in
140 countries

250+

Locations
globally

\$22.2B

FY25 Revenue

Avnet Capabilities

AVNET

CORE SEMI

**softweb
solutions**

AN AVNET COMPANY

CLOUD APPLICATION
DEVELOPMENT

TRIA
AN AVNET COMPANY

EMBEDDED MODULES
& BOARDS

/IOTCONNECT

IOT PLATFORM
FOR OEMS

W
Witekio

AN AVNET COMPANY

EMBEDDED SOFTWARE
DESIGN SERVICES

A
DESIGNED BY AVNET

SOLUTIONS DEVELOPMENT:
ADVANCED APPLICATIONS
GROUP



Cloud Migration | MAP SPRINTS

Migrate data sets and apps to the cloud securely



AWS AI / ML | Gen AI

Rekognition, SageMaker, Bedrock & more



Mobile Applications

Powerful mobile apps for global audiences



Server Monitoring

Detect cloud computing and network issues



Big Data & Analytics

Scalable and secure big data solutions



Enterprise Applications

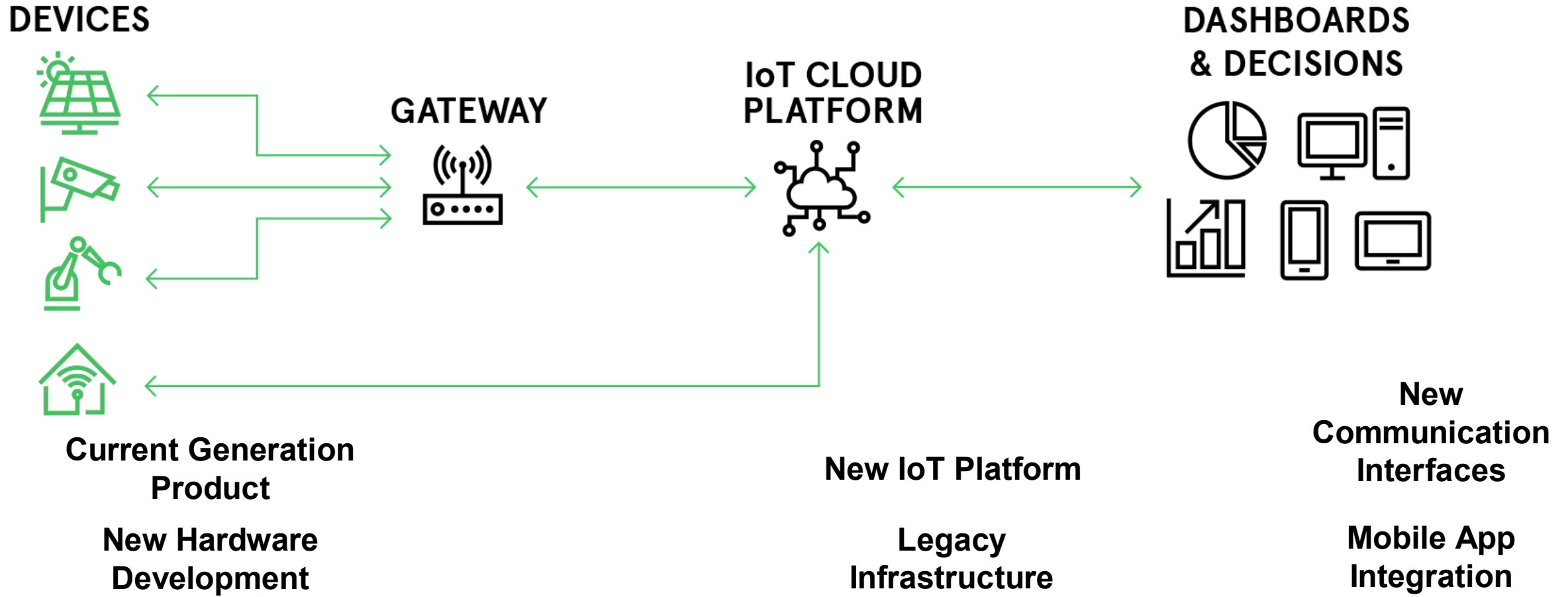
Mission-critical apps running on AWS



Managed Services

Infrastructure management on AWS

/ Challenge of IoT



Developing an IoT product is costly, cumbersome, and time consuming.

/ Challenge of IoT

DEVICES



GATEWAY



IoT CLOUD PLATFORM



DASHBOARDS & DECISIONS



← /IOTCONNECT® →

With /IOTCONNECT, IoT development becomes simple, secure, and scalable.

