

The Cisco Live! logo features the word "CISCO" in a dark blue, sans-serif font, followed by "Live!" in a dark blue, cursive script font. The background of the entire image is a vibrant, multi-colored abstract pattern of overlapping, wavy lines and geometric shapes, transitioning from dark blue on the left to bright yellow and white on the right, with a sunburst effect on the right side.

CISCO *Live!*

Let's go

Don't Just Connect, Grow your IoT Business with Cisco IoT Cellular Connectivity

Christian Falckenberg, Technical Solution Architect

Who do you work for?

Service Provider who offers IoT connectivity

0%

Partner who sells IoT solutions

0%

Enterprise who uses IoT solutions

0%

Other

0%

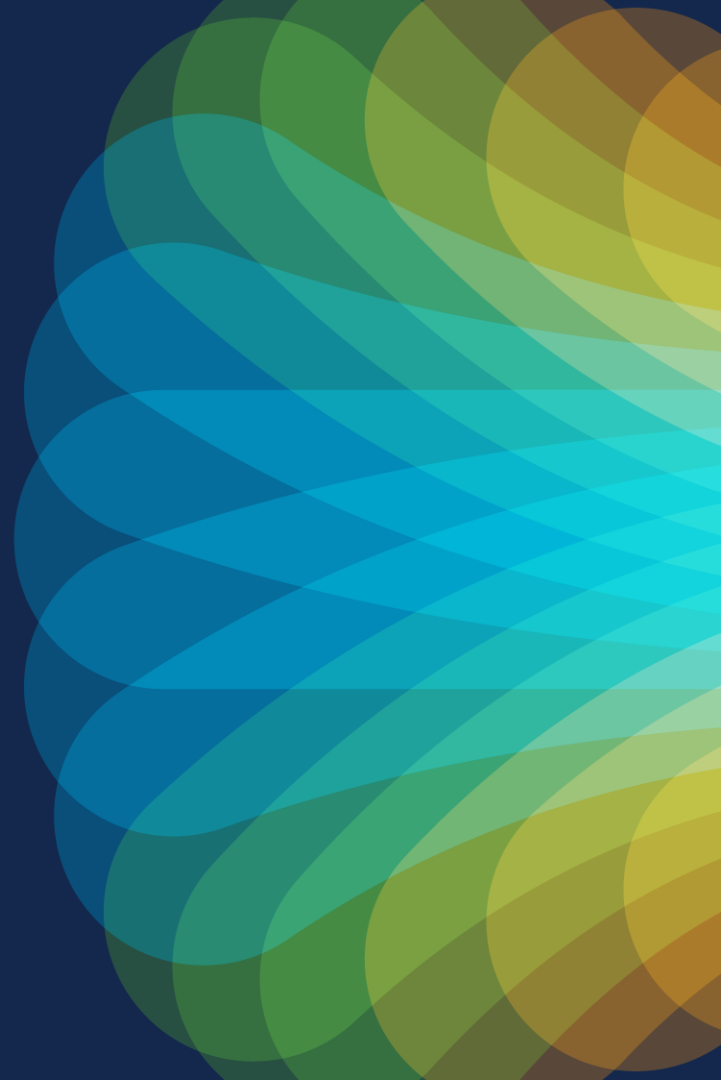


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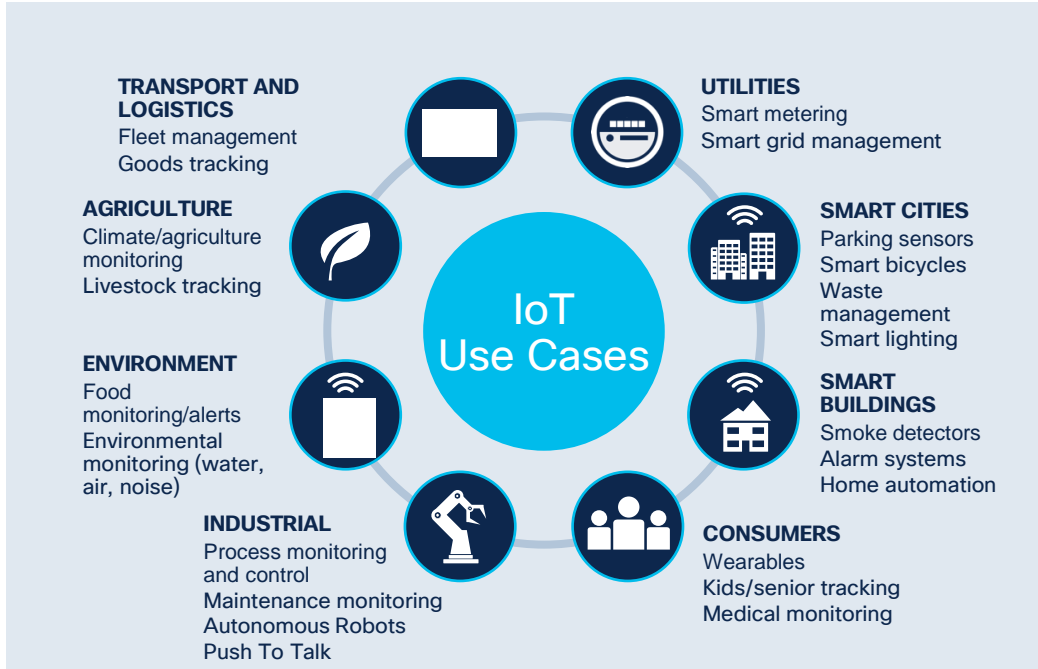
Agenda

- IoT Connectivity Market
- Cisco IoT Control Center Solution
- Demo:
 - Deploy, Manage and Mitigate
 - Automate
 - Program
- Innovation
- Why Cisco

IoT connectivity market



The complexity of the IoT market



- Massive IoT requiring low cost / low power devices for small data volumes
- Industrial applications requiring low latency and extra security
- Mission Critical apps requiring high bandwidth and low latency
- Consumer and Enterprise
- Different vertical industries
- Variety of infrastructure and business requirements

All use cases need connectivity!

IoT Wireless Connectivity Options

4G, 5G



- Variable to high bandwidth, easy to deploy
- Variable monthly cost, dependent on Service Provider

2G, NB-IoT, LTE-M



- Long range, low power, low bandwidth
- Variable coverage and monthly cost, dependent on Service Provider

NoN-Cellular
LPWA



- Long range, low power, very low bandwidth
- Great for sensors with small data payload

802.11 Wi-Fi



- High bandwidth, broadly supported
- Public spectrum, prone to interference

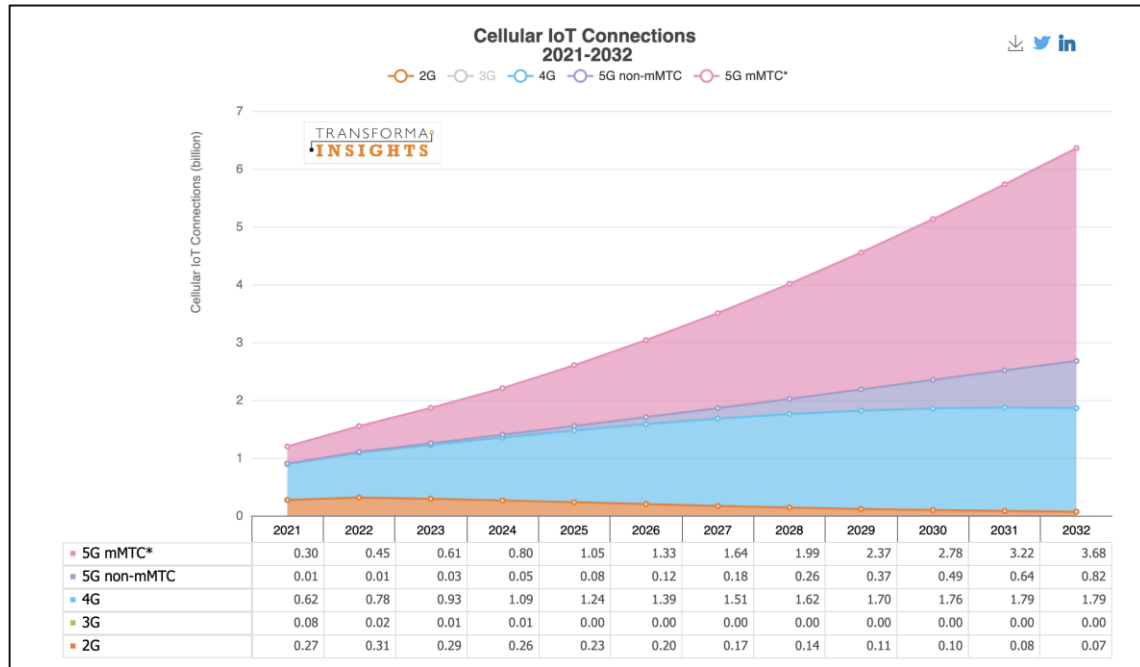
Cisco URWB
(aka Fluidmesh)



- Ultra reliable, high bandwidth
- Unlicensed spectrum

The IoT Connectivity Market

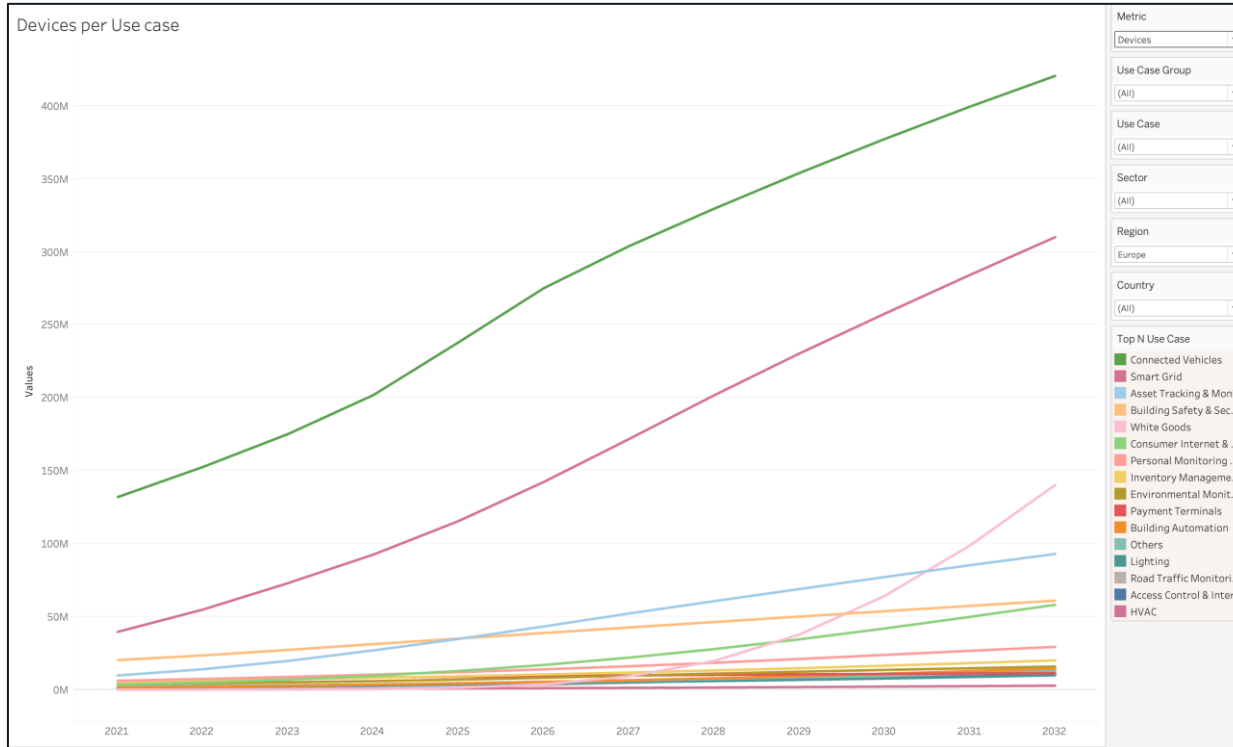
Steady growth for cellular connections



<https://transformainsights.com/research/forecast/highlights>

- Cellular IoT connections growing from 2 billion in 2024 to 2030:
 - [Transforma](#): 5 Billion
 - [Omdia](#): 5.4 Billion
 - [Counterpoint](#): 6 Billion

