Driving Into the Future with Cisco IoT Control Center

Cisco Knowledge Network Webinar

December 6, 2023

Driving Into the Future with Cisco

Cellular IoT management that powers your business

Today’s speakers

John Malzahn

Leader, Provider Mobility
Product Marketing

Michael Blanck

Engineering Product Manager,
IoT Control Center

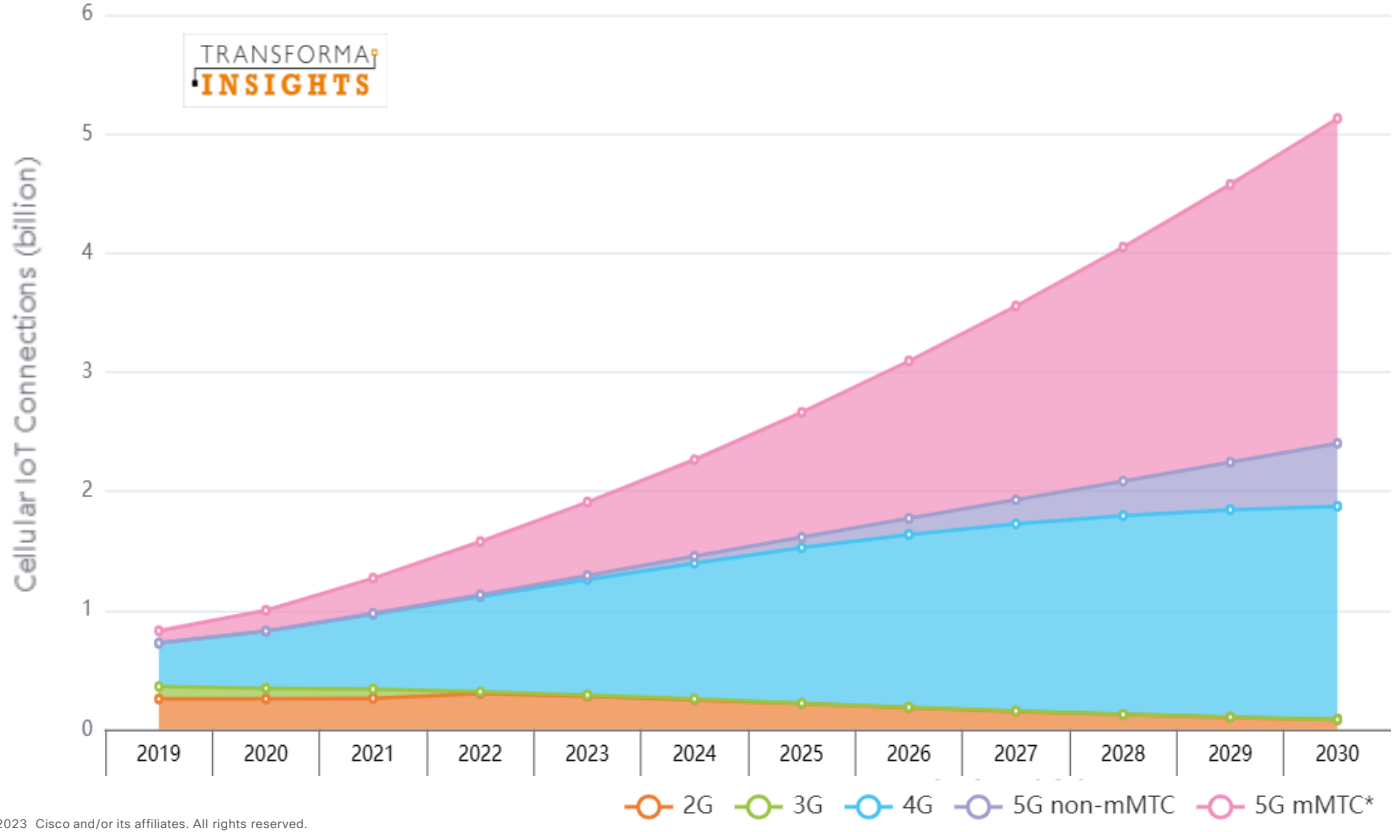
Karthik Sundaramurthy

Engineering Product Manager,
IoT Control Center

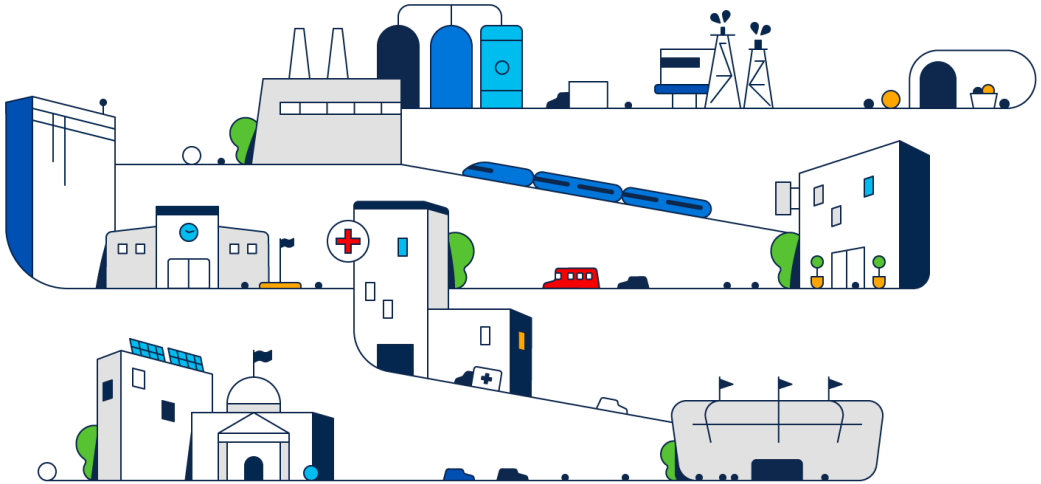
Agenda

- Transforming business with cellular-powered IoT
- Introducing Cisco IoT Control Center
- How IoT Control Center does more than manage connectivity
- Product Demo
- Getting started

Cellular IoT connections will grow to 5B by 2030



And IoT connections are transforming the enterprise



56% Increasing efficiency and productivity

37% Reducing cost