Things



Dehumidifiers



In-Wall Moisture
Sensors

It takes **things** like **connected dehumidifiers** and **moisture sensors**

Things



Dehumidifiers



In-Wall Moisture
Sensors

extracts

Business Insights

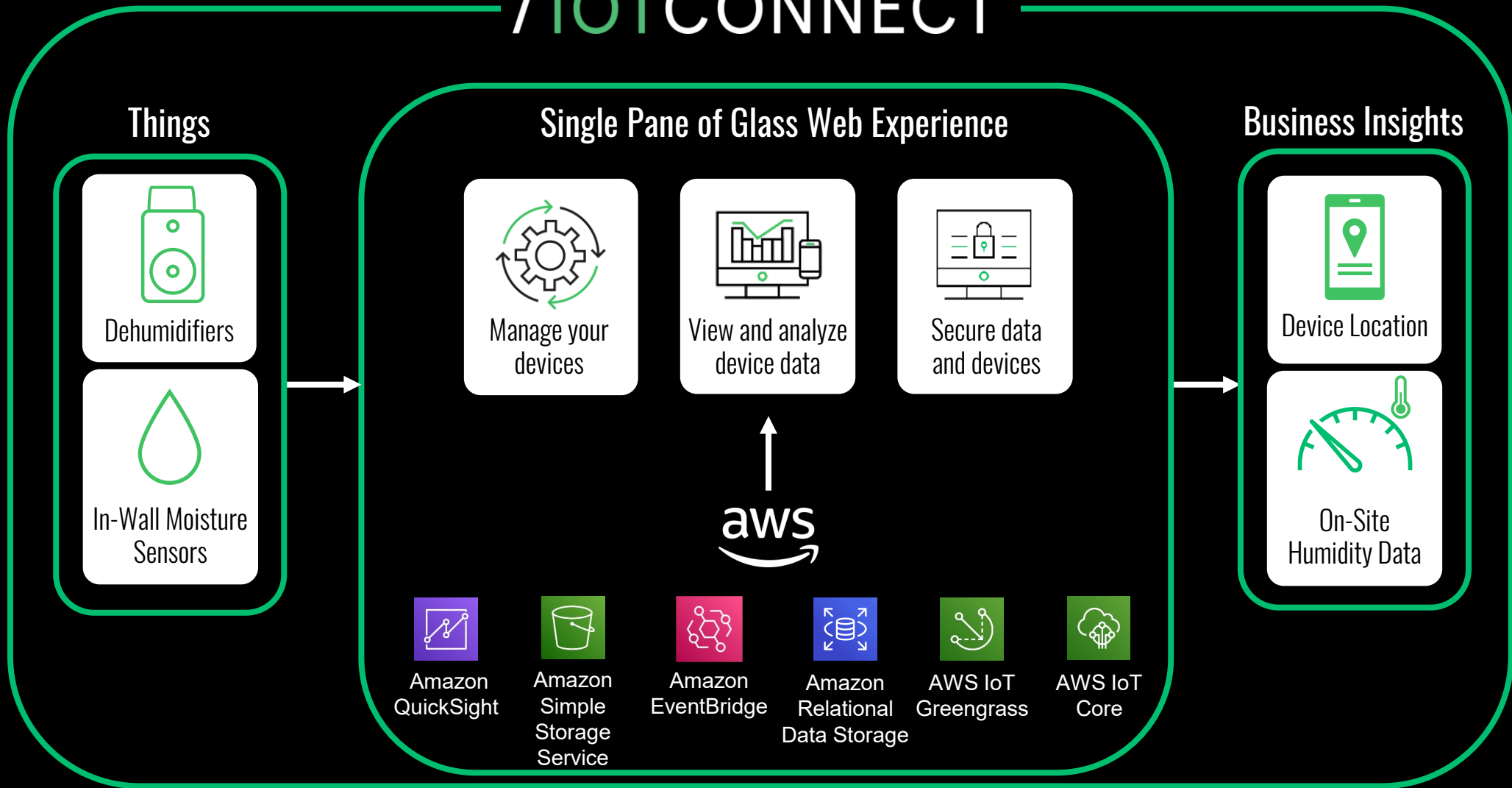


Device Location



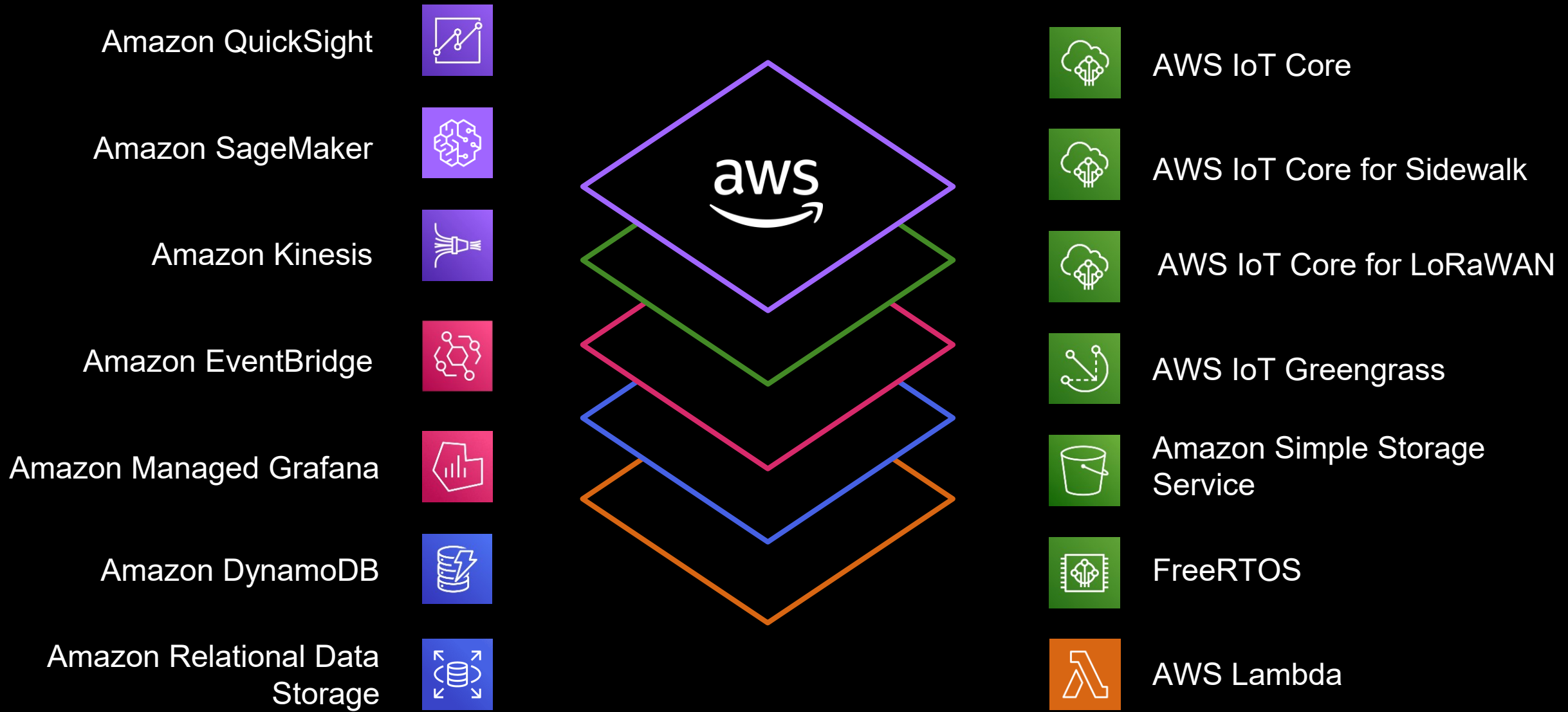
On-Site
Humidity Data

and **extracts valuable insights** to improve business intelligence



to create a **single pane of glass** experience

that's **built on AWS**



We take needed **AWS services** for IoT solution development

/ IOTCONNECT[®]

Solutions Suite

AVNET



One interface for
AWS services

And aggregate them to create **one ecosystem** for **production ready IoT**

// IOTCONNECT SaaS Application in Action



The dashboard features a dark blue sidebar with navigation options: Dashboard, Jobs, Devices, Devices Maintenance, Users, and Notifications. The main content area has a blue header and displays four summary cards: Total Jobs (40), Total Devices (2598), Total Users (5), and Total Notifications (8). A welcome message states: "Welcome You have 28 active jobs | 1255 of your 2598 total devices in use." Below this is a map of the Atlanta area with a blue dot indicating a job location. A legend at the bottom of the map shows: Pending (yellow), Active (green), Completed (blue), and Closed (red). On the right, there is an advertisement for a DRIEAZ LGR 6000Li dehumidifier with the text "AMAZINGLY QUIET SCREAMING LGR PERFORMANCE".

Copyright © 2022 Legend Brands - All Rights Reserved. Version: 1.0.1

The top smartphone screen shows the mobile app's job details for "Job '112 Main St'" in the "Basement". It includes a "DEVICES (1)" section with Bluetooth and Wi-Fi icons. The bottom smartphone screen shows the device control interface for "Revolution -123456" (Serial Number: 654321). It features "Turn On" and "Purge" buttons, a "Dehu: Off" status, "Humidistat: Idle", and a humidity control slider set to 40%. A technical specifications table is also visible:

Model	REVOLUTION
Life Hours	1
Firmware	8.9.0 1.4.3
Pump	Off
Compressor	Off
Fan	Off

The bottom of the app screen has a navigation bar with icons for settings, analytics, alerts, and a gear icon.

Next Steps

AVNET

/IOTCONNECT[®]

Migrate Azure IoT Edge to AWS IoT Greengrass

Challenges

Overcome Edge End-of-Life & Modernization Challenges Without Starting Over

As Azure IoT Edge approaches end-of-life, many organizations are being forced to confront difficult questions about security, scalability, and long-term platform viability. Retired security patches and limited support increase operational risk, while proprietary cloud dependencies make it harder to adapt to evolving business and technology requirements. At the same time, edge applications are often deeply embedded in day-to-day operations, leaving teams concerned about downtime, lost data, or the cost and complexity of re-architecting solutions. Customers need a clear path forward—one that protects existing investments while enabling modernization at a pace that aligns with business priorities.

Avnet /IOTCONNECT Solution

Unlock a Secure, Scalable Edge Future with Avnet & /IOTCONNECT

Avnet's /IOTCONNECT-enabled Azure IoT Edge to AWS IoT Greengrass Migration solution is designed to help customers move beyond these challenges with confidence. Using a proven, phased migration approach, Avnet enables organizations to transition existing edge workloads to AWS IoT Greengrass V2 while maintaining operational continuity and minimizing risk. By combining Avnet's migration expertise, AWS's open and standards-based edge services, and /IOTCONNECT for centralized visibility and coordination, customers gain a modern edge platform that is more secure, flexible, and cost-effective. The result is a future-ready edge environment that supports growth, reduces long-term operational burden, and allows teams to focus on innovation—not infrastructure.

Benefits

10% 25% 50% 100%

CloudWatch Dashboards Automatic Rollback

- » **Faster Time to Value**
Accelerates migration efforts using a proven framework and reusable tooling, helping teams move from assessment to pilot and production more quickly.
- » **Simplified Device Provisioning**
Modernizes device onboarding with automated, scalable provisioning methods that reduce manual effort and improve consistency across fleets.
- » **Built-In Operational Visibility**
Enhances insight into device health and edge workloads through integrated monitoring and logging, making it easier to manage performance and reliability.
- » **Foundation for Advanced Edge Use Cases**
Prepares the edge environment to support future innovations such as edge analytics, AI inference, and smarter data processing closer to devices.

Contact our IoT experts – mvto.kh@Avnet.com

AVNET

es

is customers improve security, and lower costs as their . By moving away from Azure re risk, organizations gain a ure, and future-ready edge n rely on with confidence.

ible

istry-standard X.509 mTLS its greater portability and whereas Azure's SAS token s devices to the Microsoft

ow-cost, pay-as-you-go tomers can scale device dably, achieving up to 5x t to Azure IoT Hub.