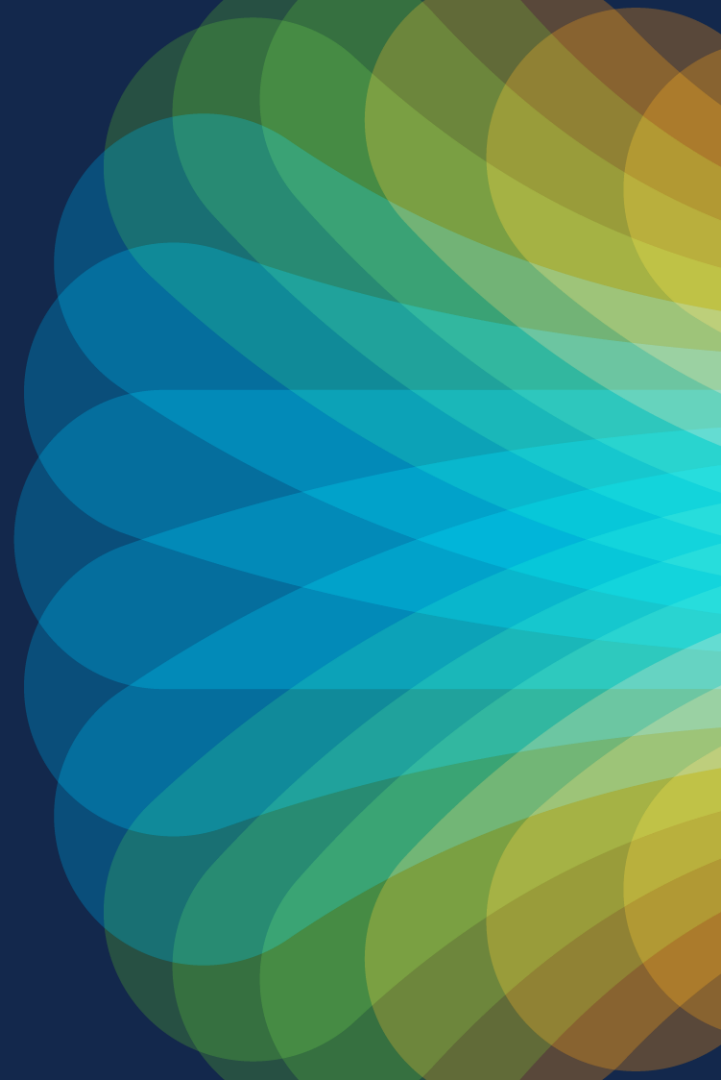
Devices per Use case in Europe



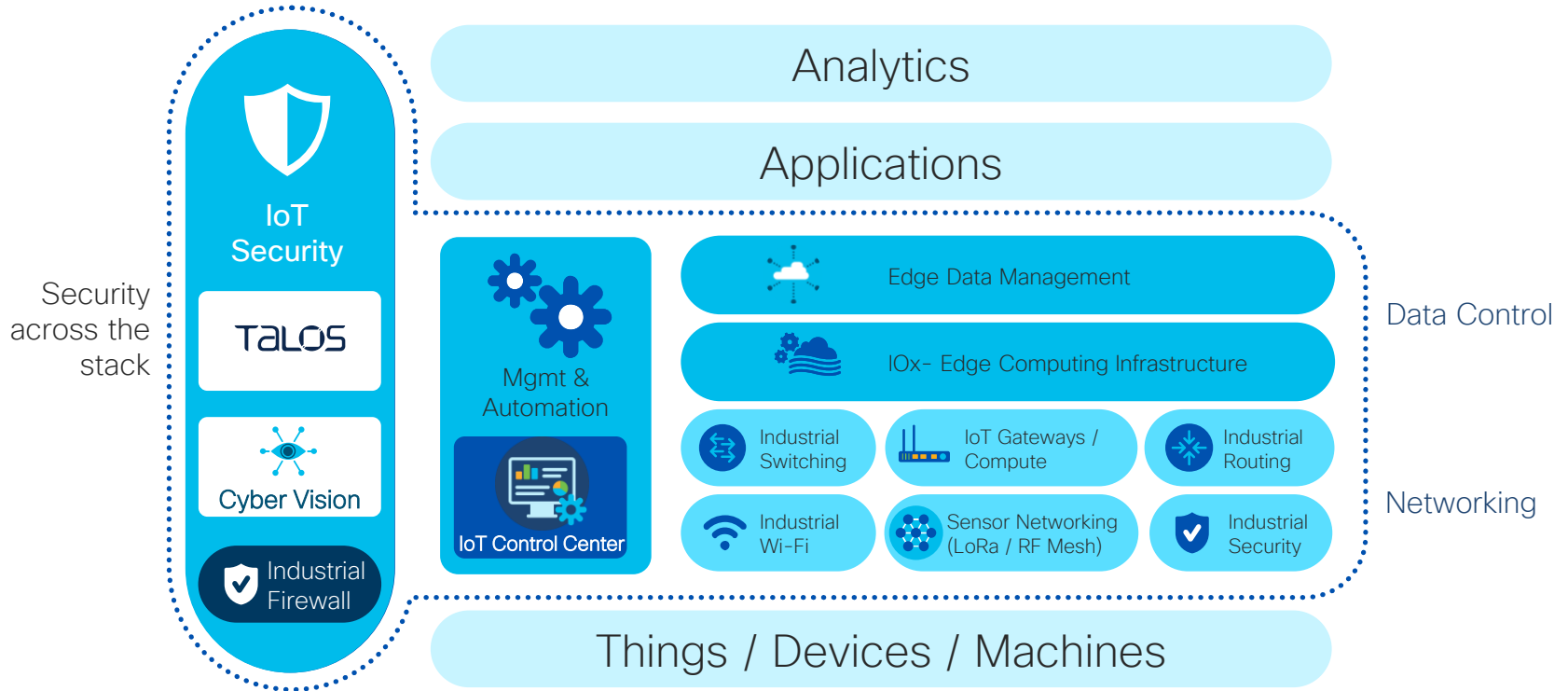
Based on Transforma IoT forecast

Connected vehicles are leading the growth, followed by Smart Grid, Asset Tracking and Building Safety and Security