49% Improving service or product quality

27% Enhancing customer experience and retention

The impact is significant across a range of industries and use cases

Connected car

Automakers are making driving safer through vehicle telematics and adding new revenue streams

High data usage, low latency, complex SIM lifecycle

Financial services

Financial organizations are getting scale and reliable service for PoS and ATM systems

Mission-critical connectivity, low latency

Smart meters

Utilities are saving costs and improving customer service with smart electric meters

Low data usage, low reliability, high latency

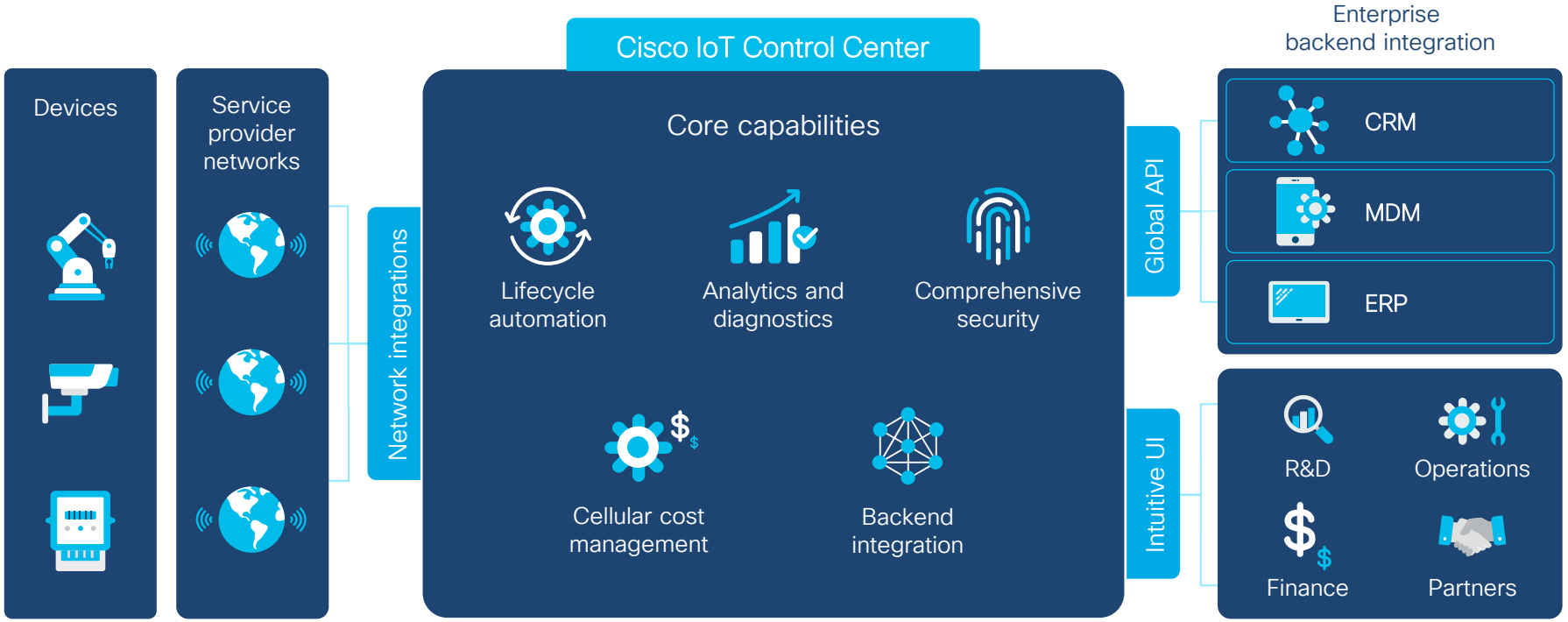
Asset management

Retailers are monitoring the health of their machines and servicing them faster

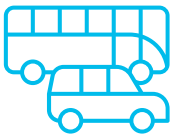
Low data usage, low reliability, high latency