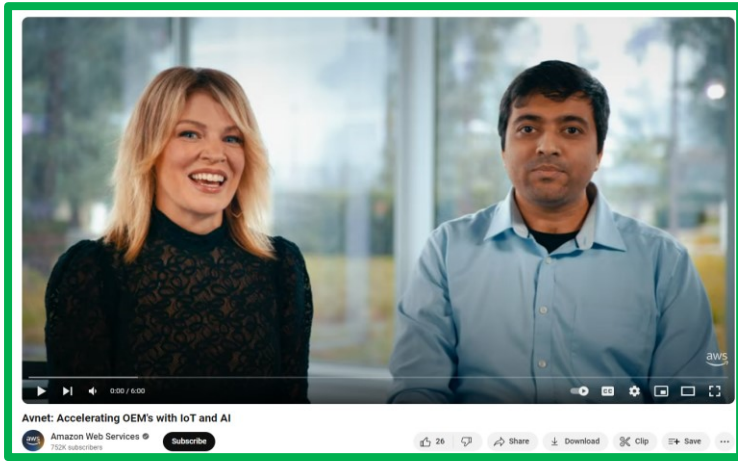
versions reach end of g long-term support are tional risk for existing

available and a free eplace

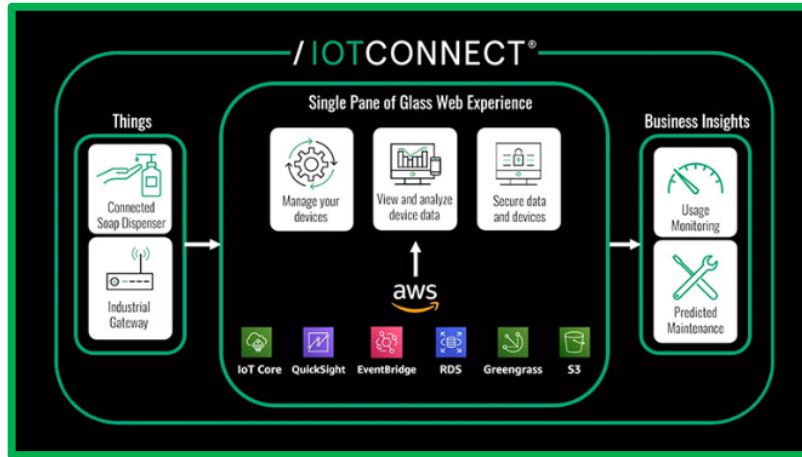
Contact us!

Learn more

/Resources



[Avnet and AWS:
This is My Architecture](#)



[Avnet
/IOTCONNECT
Webinar](#)



[/IOTCONNECT Quick
Start Development
Kits](#)

/IOTCONNECT Quick Start Enablement

IoTConnect Guides are available today on the following development kits:

- 1** **ST Discovery Kit for IoT node with STM32U5 series**
This development kit features Wi-Fi, Bluetooth, a number of sensors and support for expansion through Arduino, STM32 and Proton™ interfaces. Engineers can use this kit to develop connected devices such as wearable sensors, as well as smart home or smart industry applications.
[LEARN MORE](#)
- Microchip WiFi32-IoT Development Board**
This development board features the PIC32MZ101 WiFi module, with PCB antennas and TrustZone hardware security engine. Additional interfaces, including MicroBUS™, enable the developer to quickly add sensors, a perfect IoT development platform. Get started with a smart monitoring solution using the on-board temperature and light sensors.
[LEARN MORE](#)
- Avnet MaaXBoard SBC based on NXP i.MX 8M**
Based on NXP's i.MX 8M processor based single board computer, this kit is perfect for smart devices at the edge. It offers the power to process both video and audio locally and run high level operating systems (Android, Windows, IoT Core, Linux).
[LEARN MORE](#)
- Renesas CK-RX65N Cloud Kit Based on RX65N MCU Group**
This kit combines the RX65N MCU with an LTE Cellular CAT-M1 module and Ethernet connectivity. With IoTConnect support, you start capturing data in the field and send to the cloud in minutes.
[LEARN MORE](#)
- Infineon XENSIV Kit with PAS CO2 sensor**
The XENSIV™ connected sensor kit is ideal for battery-powered IoT devices. Its small size hides a lot of performance. With both Wi-Fi and Bluetooth connectivity, the kit includes a CO2 sensor and the OPTIGA™ Trust M security device. The kit works with IoTConnect's Secure Device Management features to provide IoT connectivity with total end-to-end security.
[LEARN MORE](#)

Pick a Board

Access our quick start landing page to look at the variety of developer board options that we have enabled. Select which board fits your need.

2

IoTConnect SDK for STM32-U5 based on X-Cube-Azure

SDK and sample application to connect [STM32U5 IoT Discovery Kit](#) to IoTConnect.

The QuickStart Guide below provides a binary image to program the board for quick evaluation of the sample application.

- [QuickStart Guide](#)

Use this Developer Guide to setup the project and modify the source to further develop using the sample application.

- [Developer Guide](#)

The BG96 Module from the [P-L496G-CELL02 Combo](#) is also supported by this project. To run your board with this module, follow the respective BG96 sections linked in the Developer or QuickStart guides.

Access GitHub

Click the GitHub link to see the sample code we have created for each of these developer kits. These include templates and dashboards.

3

Select a Personal Plan

Test Drive

2 Months Free

- Messages **30K (Max)**
- Devices **5 (Max)**
- Users **5 (Max)**

SUBSCRIBE NOW

No Credit Card Required.

Sign up for Free Trial

Using the provided link from the quick start guide, sign up for a free /IOTCONNECT account and demo all of the design acceleration features.

4

Temperature: 30.979
Pressure: 843.168
Humidity: 14.748

Env Sensors

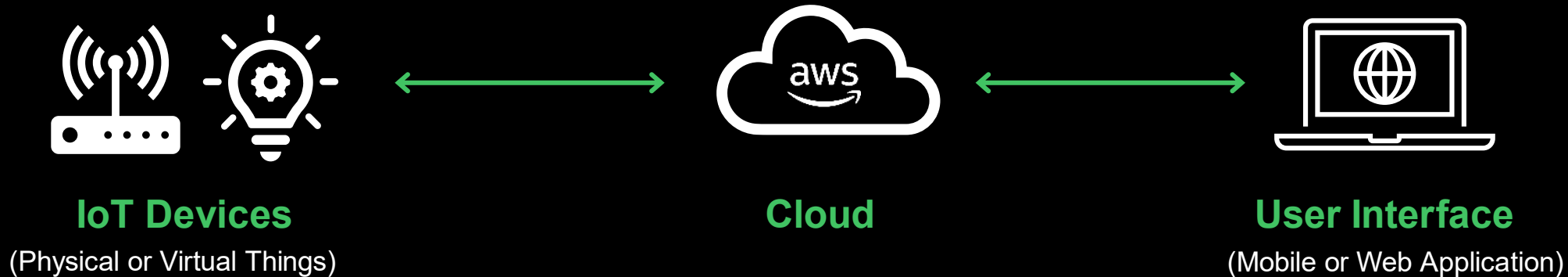
Device Command

Start Developing

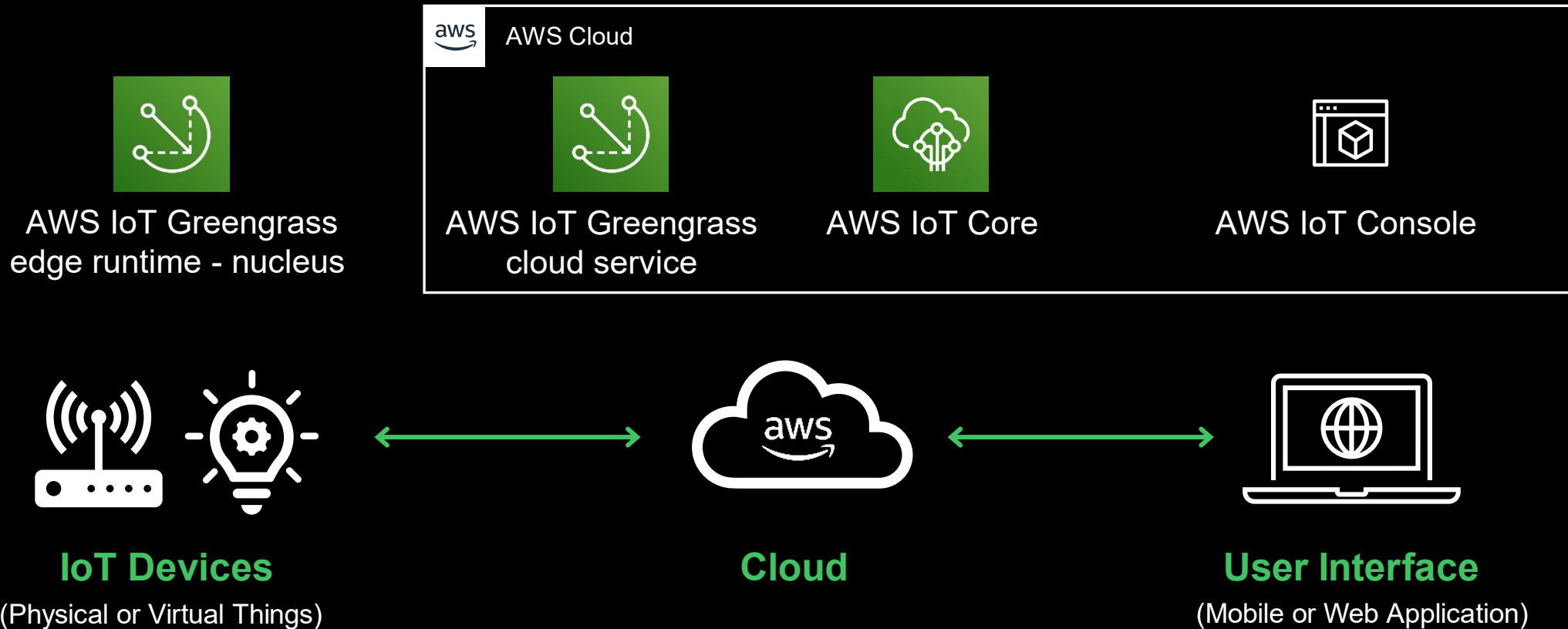
With dynamic dashboards and easy onboarding widgets, /IOTCONNECT makes designing for your application simple, secure, and scalable.