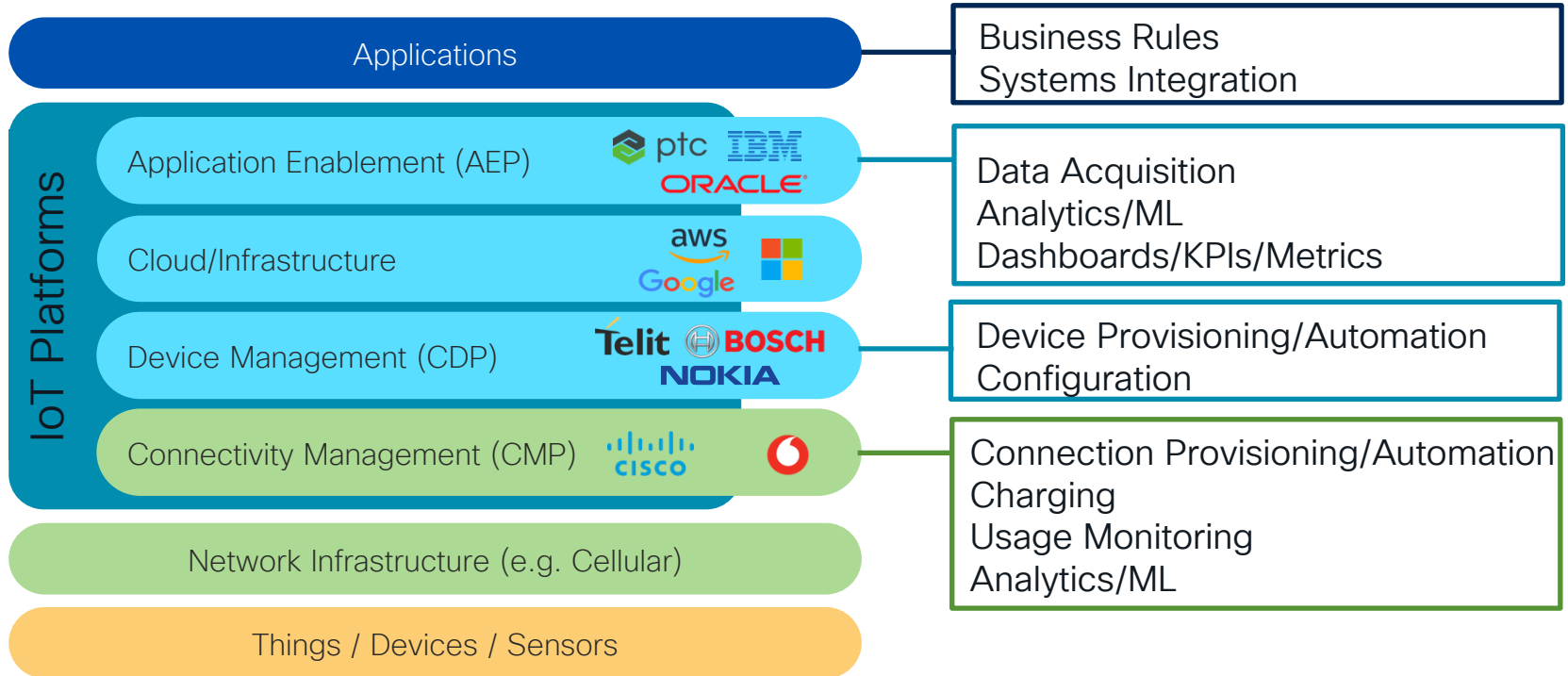
Cisco IoT Control Center solution



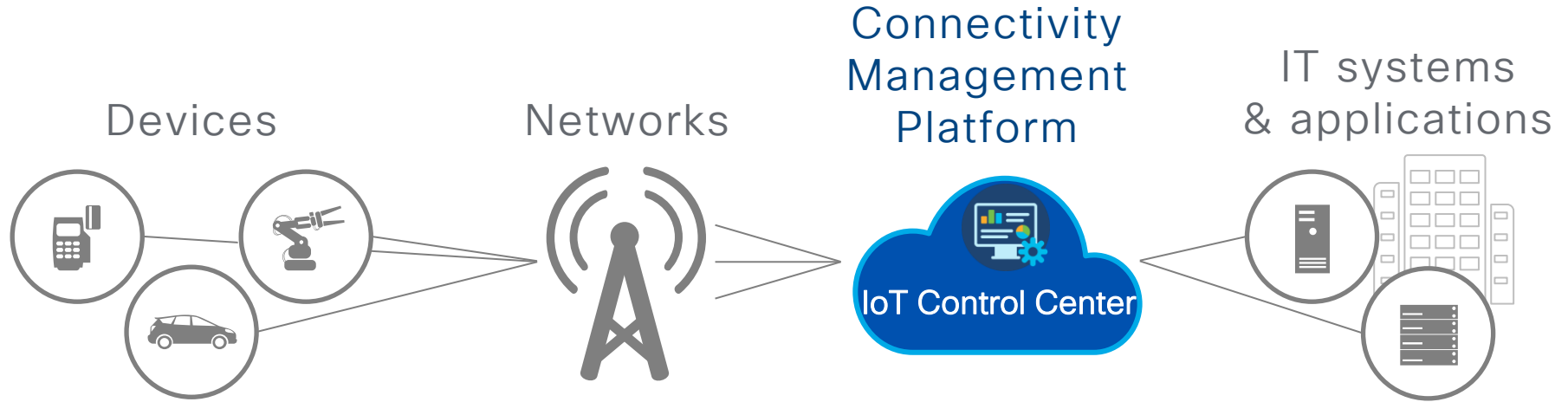
Cisco's industry-leading IoT portfolio



IoT Solutions address many different layers



Cisco Connectivity Management Platform



Automated connectivity
management for all your
devices globally

IoT CC meets customer needs across verticals



Connected Car

Auto makers are making driving safer through vehicle telematics

IoT CC ensures reliable cellular connectivity and helps save data costs for millions of cars on one platform.

High data usage, low latency, complex SIM lifecycle management



Financial Services

Financial organizations are getting scale and reliable service for Point of Sales and ATM systems

IoT CC enables businesses to remotely identify and resolve usage and connectivity issues at scale with analytics-based diagnostic tools.

Mission-critical connectivity, low data usage, low latency



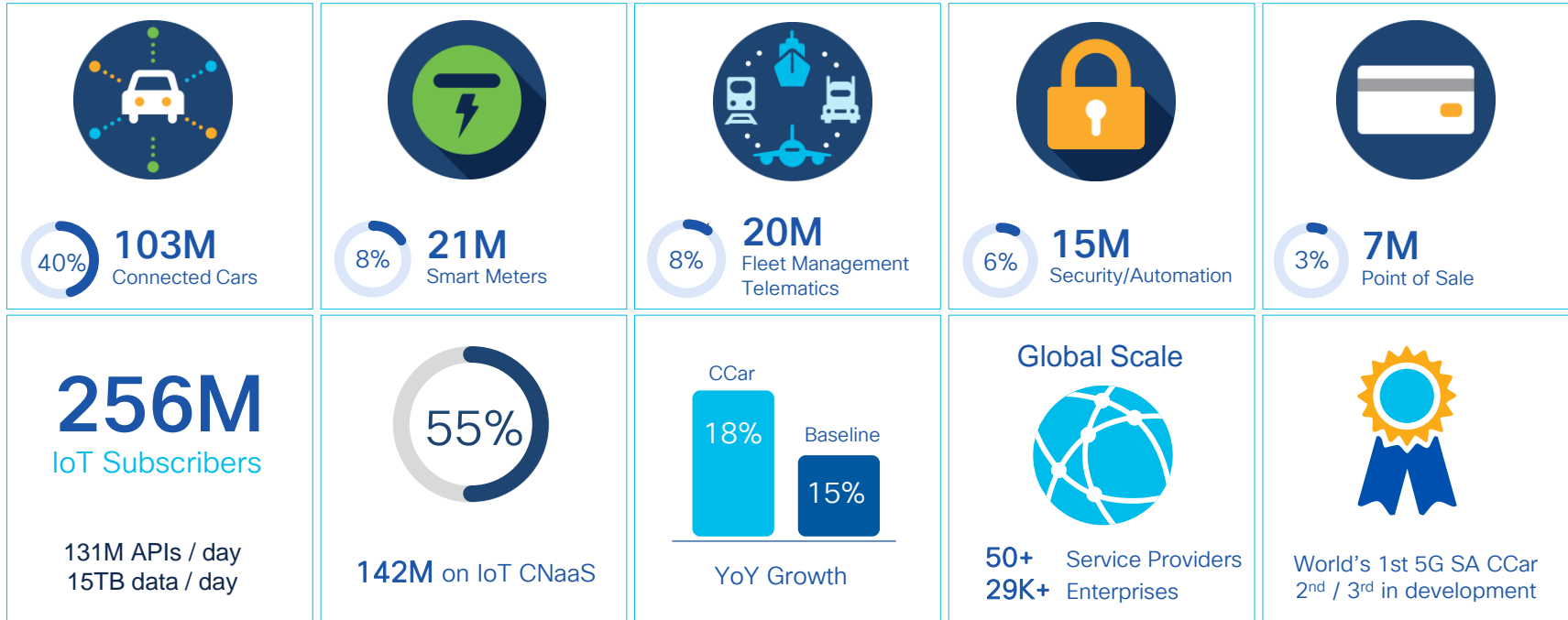
Smart Meters

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

IoT CC provides fine-grain visibility and control for millions of devices so organizations can manage issues themselves – day or night – without a call to their service provider.

Low data usage, lower reliability requirements, high latency

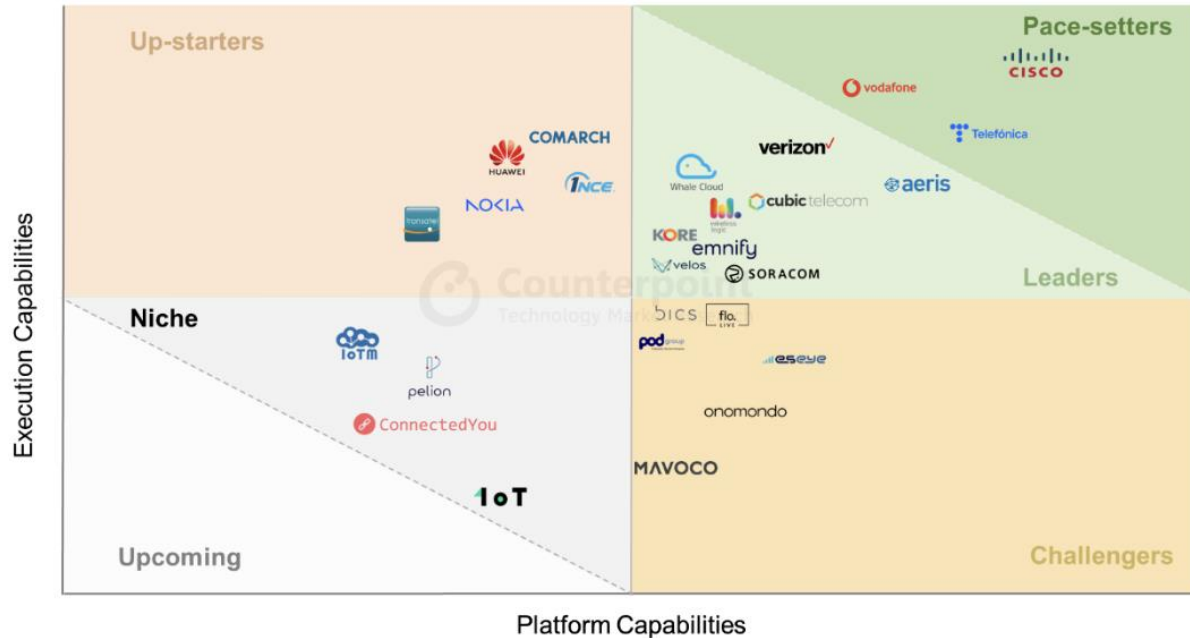
IoT Control Center Business Snapshot



90M includes Consumer, Insurance, Industrial IoT, Asset tracking, Retail, and other use-cases.

Independent market analysis from Counterpoint

Counterpoint CORE: Connectivity Management Platform, 2023

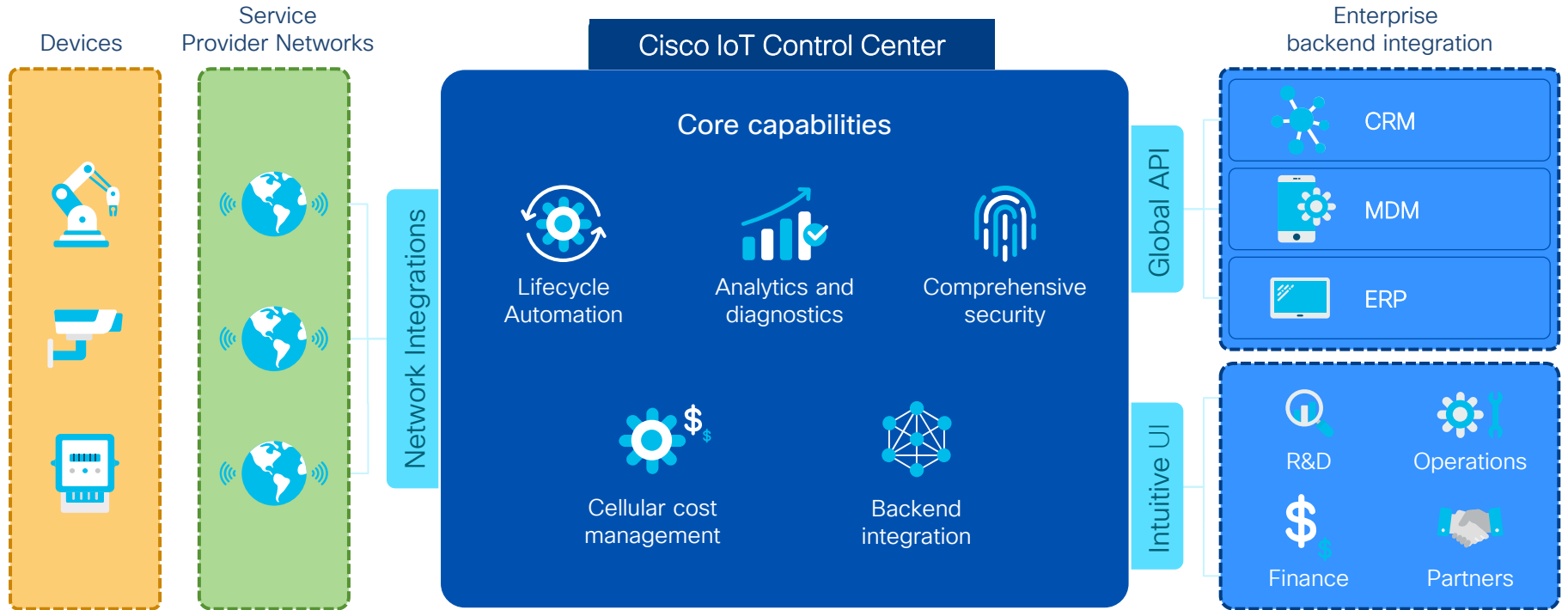


“Cisco leads in provisioning, orchestration, analytics, product maturity and integration with OSS/BSS”