Control Center delivers differentiated value

Helps to solve many key IoT challenges



Cisco IoT Control Center is driving real-world impact at scale



42% **100M** connected cars

7% **23M** smart meters

8% **20M** fleet management, telematics

6% **14M** security and automation

6% **14M** point of sale, retail

241M

IoT subscribers

3B events per day
15TB data per day

123M on 5G IoT CNaaS

YoY growth

50+ service providers, **30K** enterprises globally

5G

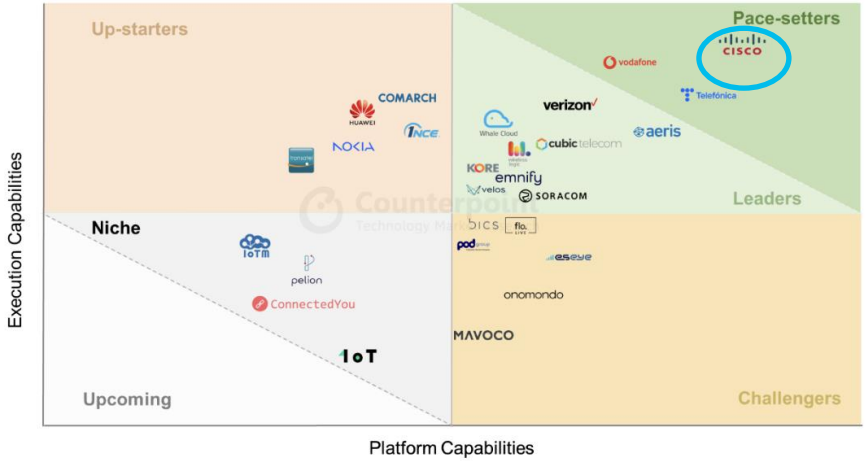
World's first 5G SA and more in development

32%, 73M includes Consumer, Insurance, IIoT, Asset tracking and other use cases.

Cisco leads as industry “Pace-setter” in Counterpoint Research’s Global 2023 IoT Connectivity Management Platform (CMP) Ranking*

Counterpoint

Counterpoint CORE: Connectivity Management Platform, 2023



“Cisco has a significant lead over its competitors in terms of platform capability as well as execution capability.”

Akshara Bassi, Senior Research Analyst, Counterpoint

*Source: Counterpoint Research, 2023 IOT Connectivity Management Platform Rankings Report

Connected Car

Why automotive OEMs want Control Center

Full automation

- Automated provisioning
- Lifecycle aware configuration
- Business process automation
- Rich APIs and feeds

Flexible billing

- Rich set of rate plan types and billing options
- Split billing and multi-party billing
- Event-driven incentives and credits

Global scale

- 50+ service providers covering 120+ countries
- Same integration for all service providers
- Localization tools

Ops tools

- Real-time diagnostics
- Machine-learning apps
- Real-time network visibility
- Security tools and fraud prevention

Automotive OEMs want to offer:

Telematics services

Internal use

- OTA SW updates
- Diagnostic information
- Metrics and data collection

Passenger safety

- Automatic crash notification
- SOS button
- E-call compliance

Security and convenience

- Door lock/unlock
- Vehicle recovery / Kill engine
- Concierge service
- Mobile application