Appendix

/ What is AWS IoT Greengrass?



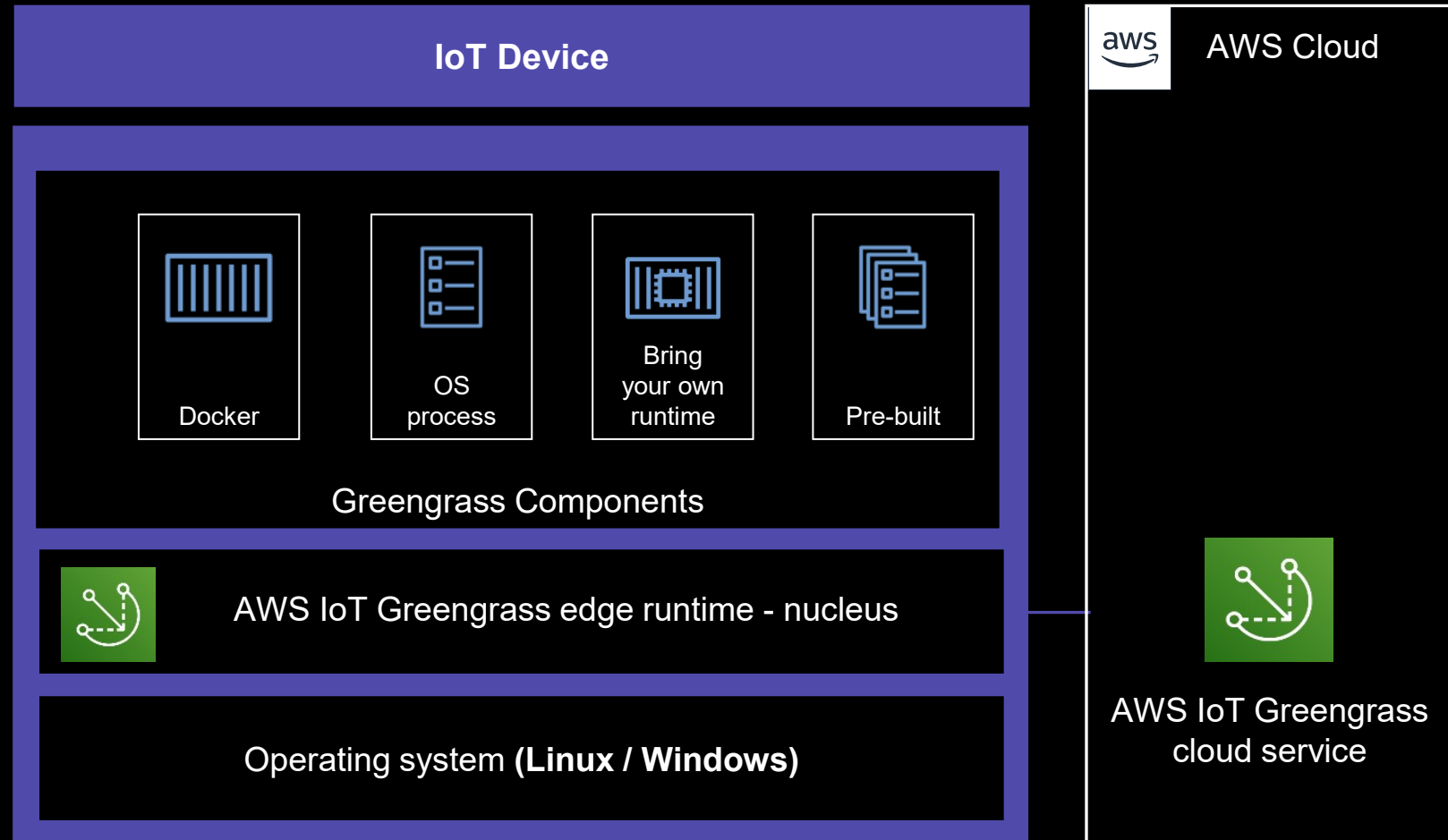
/ What is AWS IoT Greengrass?



/ AWS IoT Greengrass Breakdown

Key features

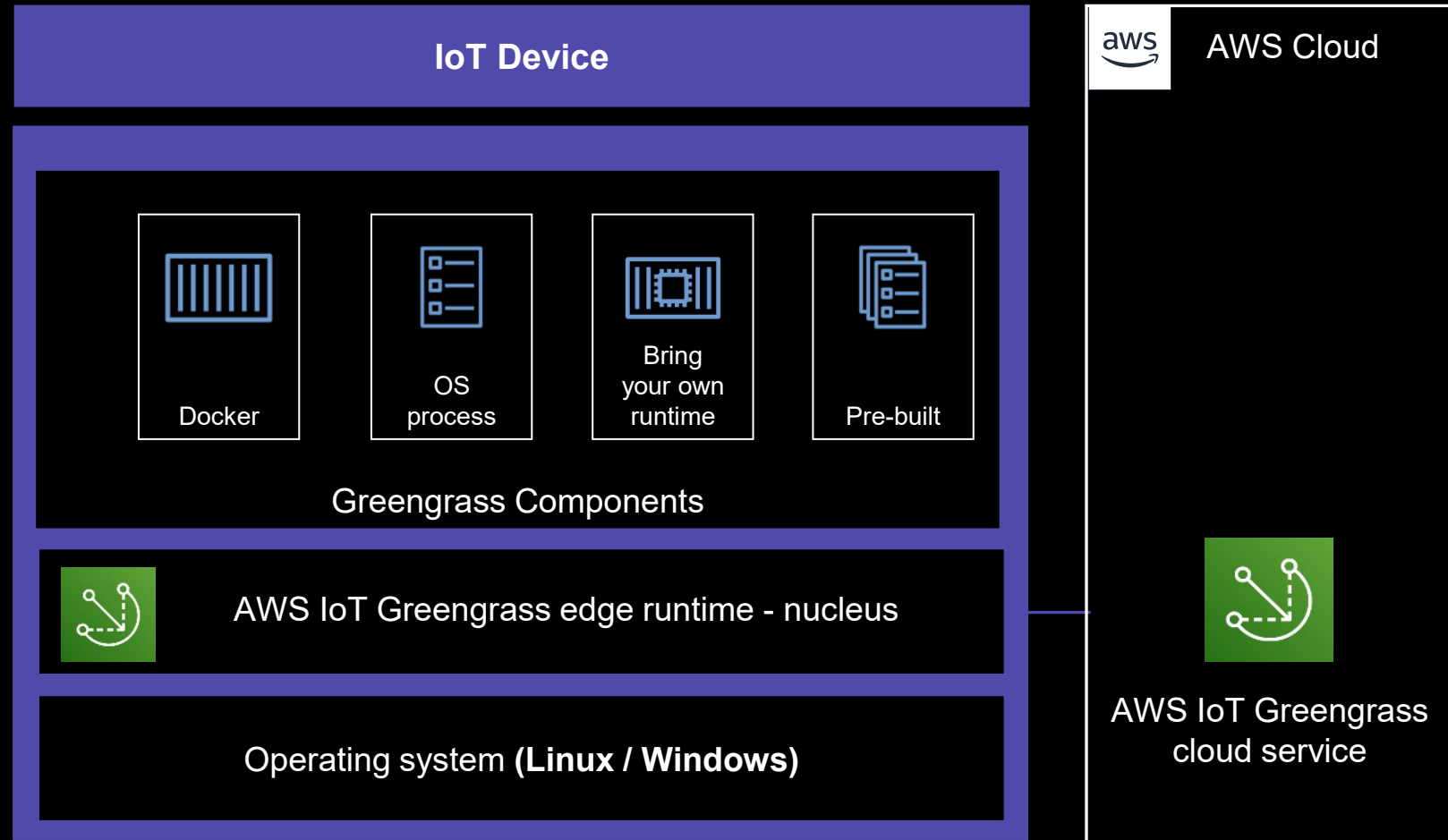
- Open source client software
- Easily share an MQTT connection across multiple applications and components
- Device-side developer tools – iterate quickly with CLI and local console
- Portable across HW (ARM/x86) and languages (C/C++, C#, Java, Python, JS/Node)
- Deploy and orchestrate containerized (and non-) applications
- Pre-built components, such as data streaming to Amazon KVS, Modbus TCP protocol support...