<https://www.counterpointresearch.com/insights/cisco-telefonica-and-vodafone-pace-setters-for-2023-iot-connectivity-management-platform-cmp-ranking/>

Automated connectivity management

Removing the complexity from the equation



IoT Control Center Business Model

Sold by Cisco to Service Providers



Operates Control Center in 15+ data centers around the world

Sells service through subscription



Integrates with operator network

Service Providers



Sells connectivity



Enterprises



Sells, deploys and manages devices



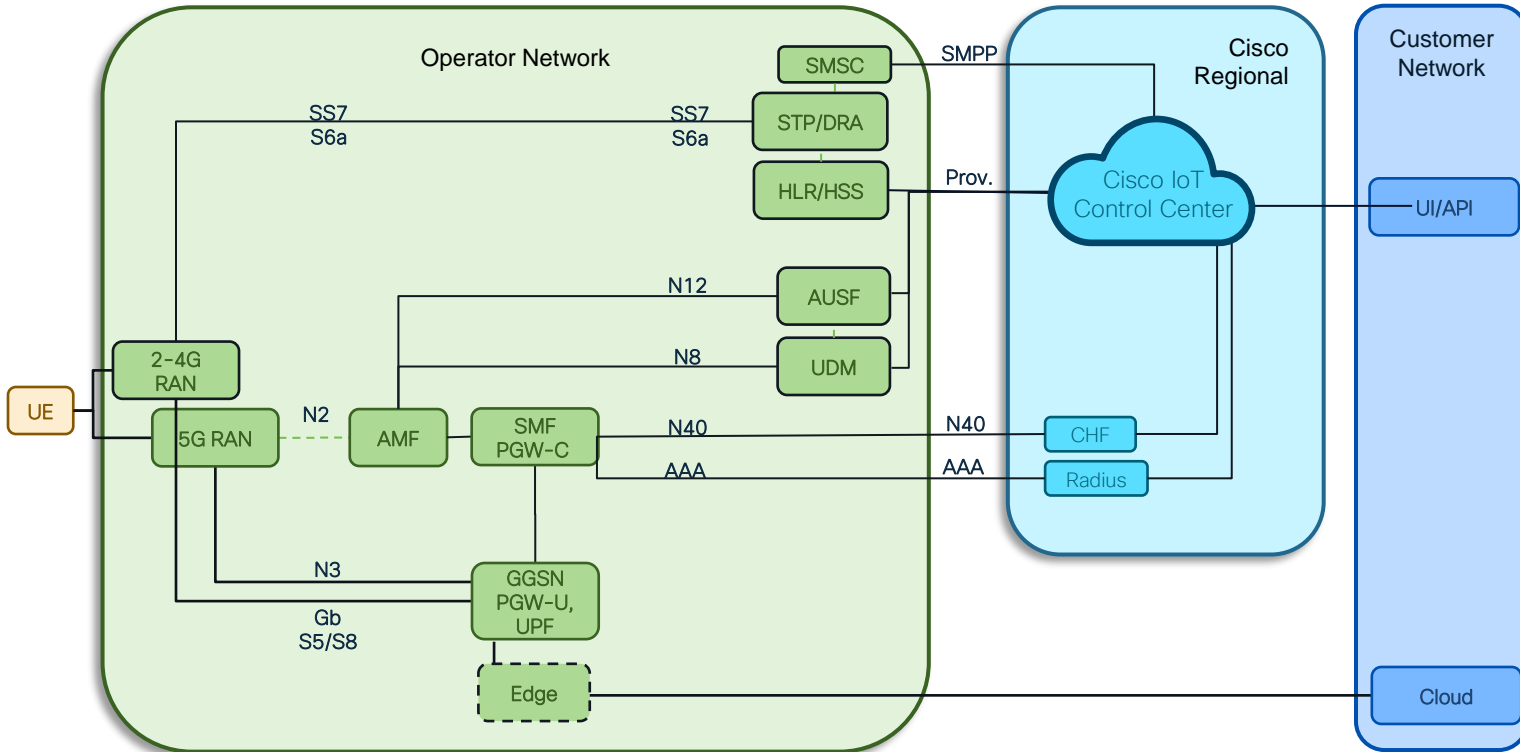
Connected Devices



Resellers

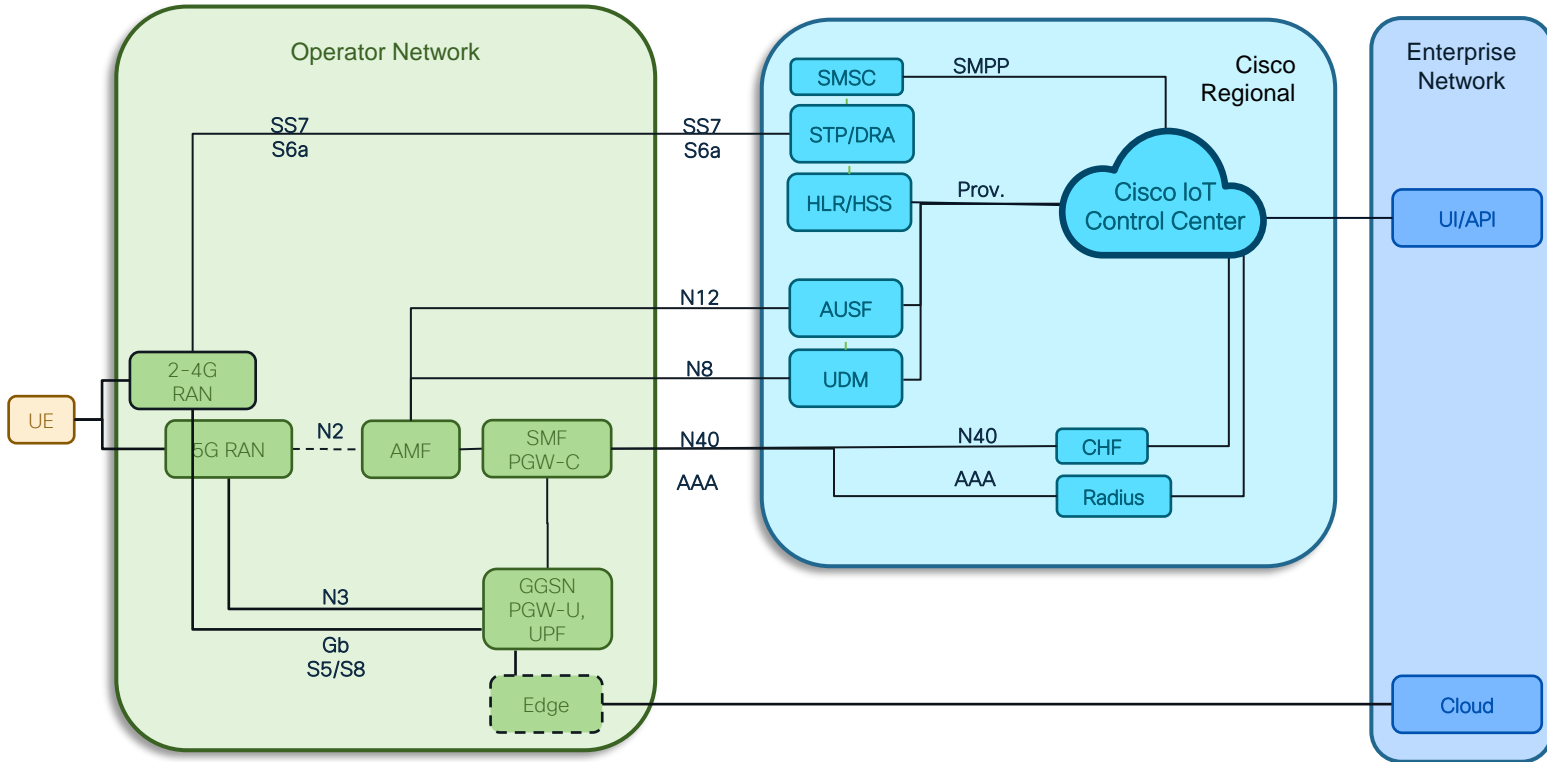


Control Center Deployment Model V2



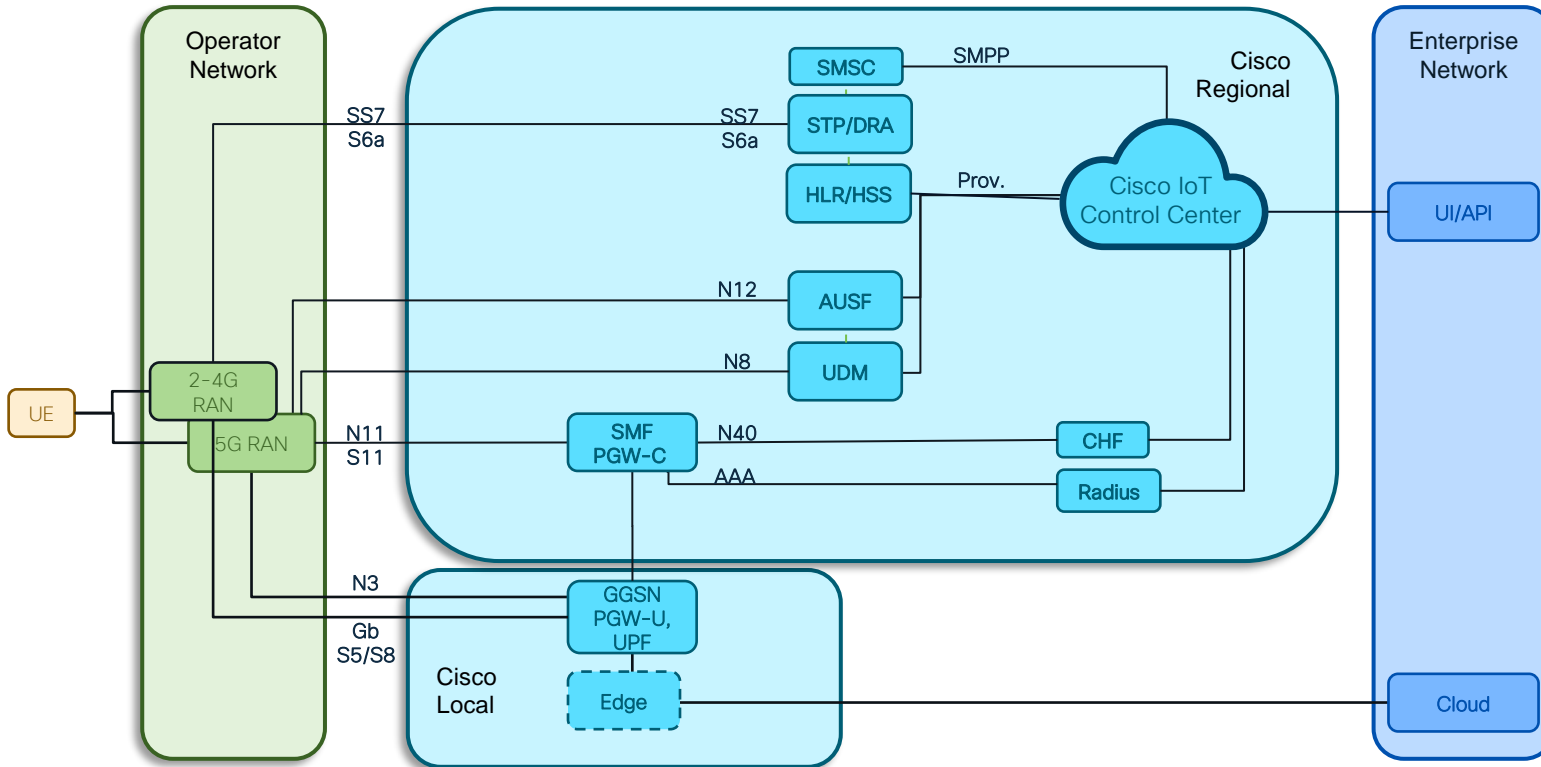
- CC provisions subscriber management from operator
- CC sends SMS via operator SMSC
- CC collects charging records via Radius, CHF or SFTP uploads

Control Center Deployment Model 1C



- CC provides the subscriber management systems and the SMSC
- CC collects charging records via Radius, CHF or SFTP uploads

Control Center Deployment Model 1B



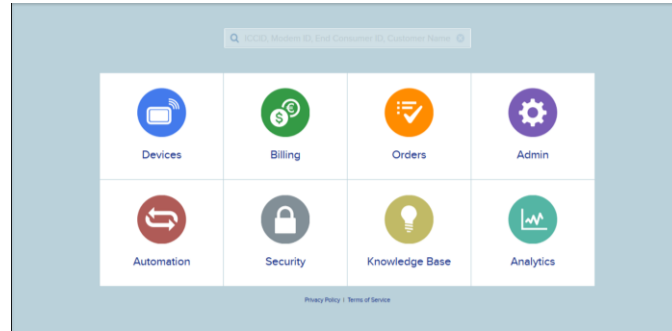
- Cisco operates CC, SMSC, subscriber management and the complete mobile core

IoT Control Center Platform Application

Same platform but different views

IoT Control Center for Service Providers

- Onboard new Enterprise accounts
- Setup rate plans and services
- Integrate with internal systems
- Manage and view all their Enterprise accounts



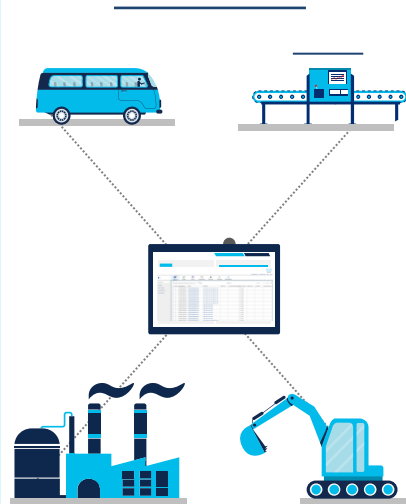
IoT Control Center for Enterprises

- Monitor device statuses and usage
- Diagnose connectivity issues in a timely manner
- Automate business rules to streamline processes
- Track costs to ensure proper budgeting

CC features - Scale faster

Zero touch provisioning