Infotainment services

Built-in head unit apps

- Streaming music
- Parking finder
- POI and navigation

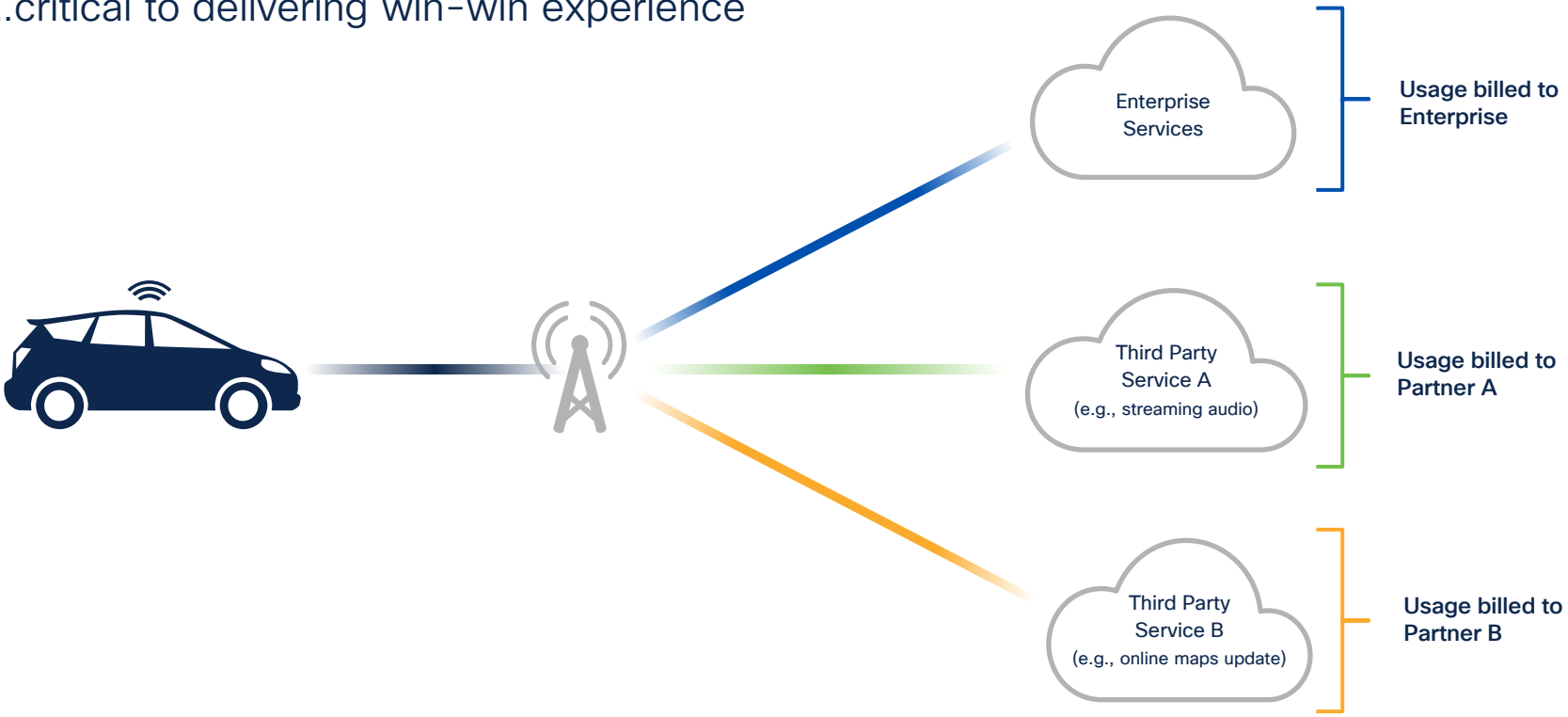
Third-party services

- Usage based insurance
- Premium audio and video
- Apple CarPlay/Android Auto

In-vehicle Wi-Fi hotspot

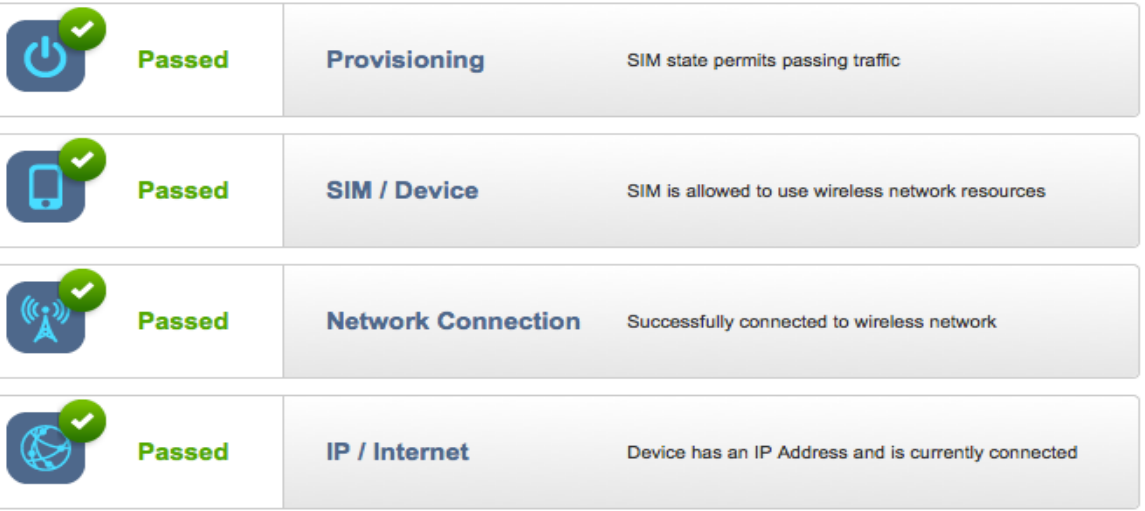
Multi-party and Split billing

...critical to delivering win-win experience



Troubleshooting simplified for the average user

Device Status	**Congratulations! This device has successfully connected.**
ICCID	**89302720396911992662**
In Session	**Yes**
SIM Status	**Activated**
Suspended	**No**
SIM Barred	**No**
Usage Limit Reached	**No**
Rate Plan	**JW Ent 10MB**
Month to Date Data (MB)	**1.319**



- Can the device interact with the customer servers?
- Is the APN configured properly?
- Is the IP address incorrect?
- Can the device open ports or sockets?