/ AWS IoT Greengrass Breakdown

Key features

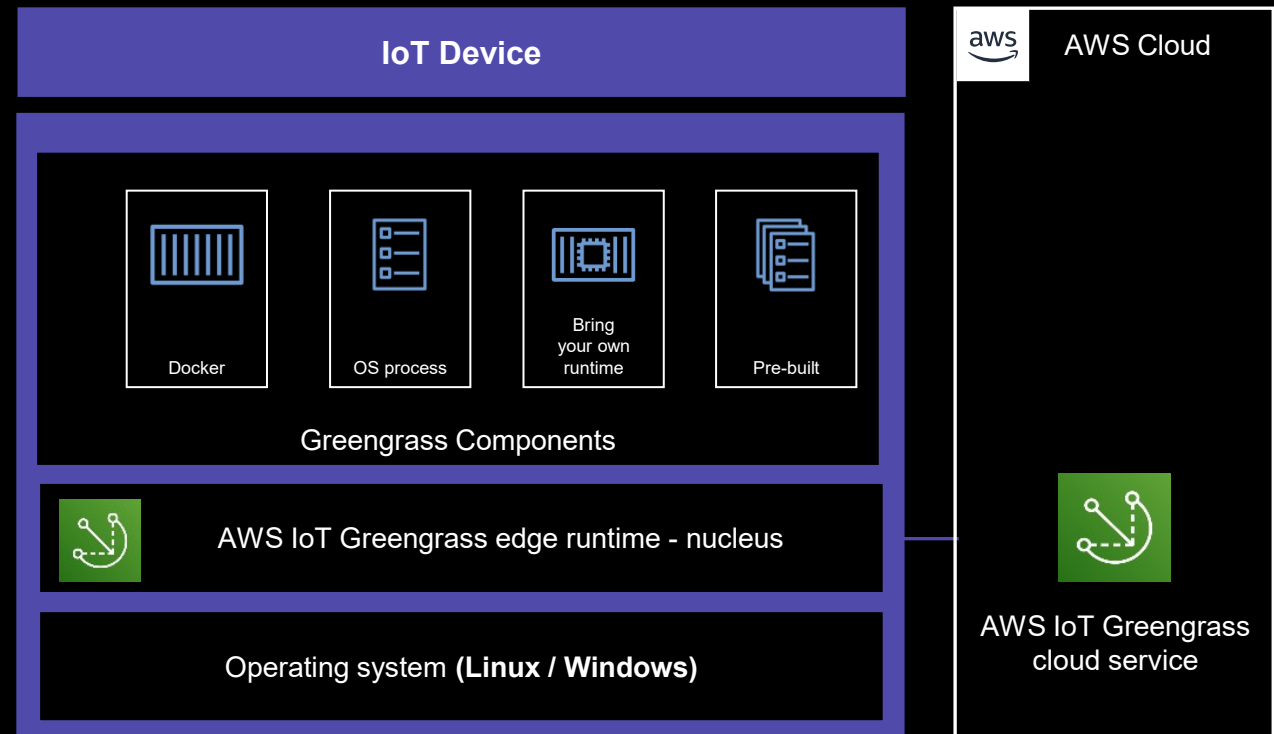
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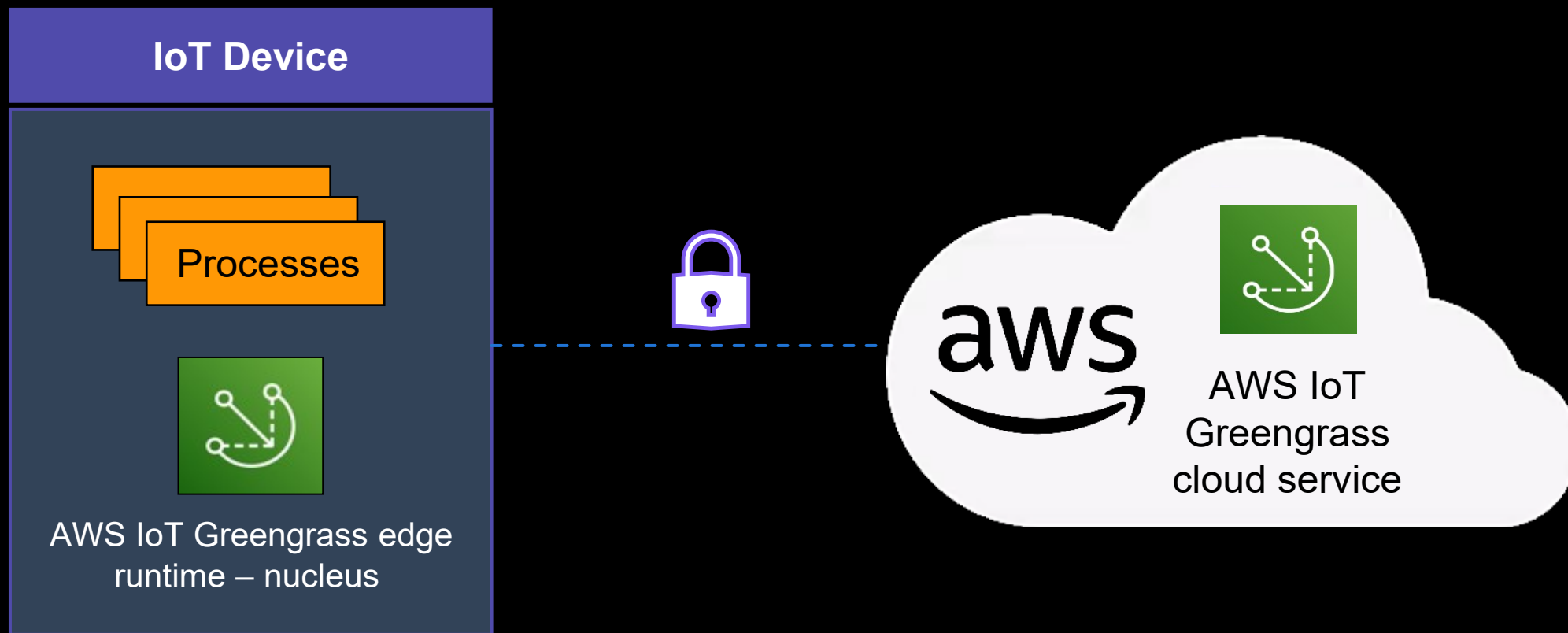
/ Greengrass is your Swiss Army Knife

Greengrass uses:

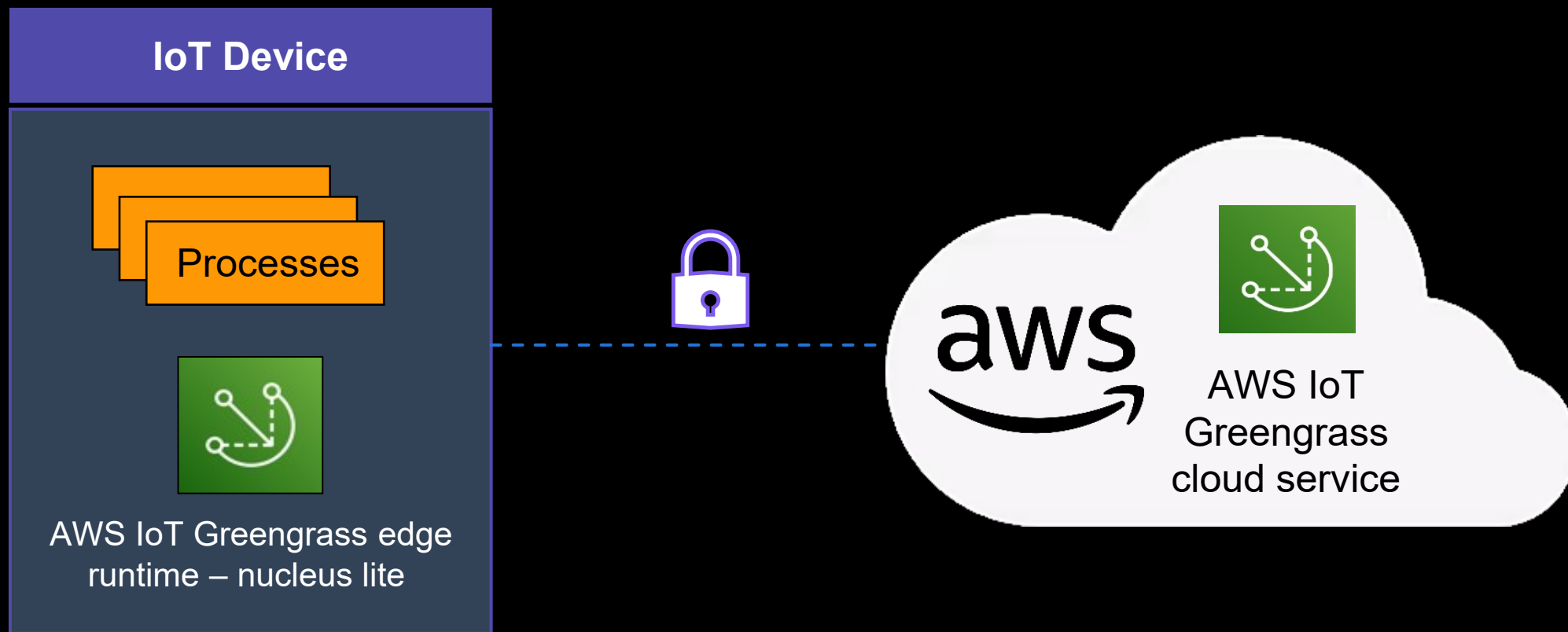
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/ What is IoT Greengrass nucleus lite?