Speed time to revenue with near zero touch SIM onboarding



SIM State & Rate plan changes

Empower your team to easily manage SIM status and rate plans themselves



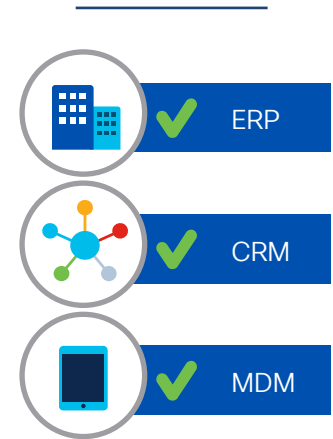
SIM Lifecycle Automation

Run more efficiently with fewer resources by automating SIM changes



API Integrations

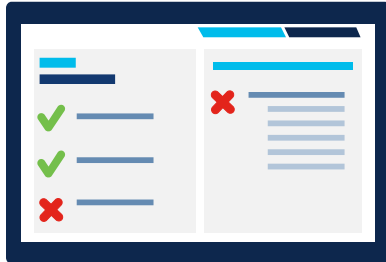
Connect to the rest of your enterprise systems with comprehensive APIs



CC features - Operate smarter

SIM level diagnostics

Resolve issues quickly using intuitive diagnostic tools



SIM level insights

Spotlight historical analysis

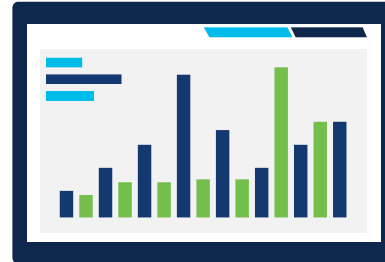
Uncover business insights through historical connectivity analytics



Connectivity insights

Call Detail Record (CDR) Analytics

Track month-to-date business-wide voice, data, and SMS usage



Usage insights

Advanced Analytics & Traffic Segmentation

Achieve business KPIs with insights from the usage, service, and deployment dashboards



Business level insights

CC features - Protect better

IMEI Allow & Deny Lists

Restrict SIM behavior to prevent unauthorized activity & access

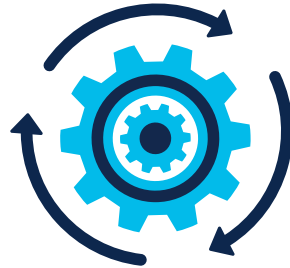


Improper usage



Rules Automation Engine

Customize security rules to your unique business needs



Fraudulent activity-triggered deactivation
Team notifications

2-Factor authentication
User security profiles
Audit trails & IP
Restrictions

Trust world-class SaaS platform security & user management



Are you / your company using a Connectivity Management Platform

Yes, Cisco Control Center

0%

Yes, but another solution as offered by the regular SP

0%

Yes, from a specialized IoT Managed Service Provider

0%

No

0%

What does that mean?

0%



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Demo:

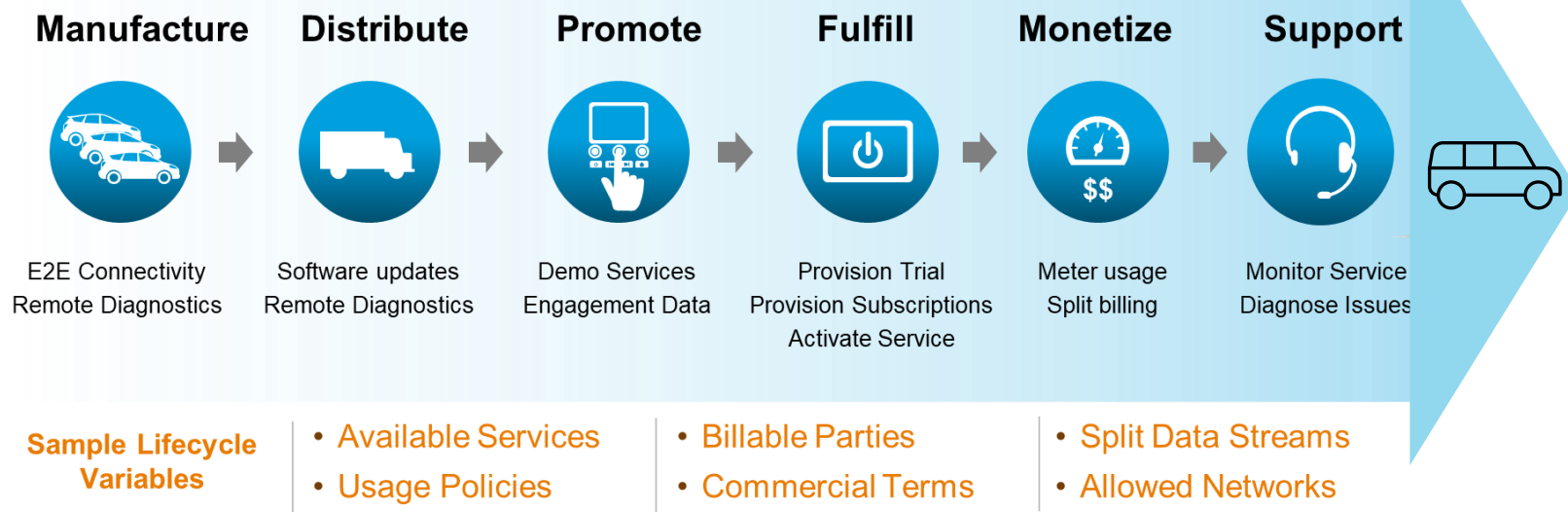
Deploy, manage and
mitigate



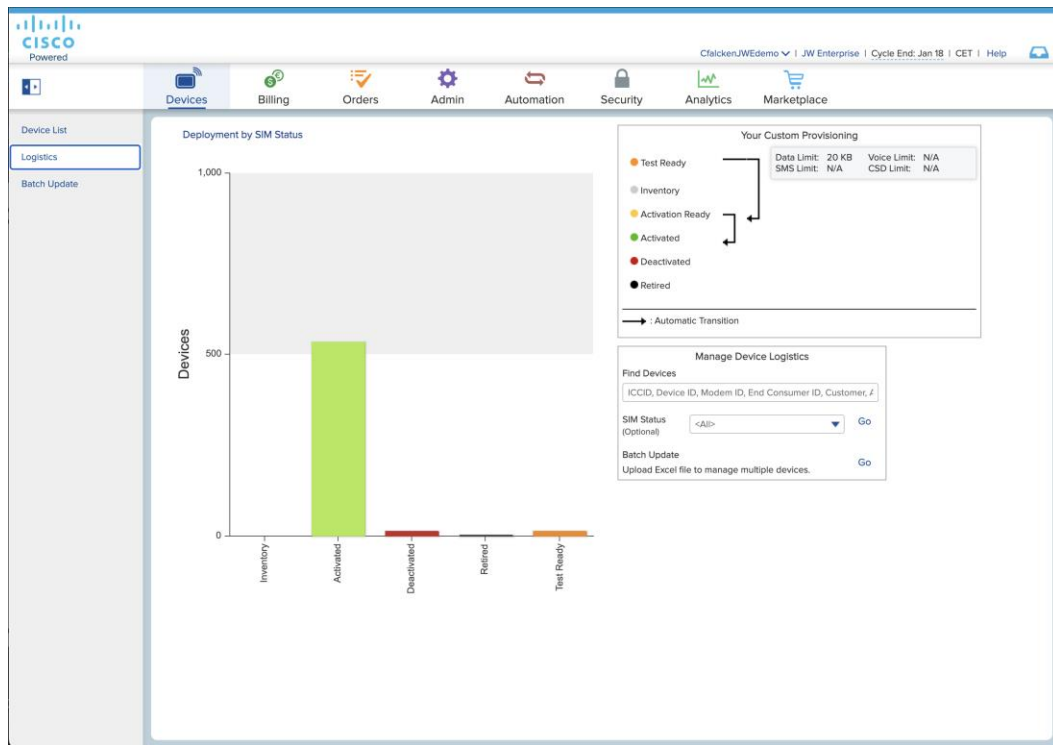
Service Lifecycle

Connected Car example

Six Stages of Service Lifecycle



SIM Lifecycle management



Key Features

- Test Ready state allows testing data and SMS during production testing without getting billed
- “Activation Ready” keeps a device in a non-billable state until it transitions to “Activated” with first data session or SMS
- Devices can be “Deactivated” or retired by enterprise customer to stop further usage and billing

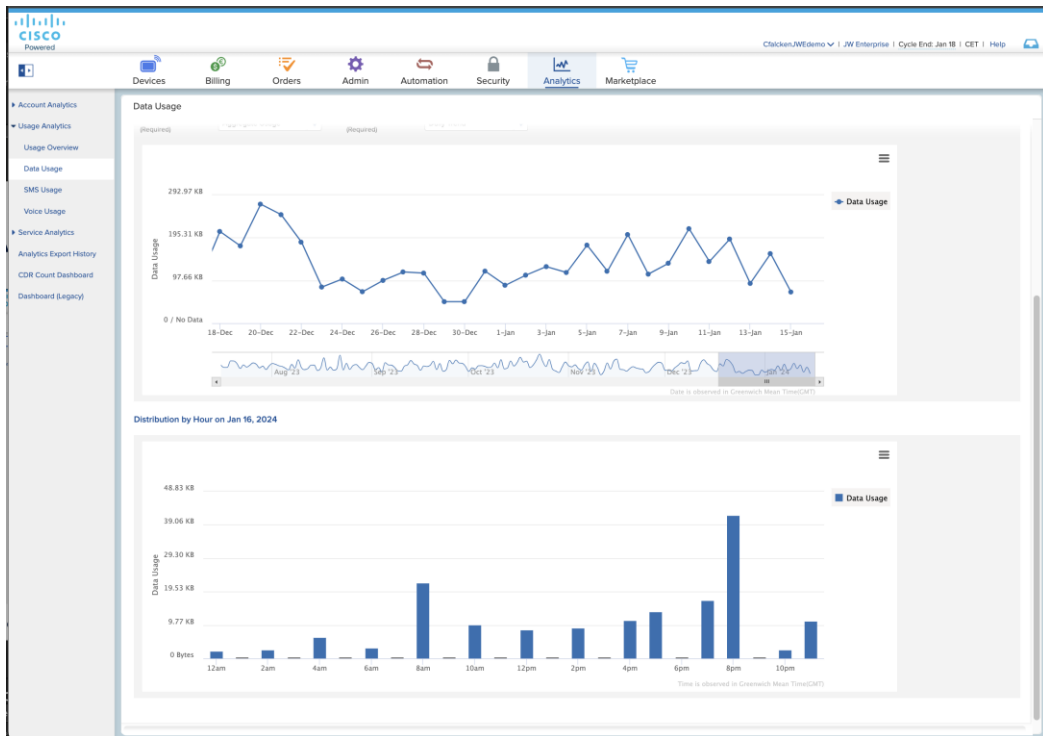
Device list

Actions	Date Added	ICCID	Cycle to Date Usage (MB)	In Session	Modem ID	MSISDN	Rate Plan	Communication Plan	Usage Limit
<input type="checkbox"/>	May 31, 2012 4:46 ...	8930272039691992...	2,778	Yes		15879285696	JWE 500KB FixPool	JW Enterprise Data V...	✓
<input type="checkbox"/>	May 31, 2012 4:46 ...	8930272039691992...	1,286	No	106	15879285694	JW Ent 10MB	JW Enterprise Data V...	
<input type="checkbox"/>	May 31, 2012 4:41 ...	8930272039691992...		No	85493827493...	882350391998433	JWE 50MB FixPool	JW Enterprise Data V...	
<input type="checkbox"/>	May 31, 2012 4:42 ...	8930272039691992...		No		12269289157	JW Ent 1MB	JWE CPlan	
<input type="checkbox"/>	May 31, 2012 4:43 ...	8930272039691990...		No		15879285659	JWE 30MB FixPool	JWE CPlan	
<input type="checkbox"/>	May 31, 2012 4:43 ...	8930272039691990...		No		15879285660	JWE 5MB FixPool	JWE CPlan	
<input type="checkbox"/>	May 31, 2012 4:43 ...	8930272039691990...		No		15879285663	JWE 30MB FixPool	JWE CPlan	
<input type="checkbox"/>	May 31, 2012 4:44 ...	8930272039691992...		No	192.168.1140	15879285682	JWE 50MB FixPool	JWE CPlan	
<input type="checkbox"/>	May 31, 2012 4:44 ...	8930272039691992...		No		15879285684	JWE 30MB FixPool	JWE CPlan	
<input type="checkbox"/>	May 31, 2012 4:45 ...	8930272039691990...		No		882350391999153	JWE 50MB FixPool	JW Enterprise Data V...	
<input type="checkbox"/>	May 31, 2012 4:45 ...	8930272039691990...		No		882350391999154	JWE 30MB FixPool	JWE CPlan	
<input type="checkbox"/>	May 31, 2012 4:45 ...	8930272039691990...		No		882350391999155	JWE 30MB FixPool	JWE CPlan	
<input type="checkbox"/>	May 31, 2012 4:45 ...	8930272039691990...		No		882350391999156	JWE 30MB FixPool	JWE CPlan	
<input type="checkbox"/>	May 31, 2012 4:45 ...	8930272039691990...		No		882350391999157	JWE 30MB FixPool	JWE CPlan	
<input type="checkbox"/>	May 31, 2012 4:45 ...	8930272039691990...		No		882350391999158	JW Ent 75MB	JWE CPlan	
<input type="checkbox"/>	May 31, 2012 4:46 ...	8930272039691992...		No		15879285686	JWE 30MB FixPool	JWE CPlan	
<input type="checkbox"/>	May 31, 2012 4:46 ...	8930272039691992...		No	114	15879285688	JW Ent 50MB	Demo 7	
<input type="checkbox"/>	May 31, 2012 4:46 ...	8930272039691992...		No		15879285690	JWE 30MB FixPool	JWE CPlan	
<input type="checkbox"/>	May 31, 2012 4:46 ...	8930272039691992...		No	104	15879285693	JWE 30MB FixPool	JWE CPlan	
<input type="checkbox"/>	May 31, 2012 4:46 ...	8930272039691992...		No	115	15879285695	JWE 50MB FixPool	JW Enterprise Data V...	
<input type="checkbox"/>	May 31, 2012 4:47 ...	8930272039691992...		No	old EW SMS S...	15879285703	JWE 30MB FixPool	JWE CPlan	
<input type="checkbox"/>	May 31, 2012 4:47 ...	8930272039691992...		No		15879285704	JWE 30MB FixPool	JWE CPlan	
<input type="checkbox"/>	May 31, 2012 4:47 ...	8930272039691992...		No	192.168.1139	15879285705	JWE 30MB FixPool	JWE CPlan	
<input type="checkbox"/>	May 31, 2012 4:47 ...	8930272039691992...		No		15879285708	JWE 30MB FixPool	JWE CPlan	
<input type="checkbox"/>	Oct 04, 2013 4:17 ...	8930272039691992...		No		15879285699	JWE 30MB FixPool	JWE CPlan	
<input type="checkbox"/>	Oct 04, 2013 4:18 ...	89302720396919844...		No		15879285423	JWE 30MB FixPool	JWE CPlan	
<input type="checkbox"/>	Oct 04, 2013 4:19 ...	8930272039691992...		No	102	15879285683	JWE 30MB FixPool	NJ Standard LTE	
<input type="checkbox"/>	Oct 04, 2013 4:19 ...	8930272039691992...		No		15879285687	JWE 30MB FixPool	JWE CPlan	
<input type="checkbox"/>	Oct 04, 2013 4:20 ...	8930272039691992...		No	110	15879285692	JW Ent 10MB	NJ Standard LTE	
<input type="checkbox"/>	Oct 04, 2013 4:21 ...	8930272039691992...		No	1252	15879285700	Network J Default	JW Enterprise Data V...	