Connected vehicle: Major trends

Autonomous, **c**onnectivity, **e**lectrification, **s**hared mobility (ACES)

Connectivity reliability
“car always-connected model”

Increased data, processing, compute, transfer, latency requirements

Need to monetize services; new partnerships and business models

Infotainment evolving; drivers expect a tailored experience

Increased security risks

Can current connectivity management support the future?

Control Center Roadmap and 5G Innovation

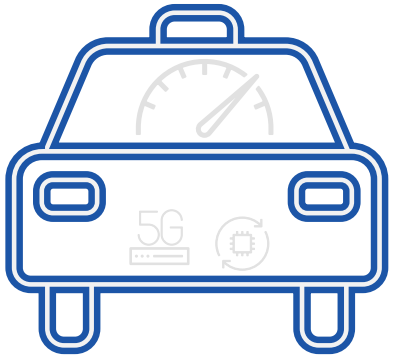
Powering 5G Enabled Applications

Commercially deployed today with a path to realize applications of the future

Safety and Security, Telematics

- Predictive maintenance with diagnostics
- OTA updates (cybersecurity correction, driving features, etc.)
- Telematics, Fleet Management and Location based services
- OEM led usage based insurance

Data enrichment for 3rd party services (EV infra, emergency, etc.)



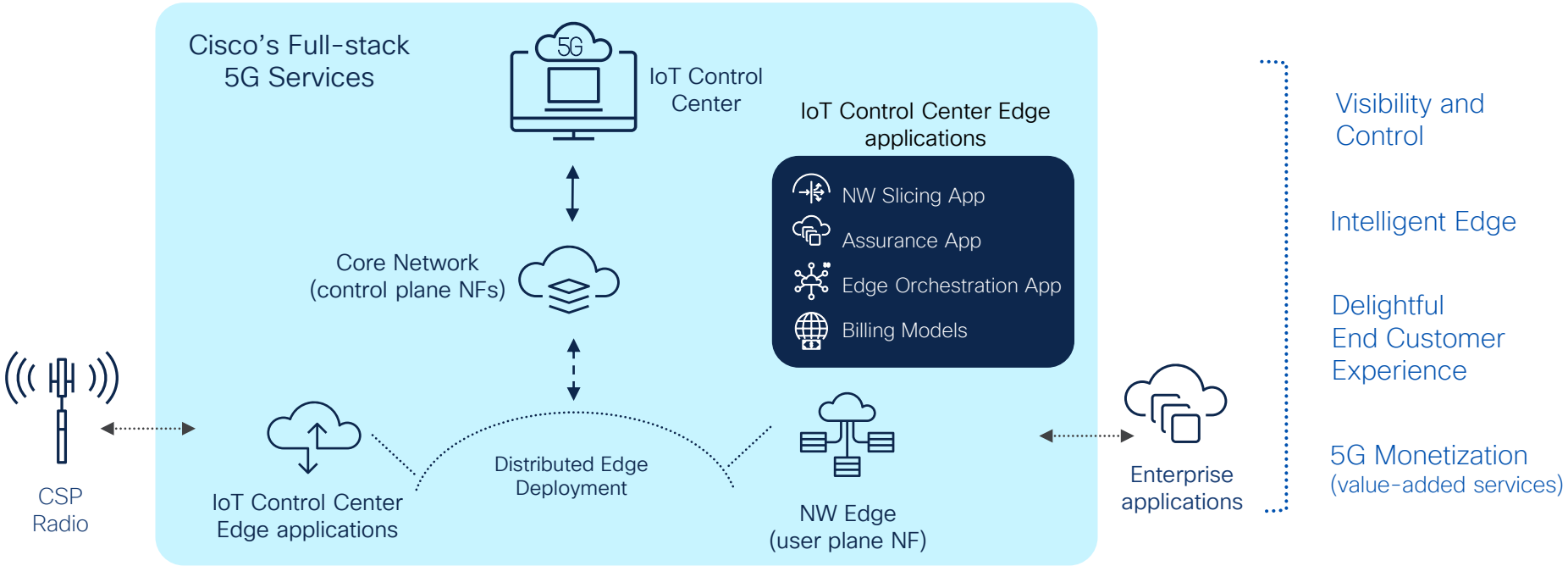
Consumer Experiences

- Infotainment applications, Wi-Fi hotspot
- Accident Avoidance
- Ecommerce / marketplace for 3rd party apps
- C-V2X and edge: HD Maps, VRU protection services, VPA, etc.