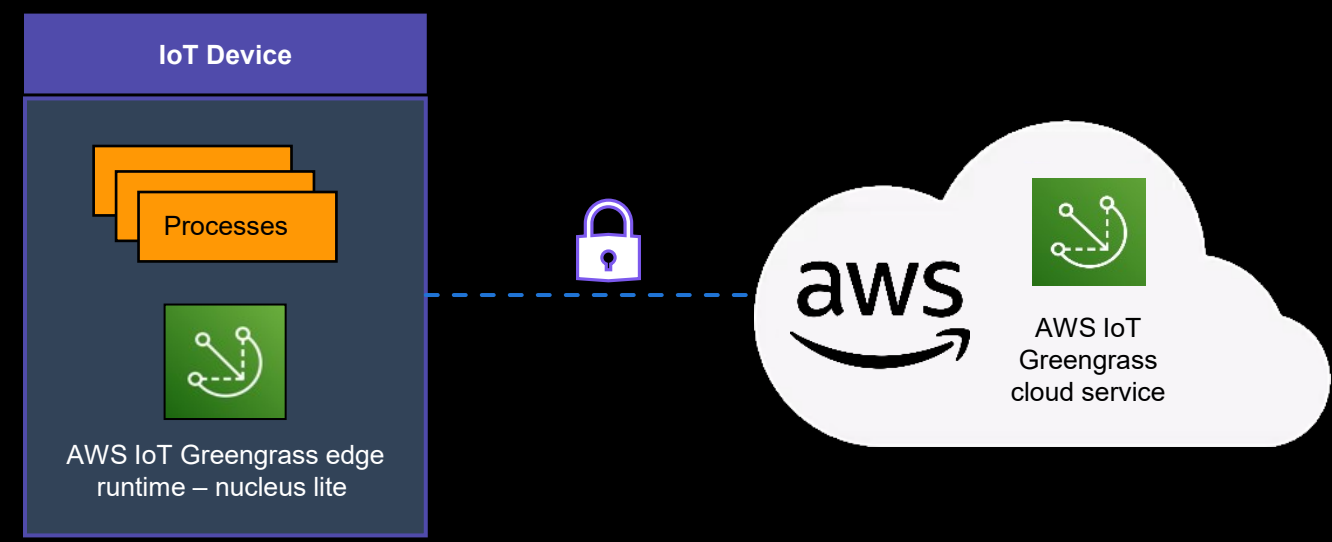
/ What is IoT Greengrass nucleus lite?



/ What is IoT Greengrass nucleus lite?

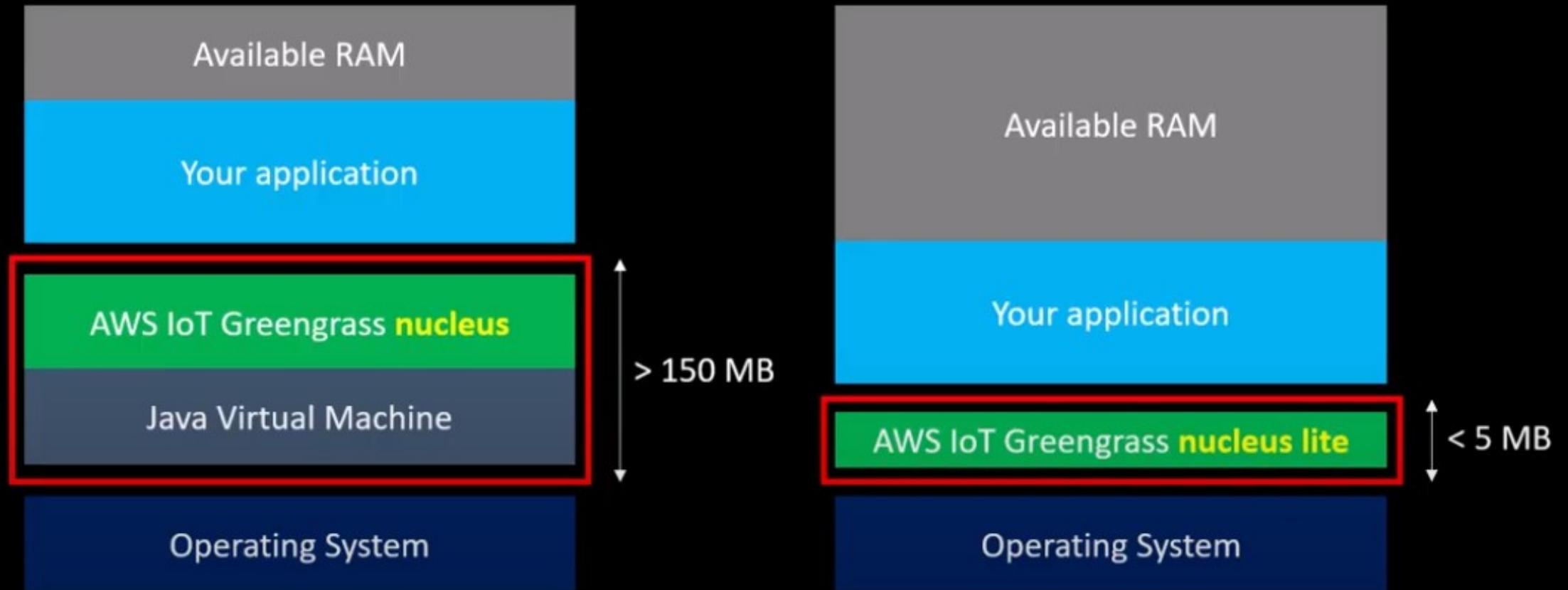
Greengrass nucleus lite features:

- Lower memory footprint: <5MB RAM, <3MB Storage
- Fit into cost sensitive and constrained embedded devices
- More space for your applications
- Removed dependency on Java (JVM)
- Depend exclusively on libc, sqlite
- Higher performance on lower spec HW
- Increased robustness with static memory allocation
- API compatibility with Greengrass service v2 API
- Generic components compatibility with Greengrass Nucleus