Key Features

- View, filter and export all devices with custom columns
- Monitor usage and session status
- Change SIM status or rate plan
- Perform Batch updates

Analytics



Key Features

- Account summary
- Usage Analytics
 - Data / SMS / Voice
- Service Analytics
 - Completed / Ongoing sessions

Diagnostics

The screenshot displays the Cisco Diagnostics interface for a device. The top navigation bar includes tabs for Devices, Billing, Orders, Admin, Automation, Security, Analytics, and Marketplace. The main content area is titled 'Diagnostics' and shows a 'Run Test Again' button. The device status is 'Problem Detected' with the ICCID 89302720396911992555. The test results are as follows:

Test Category	Status	Details
Provisioning	Passed	SIM state permits passing traffic
SIM / Device	Passed	SIM is allowed to use wireless network resources
Network Connection	Passed	Device is currently registered, and there is recent activity.
IP / Internet	Warning	Device is currently not connected, however it has previous successful Data Sessions

Possible reasons for test failure:

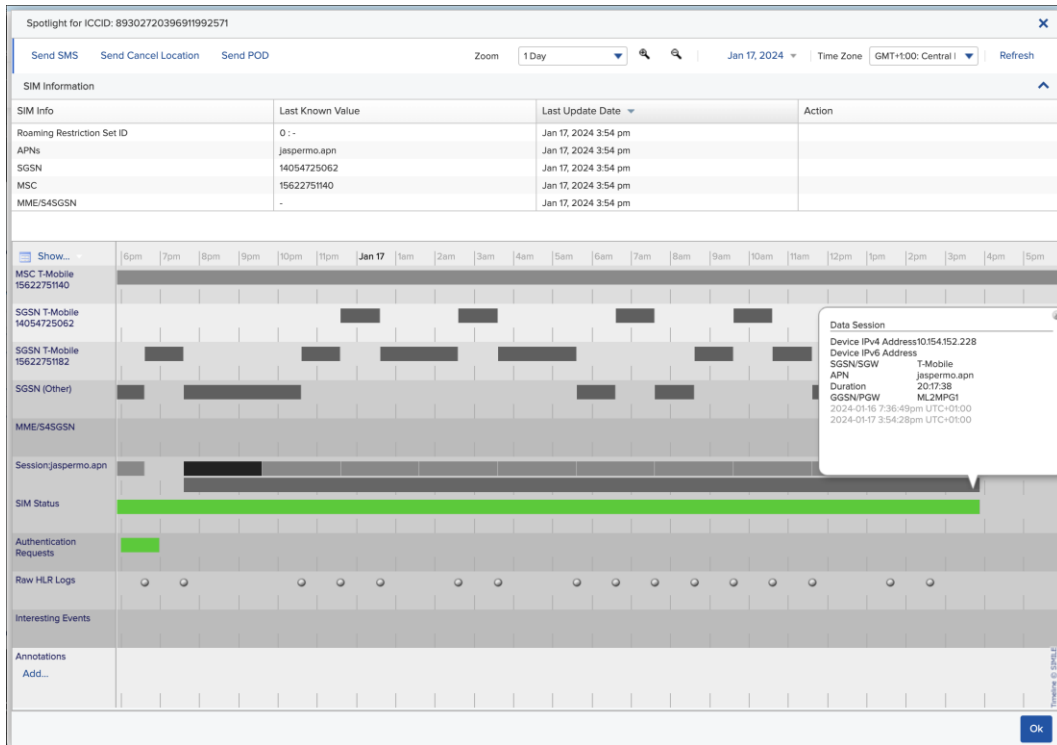
- APN not configured properly
- The device is unable to open ports or sockets.
- IP address is incorrect
- Data cannot flow bidirectionally. NOTE: Spotlight shows unidirectional and no data flow issue in the Testset

Next Steps: SIM Information, Send SMS, Go to Advanced Spotlight

Key Features

- Simple device checks of the related to Provisioning, SIM permissions, network connection and Internet access
- Includes possible root causes and steps to mitigate warnings and errors

Advanced Spotlight



Key Features

- Get quick insights to device signaling events up to 30 days in the past
- Troubleshoot device connectivity
- Send SMS to device
- Cancel Location causing the device to reregister on the network
- Packet of Disconnect (soft reset) only disconnecting the ongoing data session. Device remains registered on the network

Invoice details

Invoice Details

Invoice ID	196752602	Billing Cycle	Apr 2021	Devices	532	Subscription Charge	\$7,606.30	Data Detail	
Account Name	JW Enterprise	Billable	Yes	Active Subscribers	532	Data Charge	\$0.00	Standard Overage	\$0.00
Account ID	100198901	Currency	USD	Data Volume (MB)	9,572	SMS Charge	\$0.00	Standard Roaming	\$0.00
Operator Account ID		Published	Yes	SMS Volume (msg)	13	Voice Charge	\$0.00		
Invoice Date	Apr 23, 2021	Events	0	Voice Volume (mss)	0:00	Events Charge	\$0.00		
Due Date	May 23, 2021	Events Volume (MB)	0	Service Revenue	\$7,606.30	Activation Charge	\$0.00		
Advanced Sub Fee	1%			Variable Discount (%)	0	Tech Type Charge	\$0.00		
						Other Charge	\$3,043,993.70		
						Fixed Discount Target	\$0.00		
						Total Charge	\$3,051,600.00		

Rate Plan

Rate Plan	Plan Version	Plan Type	Payment Type	Subscriptions	Prepaid Activat	Subscription Ch	Advanced Sub F	Fixed Pool Char	Data Volume (M	Data Char
AcmeAnalytic...	3	Monthly - Flexi...	Monthly	10		\$0.01	\$0.00	\$0.00	0	
Default Pricing...	1	Default Pricing	Monthly	0		\$0.00		\$0.00	0	
JWE 30MB Fix...	4	Monthly - Flexi...	Monthly	20		\$1,212.00	\$12.00	\$0.00	0	
JWE 500KB FL...	1	Monthly - Flexi...	Monthly	258		\$1,042.32	\$10.32	\$0.00	0	
JWE 50MB Fix...	4	Monthly - Flexi...	Monthly	50		\$3,787.50	\$37.50	\$0.00	0	
JWE 5MB FixP...	4	Monthly - Flexi...	Monthly	2		\$22.22	\$0.22	\$0.00	0	
JW Ent 10MB	4	Monthly - Flex...	Monthly	61		\$1,540.25	\$15.25	\$2.00	9,572	
JW Ent 1MB	2	Monthly - Flex...	Monthly	4		\$0.00	\$0.00	\$0.00	0	
JW Ent 50MB	2	Monthly - Flex...	Monthly	2		\$0.00	\$0.00	\$0.00	0	

Key Features

- Total cost for a billing cycle with breakdown of the charges for subscription, data/SMS/voice and other service
- Detailed usage and costs per rate plan and per device

Demo: Automate

Automation Use Cases

If the device connects too many times, create a service ticket in CRM System



When consumer connects for the first time, activate the device automatically



If the device's SIM connects from a different device, deactivate the SIM



If the connection is lost, send a message to a technician



When in another country, change the rate plan to favorable rates



If the data limit is exceeded, change the rate plan to one that includes more volume (but switch back next month)



Creating automation rules

The screenshot shows the 'Create New Rule' configuration page in the Cisco management interface. The page is divided into three main sections: 'Define Rule', 'Set Filters', and 'Name the Rule'.
1. **Define Rule:** This section is currently active. It shows 'Current Selections' with 'Usage Monitoring' as the category and 'Cycle To Date Data Usage' as the trigger. Under 'When this happens...', a rule is defined: 'If any SIM exceeds a specified data limit of 1024 KB in the current cycle'. Under 'Do this...', the action is 'Change the device's rate plan to JWE 30MB FixPool'. A 'Follow Up with' checkbox is checked, and the follow-up action is 'Revert to previous rate plan' at the 'End of current billing cycle'.
2. **Set Filters:** This section is currently empty, with 'None selected' under 'Current Filters'.
3. **Name the Rule:** A text input field contains the name 'Upgrade rate plan'.
At the bottom right, there are 'Activate Rule' and 'Cancel' buttons.

Key Features

- Select one of many rule triggers
- Define actions from notifications to directly applying changes
- Define filters to apply rules to a subset of your devices

Demo: Program

Have you used an API before?

Yes, played with Postman but don't have programming skills

0%

Yes, with Python or other programming languages

0%

No

0%

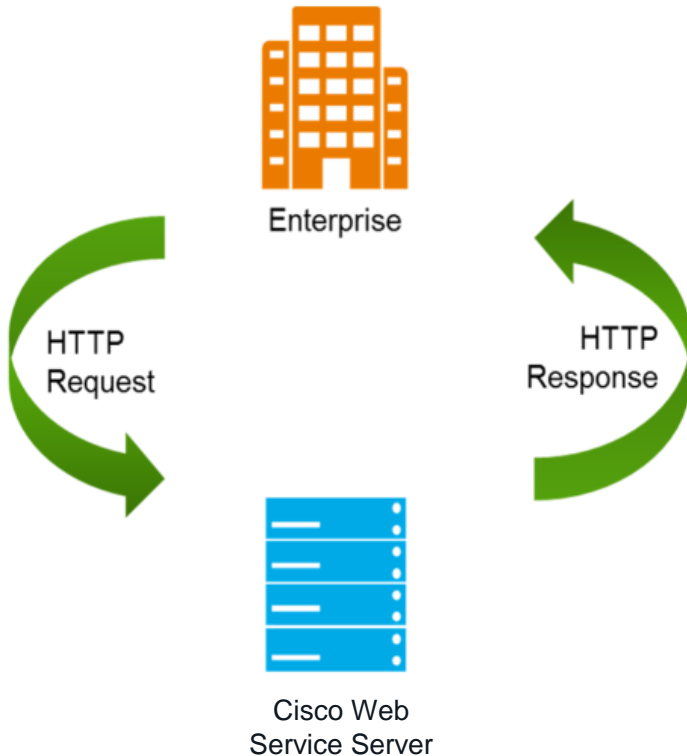
What does API mean?

0%



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Enterprise Integration with API Overview



- Similar functions to Control Center web interface
- Use the enterprise's existing infrastructure to manage device deployment
- Supported interfaces:
 - SOAP (XML)
 - REST API
- Sandbox environment available
- Sample code/online documentation available
- Same APIs for 50+ Service Providers

“Try it out” in Knowledge Base

The screenshot shows the 'Get Device Details' API endpoint in the Cisco Knowledge Base. The interface includes a 'Parameters' section with a 'Try it out' button. The parameters are:

Name	Description
iccid * required string (path)	ICCID
apiVersion * required string (path)	Defaults to 1 Default value : 1

The 'Responses' section shows the response content type set to 'application/json'. Below this, the 'Curl' command is displayed:

```
curl -X GET "https://restapi1.jasper.com/rws/api/v1/devices/89302720396911992571" -H "accept: application/json" -H "Authorization: Basic 022hbGMrZmSKV8VzWlV0jNlMDVjYjYlNmVhMjU4NDQ4Yy1lNDg3LTk3OTRmOGRhMDQ3OQ=="
```

The 'Request URL' is shown as:

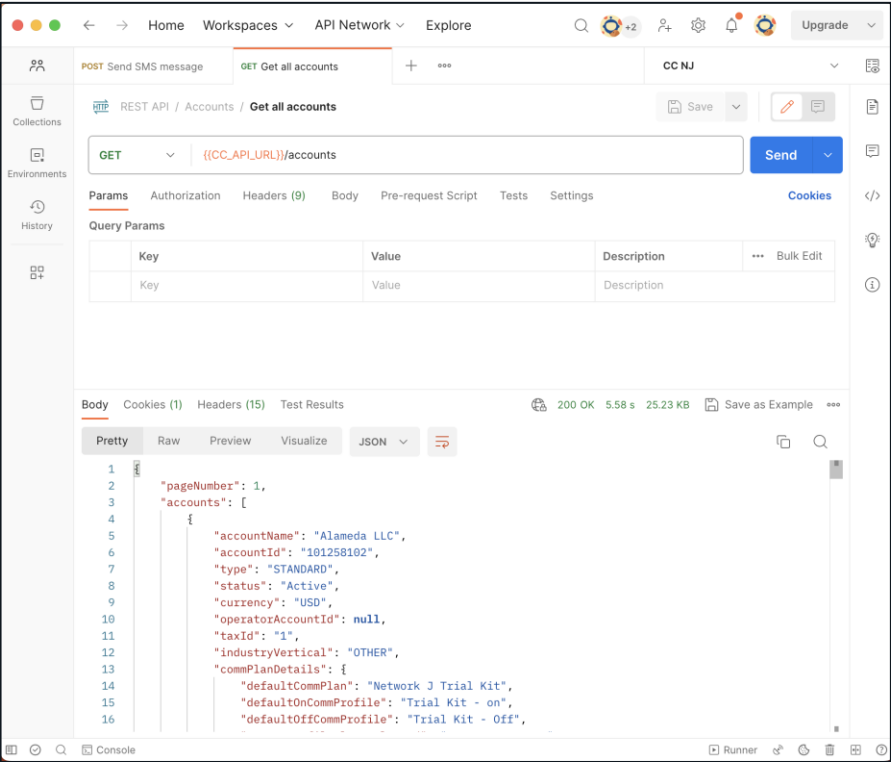
```
https://restapi1.jasper.com/rws/api/v1/devices/89302720396911992571
```

The 'Server response' section shows a 'Code' of 200 and a 'Response body'.