Electrification | Edge Intelligence | Intelligent cockpit

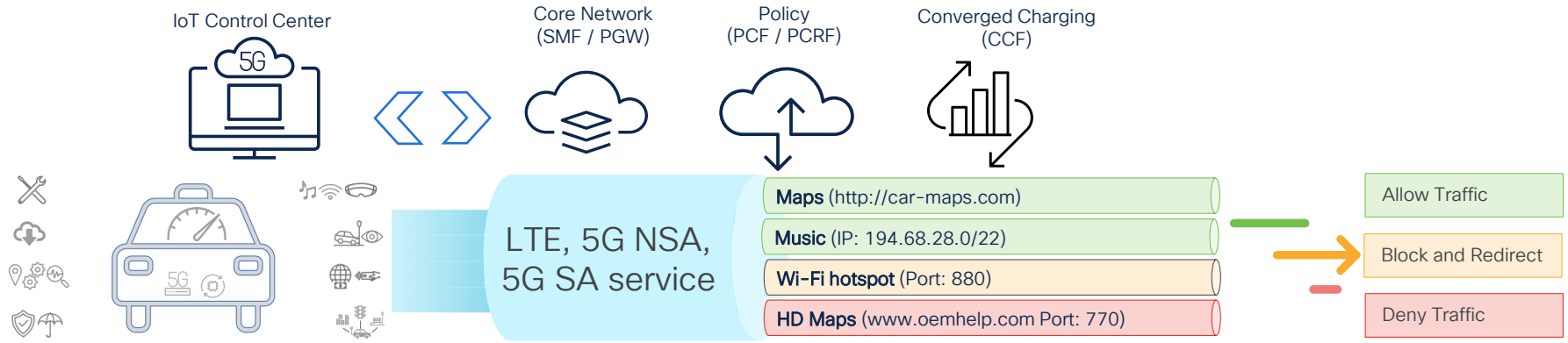
Cisco’s full stack 5G service

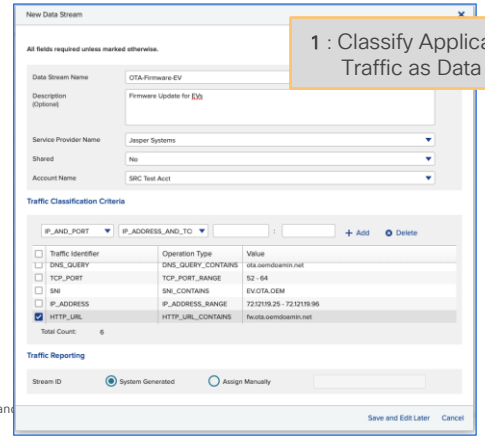
Enabling global IoT deployments with agility



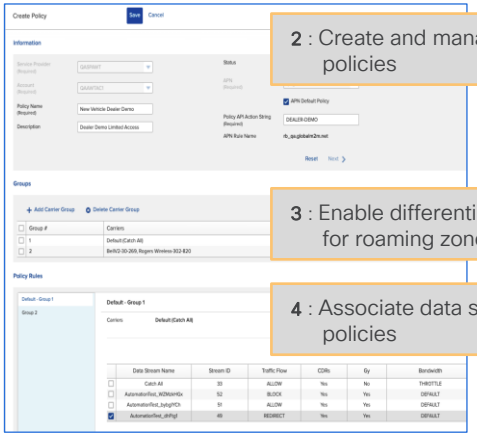
Self-serve capabilities to launch subscription services OnDemand