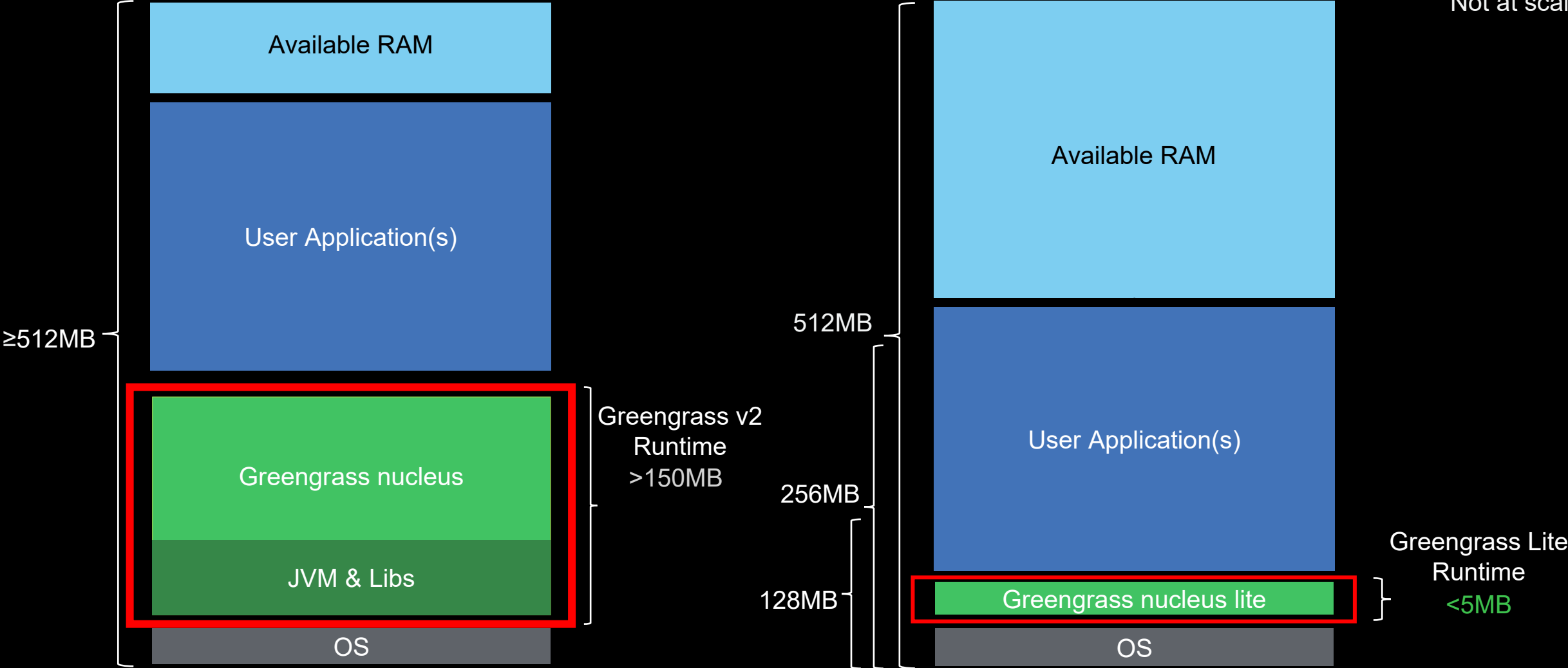
/ Advantages of Greengrass nucleus lite

Memory footprint



Memory Comparison

Not at scale



AWS IoT Greengrass nucleus

AWS IoT Greengrass nucleus lite

/ What does nucleus lite share with nucleus?

Cloud service:
Deployments and
device
management

Interprocess
communication
(IPC)

Core device role &
token exchange
service

Component
recipes

AWS IoT Core
connectivity

/ AWS IoT Greengrass nucleus vs. nucleus lite

	nucleus	nucleus lite
RAM	96 MB	5 MB
Flash/disk	256 MB	5 MB
nucleus language	Java	C
Operating systems	Windows and Linux	Linux with systemd
Directory structure	Monolithic	Modular
Memory allocation	Dynamic	Static
Logging system	Custom	systemd journal
Configuration store	TLOG	SQLite
Lambda functions	Yes	No
Feature set	Full	Subset*

/ Greengrass nucleus vs. nucleus lite

	nucleus	nucleus lite
RAM	96 MB	5 MB
Flash/disk	256 MB	5 MB
nucleus language	Java	C
Operating systems	Windows and Linux	Linux with systemd
Directory structure	Monolithic	Modular
Memory allocation	Dynamic	Static
Logging system	Custom	systemd journal
Configuration store	TLOG	SQLite
Lambda functions	Yes	No
Feature set	Full	Subset*

*Shared nucleus and nucleus lite functions

- Cloud service: Deployments and device management
- Interprocess communication (IPC)
- Core device role & token exchange service
- Component recipes
- AWS IoT Core connectivity

/ Greengrass nucleus vs. nucleus lite

Indications for nucleus:

Windows operating system

Lambda function components

Docker container components

Scripted / interpreted languages

Feature not yet supported by nucleus lite

Indications for nucleus lite:

Constrained hardware with less than 512 MB RAM

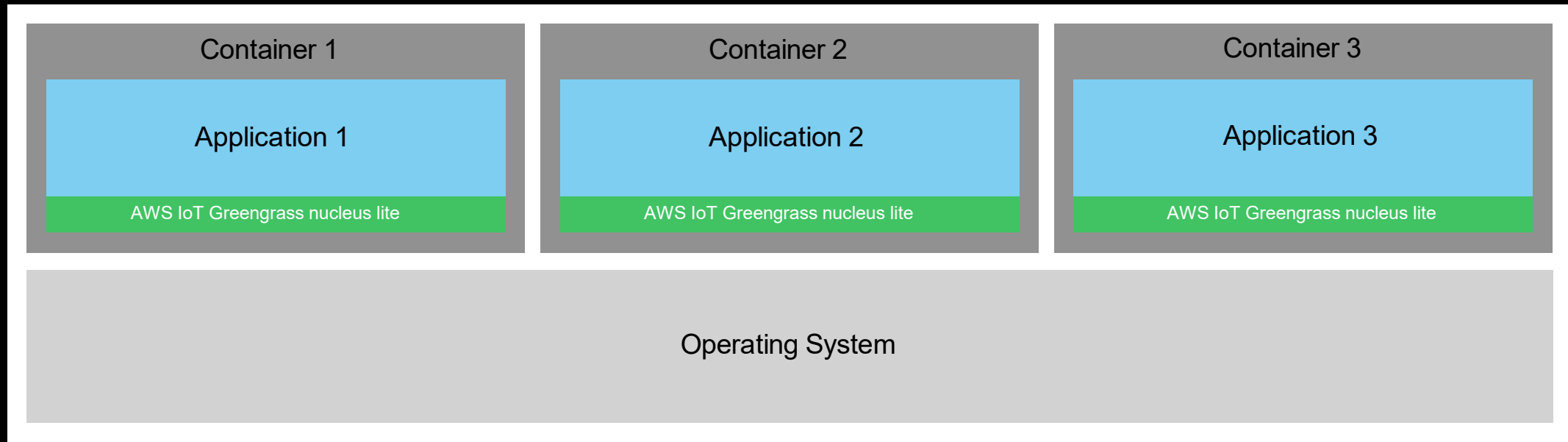
Constrained hardware with CPU clock under 1 GHz

Compliance requirements

Creating your own embedded Linux distribution with A/B partitions for OS image updates

Compiled languages

/ Multi-tenancy Support for Containerized Applications



With its small footprint, nucleus lite provides the opportunity for effective containerization in multi-tenant IoT deployments.

Developers can run multiple isolated applications, each bundled with their own AWS IoT Greengrass runtime and connected to a distinct account/endpoint.