With Dynamic traffic classification, policy and charging control





1 : Classify Application Traffic as Data Streams

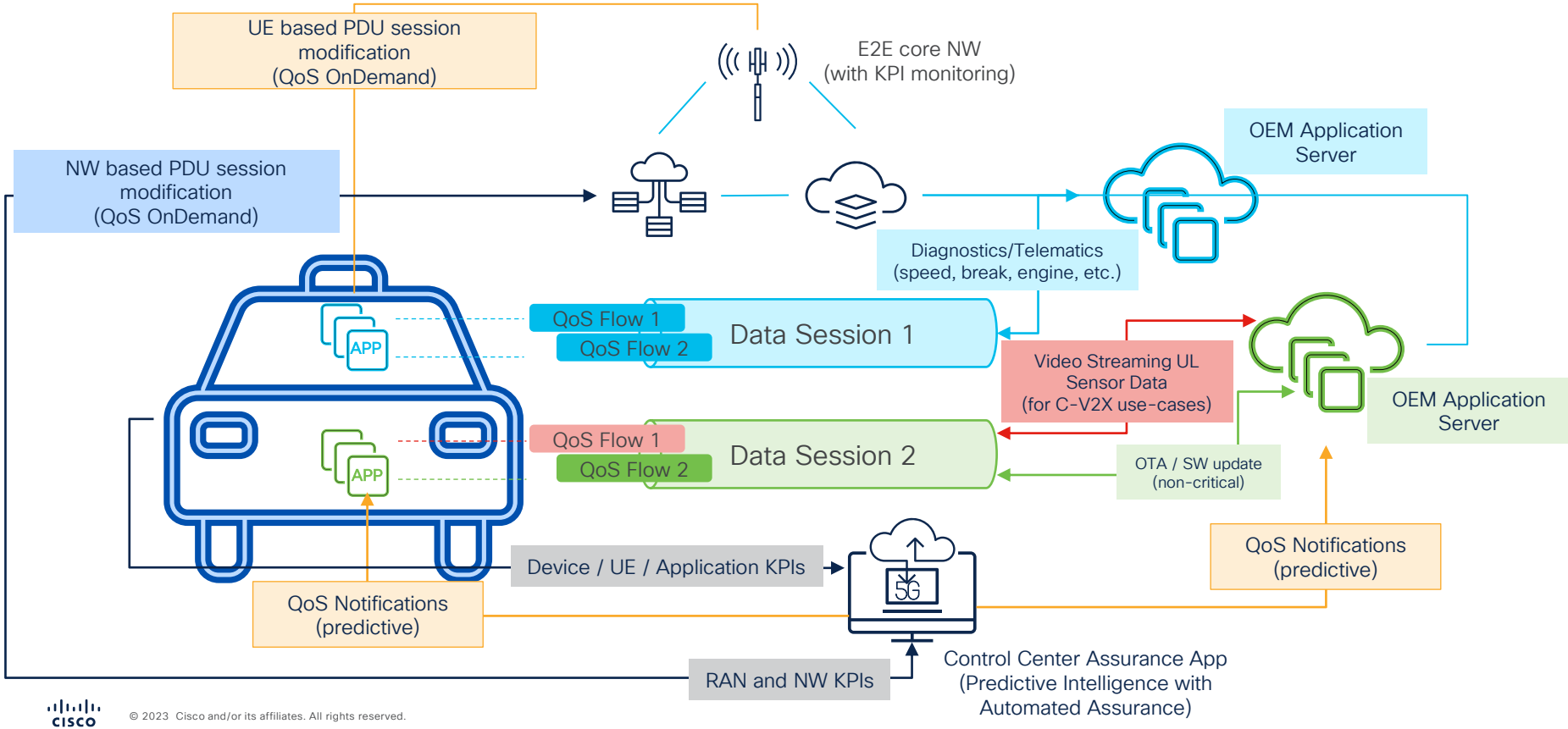


2 : Create and manage NW policies

3 : Enable differential treatment for roaming zones.

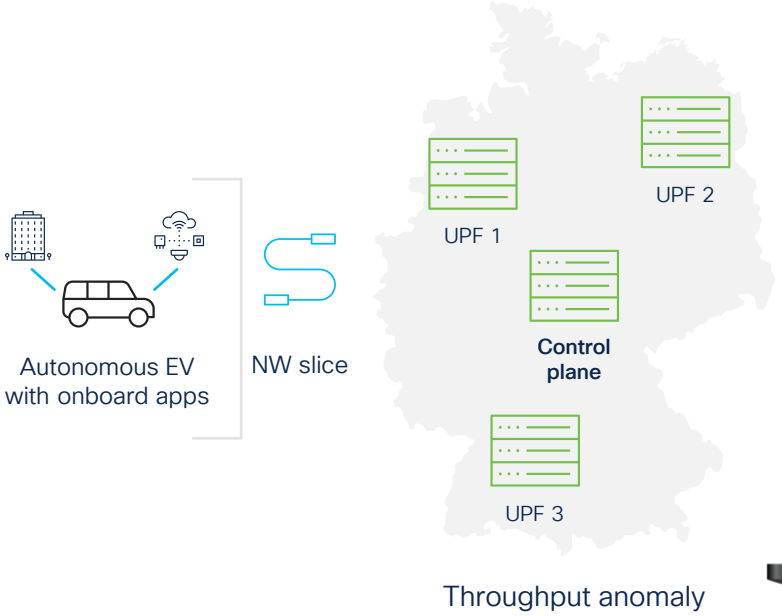
4 : Associate data streams with policies

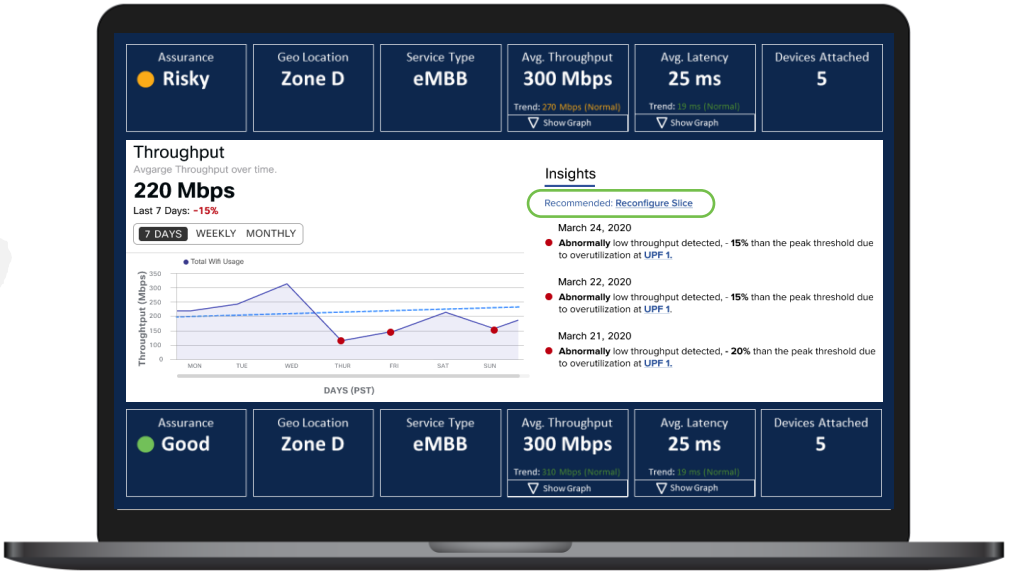
Closed-loop Service Assurance
QoS OnDemand



Diverse 5G applications with slicing and edge capabilities

Dynamic network slicing is available with IoT Control Center today





Demo

The Cisco difference

We are the CMP market leader

Our global experience, reach, and track record are second to none. We connect more devices and connected cars for more enterprise customers than any other platform on the planet.*

We understand your business better

Our scale and reach gives us a deep insight into markets and your needs. From the complexity of connected cars to the massive scale of smart meters, Cisco has helped 32,000+ businesses across industries expand their cellular IoT.

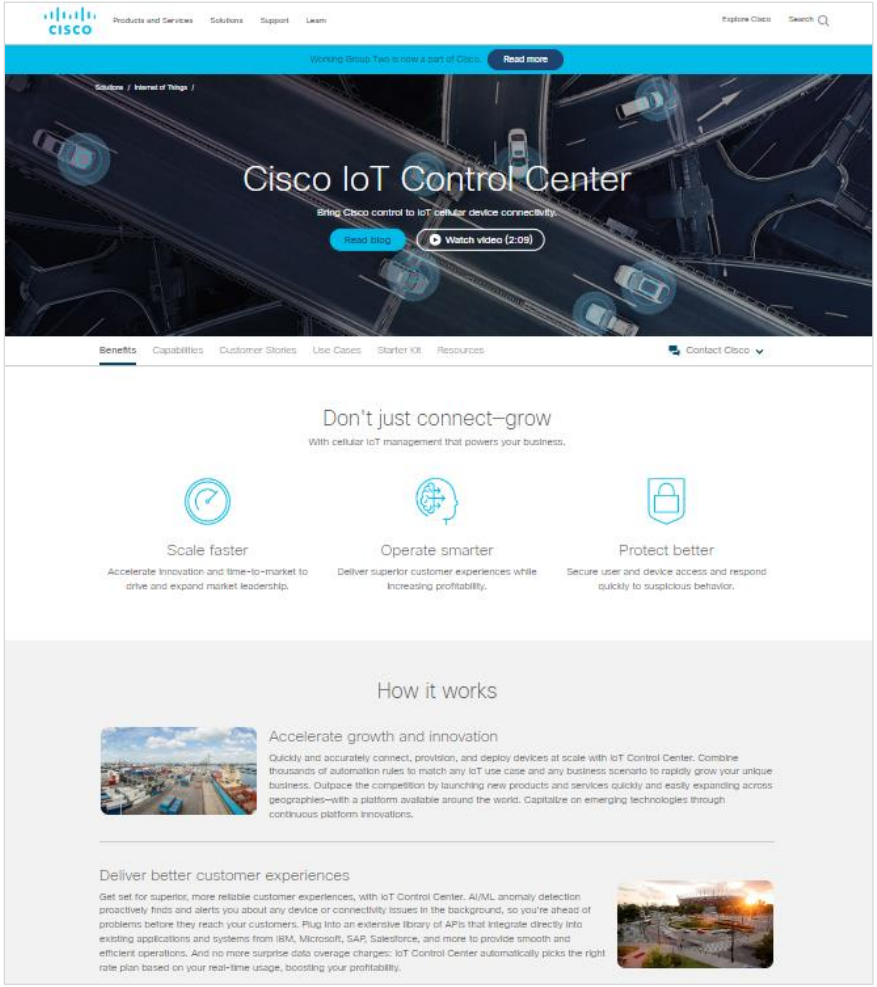
We are constantly innovating

At Cisco, we are solving tomorrow's IoT challenges today to give you the competitive edge to focus on what matters most—growing your business.

Over 240M connected devices including 100M connected cars for over 32,000 enterprises.

For more information visit our web page:

cisco.com/go/iot-mobility



Questions?

The bridge to possible