Use cases include: Smart Home Equipment, Smart Metering

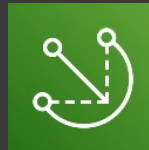
/IOTCONNECT[®] Supports All Devices



AWS IoT Core



AWS IoT Core for
LoRaWAN amazon sidewalk



AWS IoT Greengrass
+ Greengrass lite

Device
Types



Connected
Devices



Gateway &
Child Devices



Private
LoRaWAN
Base Station



Private
LoRaWAN
Concentrator



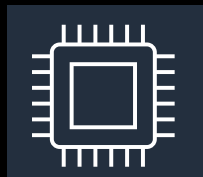
Public
LoRaWAN
Device



Amazon
Sidewalk
Device

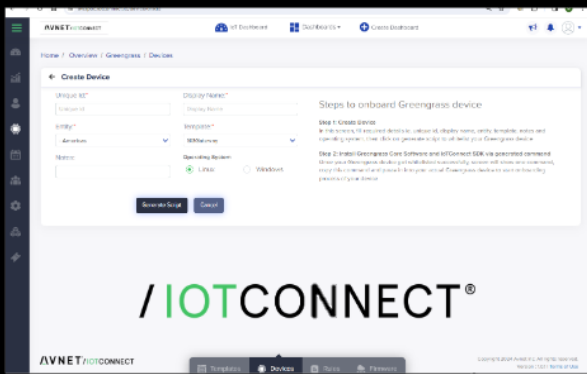


Edge Server
or Gateway



Memory Constrained
Edge Device

Device
Enablement

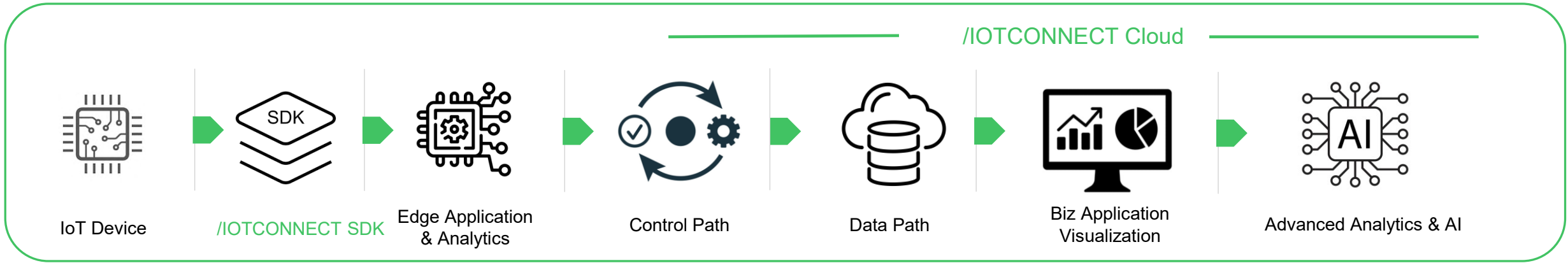


AWS IoT
Greengrass



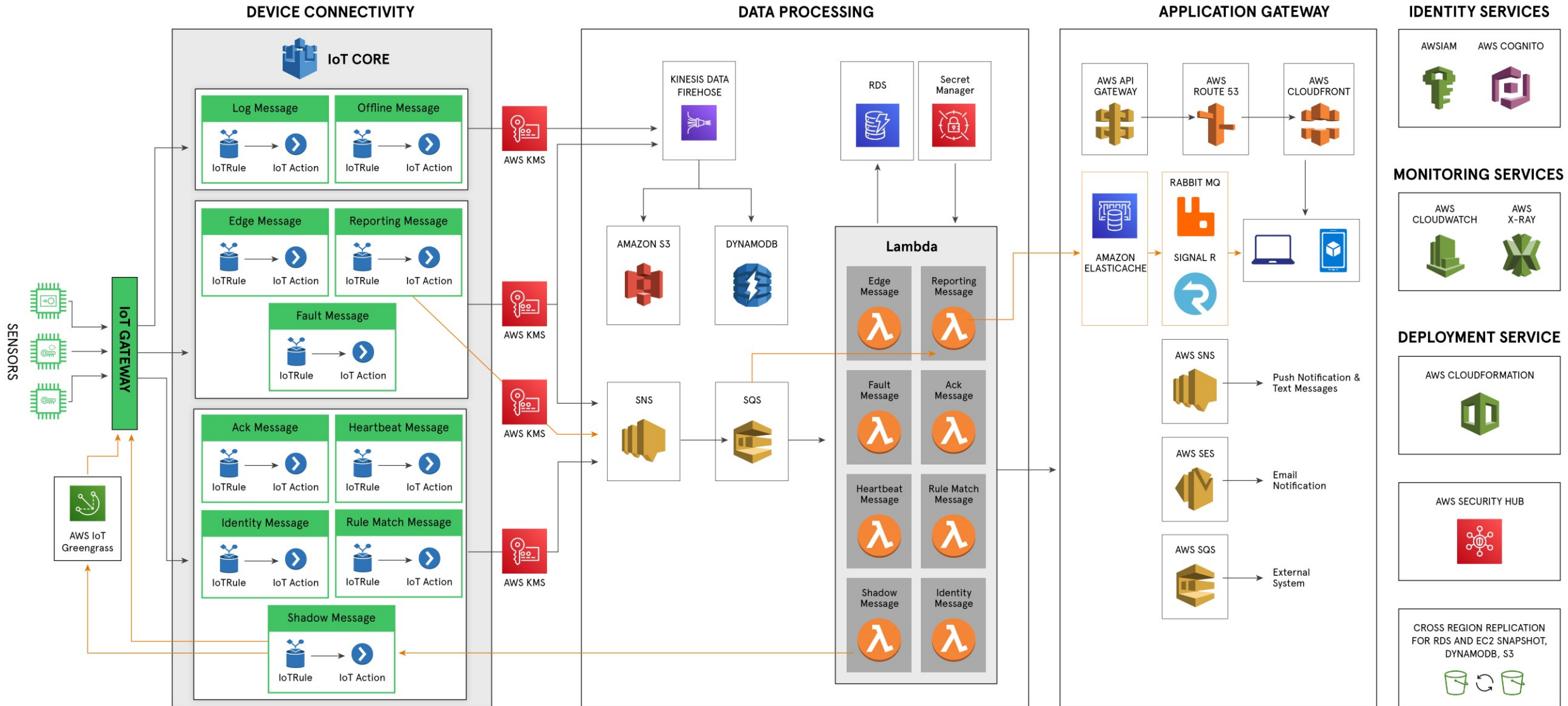
/IOTCONNECT[®] enables ALL devices types through a single pane of glass.

/IOTCONNECT Building Blocks w/ AWS



FreeRTOS	Python	Greengrass	IoT Core	RDS	QuickSight	SageMaker
C			EventBridge	S3 Data Lake	Grafana	
Transport			Kinesis	S3		
amazon sidewalk	LoRaWAN™ PRIVATE PUBLIC		Lambda	DynamoDB		

/IOTCONNECT Platform Architecture

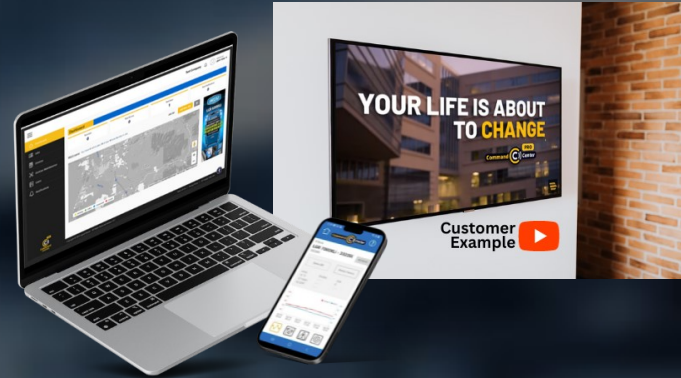


//IOTCONNECT Developer Personas



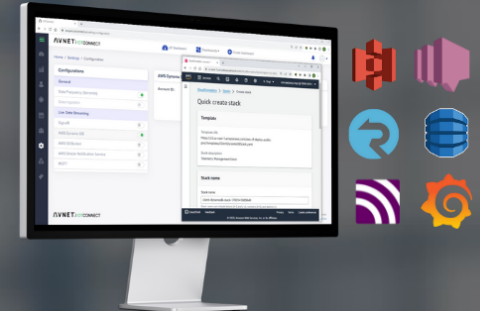
- Device, User, Roles, and Entity Admin
- Security manag
- Basic dashboarding
- Internal Ops

Device Builders & Deployment Managers



- RESTful API
- Predictable URLs
- Intelligent error handling
- OAuth 2.0 authentication
- Access to all IoT functions

Application & UX Developers



- Dynamo DB, S3
- Signal R
- MQTT
- Grafana
- AWS SNS

Cloud Developer & Data Science

/IOTCONNECT SDKs: Deliver a Positive Developer Experience



Objectives:

- Deliver device-builders a positive developer-experience
- Integrate into the Avnet Supplier's development flow and ecosystem
- Provide confidence for a successful outcome at the onset of our customer's IoT journey



Software Resources

- /IOTCONNECT Enablement, Witekio, and Softweb service teams
- Access to global and scalable Avnet software services
- Skills: C, Python, Java, OS/RTOS, Applications, AI/ML



Deliverables

- /IOTCONNECT Library
- SDK (C / C# / Python / ...)
- Test Strategy
- Platform Targeted Samples
- Developer Guide
- QuickStart Experience

/ Device Enablement: SDKs

Generic SDKs

Multiple Languages and Environments



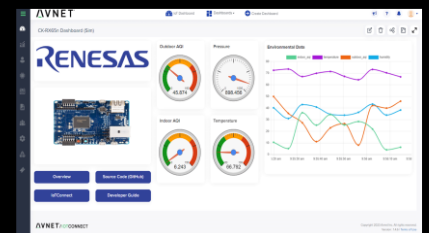
Platform-specific SDKs

Development Boards and Embedded Hardware



 <https://docs.iotconnect.io/iotconnect/sdk/>

 <https://github.com/avnet-iotconnect/>



/IOTCONNECT AWS Demo Examples



1 - Audio Detection - 1 Device

Urban Sound Event Classifier

ML Acceleration Engine for Low-Power MCUs

Sensor Location

Sound Generator (mciBMAX)

NO ACTIVITY

Date	Resource	Event Name	Condition	Severity
Jan 02, 2024 22:02:30	ml-ai-0000-01	Rule Matched	class == "Signal"	

AI/ML Audio Classification

MCI-RASYN

RENESAS EDGE IMPULSE SYNTIANT

Commands: UP, DOWN, BACK, NEXT, OK SYNTIANT

MESSAGE COUNT: 0

Attribute	Time	Value
inferencelab	2024-01-12 01:23:15	600
msgCount	2024-01-12 01:23:15	0
inferencelab	2024-01-12 01:23:15	600

Edge ML Voice and Motion Detection

Shark Ninja Grill Demo

NINJA

Grill State: ON

Grill Temp (F): 425

DEMO OVERVIEW

FW Version	Last Refreshed
01.03.00	2024-01-12 01:23:15

Device Command (SINAMMCL01)	Executed On (UTC)	Status	Executed Count
setTemp 600	Jan 12, 2024 01:16:36	Success	2
grill_on/off on	Jan 12, 2024 01:16:27	Success	1
grill_on/off on	Jan 10, 2024 12:02:00	Success	1
grill_on/off on	Jan 10, 2024 10:16:19	Success	2
grill_on/off on	Jan 10, 2024 10:16:19	Success	1

Consumer Indoor Grill