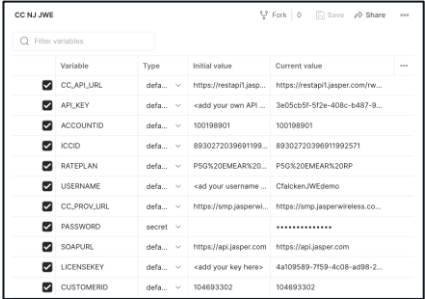
Key Features

- Detailed documentation of all API functions and parameters in the Online Help aka Knowledge Base
- “Try it Out” uses your own API key to quickly test API messages with the real system

Using REST API with Postman



- Postman is a powerful tool to define API calls and use them with different environments
- Using REST API simply means sending an HTTP GET or POST request with a specific URL
- Response is returned in JSON format

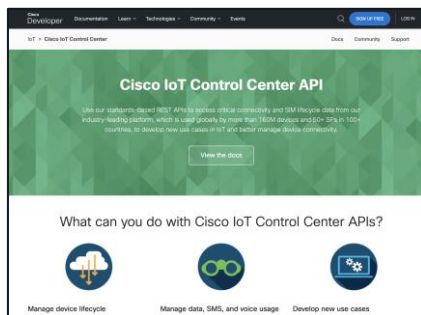


Using REST API with scripts – Get

- Many programming languages support simple interfaces to talk to a REST API and to process the response
- Python's "request" library makes it very simple to send a REST API call

Documentation, sandbox environment and sample scripts offered via Cisco DevNet

<https://developer.cisco.com/control-center>



```
#!/usr/local/bin/python
#
import requests
import json
import base64
import pprint
import yaml
import sys
import os
from pathlib import Path
import argparse
import time

# Parse the command line to get the site name
#
parser = argparse.ArgumentParser(os.path.basename(__file__))
parser.add_argument("site", help="Name of the site as specified in settings.yaml", type=str)
parser.add_argument("string", help="String to send for echo", type=str)
args = parser.parse_args()

# Get the settings (URL, username, apikey) from external file
#
full_file_path = Path(__file__).parent.joinpath('../settings.yaml')
with open(full_file_path) as settings:
    settings = yaml.load(settings, Loader=yaml.Loader)

print("Sending echo request for ", args.string, file=sys.stderr)

myResponse = requests.get(
    settings[args.site]["resturl"] + "/echo/" + args.string,
    auth=(settings[args.site]["username"], settings[args.site]["password"]))

# For successful API call, response code will be 200 (OK)
if(myResponse.ok):

    # Loading the response data into a dict variable
    # json.loads takes in only binary or string variables so using
    # loads (Load String) takes a json file and converts into python dict
    jsonData = json.loads(myResponse.content)

else:
    # If response code is not ok (200), print the resulting http status
    print("Failure")
    myResponse.raise_for_status()

print (jsonData["context"])

./get_device_usage.py kpn -i 8931082322089197xxx
Processing 1 ICCIDs
Getting usages for ICCID ['8931082322089197xxx']
[
  {
    "iccid": "8931082322089197xxx",
    "imsi": "204080823499xxx",
    "msisdn": "3197045090xxx",
    "imei": "8652340326409xxx",
    "status": "ACTIVATED",
    "ratePlan": "Cisco IOT Demo 500MB Data",
    "communicationPlan": "Cisco IOT Demo DATA",
    "ctdDataUsage": 0,
    "ctdSMSUsage": 0,
    "ctdVoiceUsage": 0,
    "ctdSessionCount": null,
    "overageLimitReached": false,
    "overageLimitOverride": "DEFAULT"
  }
]
```

Push API with scripts

- Events triggered by automation rules can be sent to a Push API receiver (i.e. an HTTP POST is sent to a specified URL)
- Received events can then be used to trigger REST API calls
- Sample code for Java receiver downloadable from Control Center help, but much simpler with Python

```
import http.server
import ...

secret_key = b"BredaDemo"
PORT = 8888

class PushAPIHandler(http.server.BaseHTTPRequestHandler):
    def do_POST(self):
        content_type = self.headers.get('Content-Type')
        if content_type.startswith('application/x-www-form-urlencoded'):
            content_length = int(self.headers.get('Content-Length'))
            post_data = self.rfile.read(content_length)
            form_data = urllib.parse.parse_qs(post_data.decode('utf-8'))
            event = form_data["eventType"][0]
            signature = form_data["signature2"][0]
            data = form_data["data"][0]
            timestamp = form_data["timestamp"][0]

            hash = hmac.new(bytes(secret_key), bytes(timestamp, 'utf-8'), hashlib.sha256)
            hash_str = base64.b64encode(hash.digest()).decode('utf-8')

            print("Event          : " + event)
            print("Signature       : " + signature)
            print("Hashed timestamp : " + hash_str)
            if hash_str == signature:
                print("Signature verification successful")
            else:
                print("Signature verification failed")

            xml_data = ET.fromstring(data)
            xmlstr = minidom.parseString(ET.tostring(xml_data,
encoding='utf8')).decode('utf8')).toprettyxml(indent=" ")
            print("XML data          :")
            print(xmlstr)

            # Send a response back to the sender
            #
            self.send_response(200)
            self.send_header('Content-type', 'text/plain')
            self.end_headers()
            self.wfile.write(b'Received push notification')

# Start the server listening on the given port
#
with http.server.HTTPServer(("", PORT), PushAPIHandler) as httpd:
    print("Push API receiver listening on port", PORT)
    httpd.serve_forever()
```

Shortened example, full script on Github (see previous Devnet link)

Innovation



Continual industry-defining innovation

Machine Learning Anomaly Detection

Be alerted to anomalies
based on your business'
ever-changing norms



Machine Learning Cost Optimization

Automatically optimize
device rate plans for the
most efficient bill



5G Standalone Support

Start incorporating 5G into
your strategy



eSIM Flex

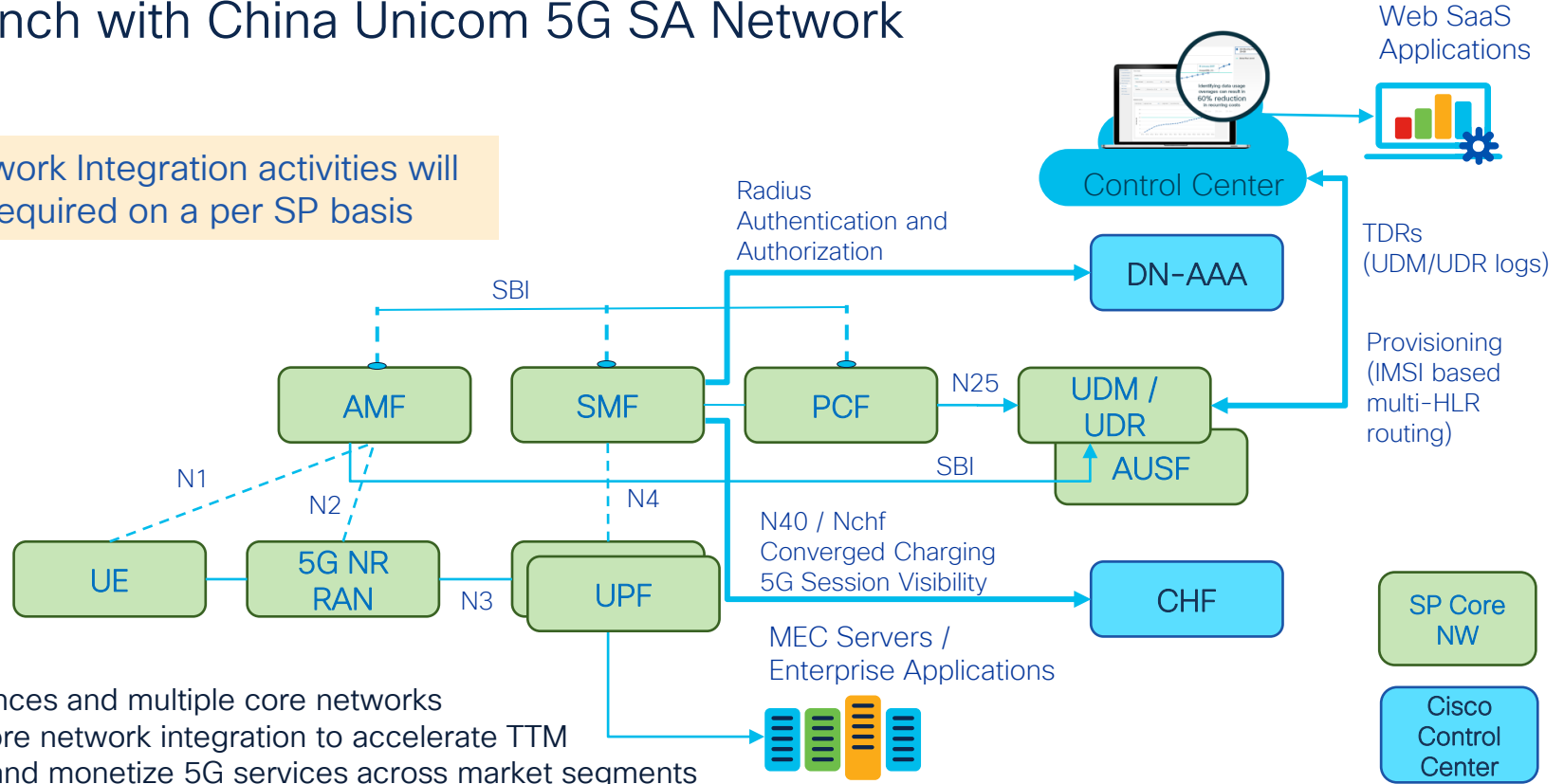
The fastest easiest SIM
portability solution on the
market



Control Center evolution to 5G

Launch with China Unicom 5G SA Network

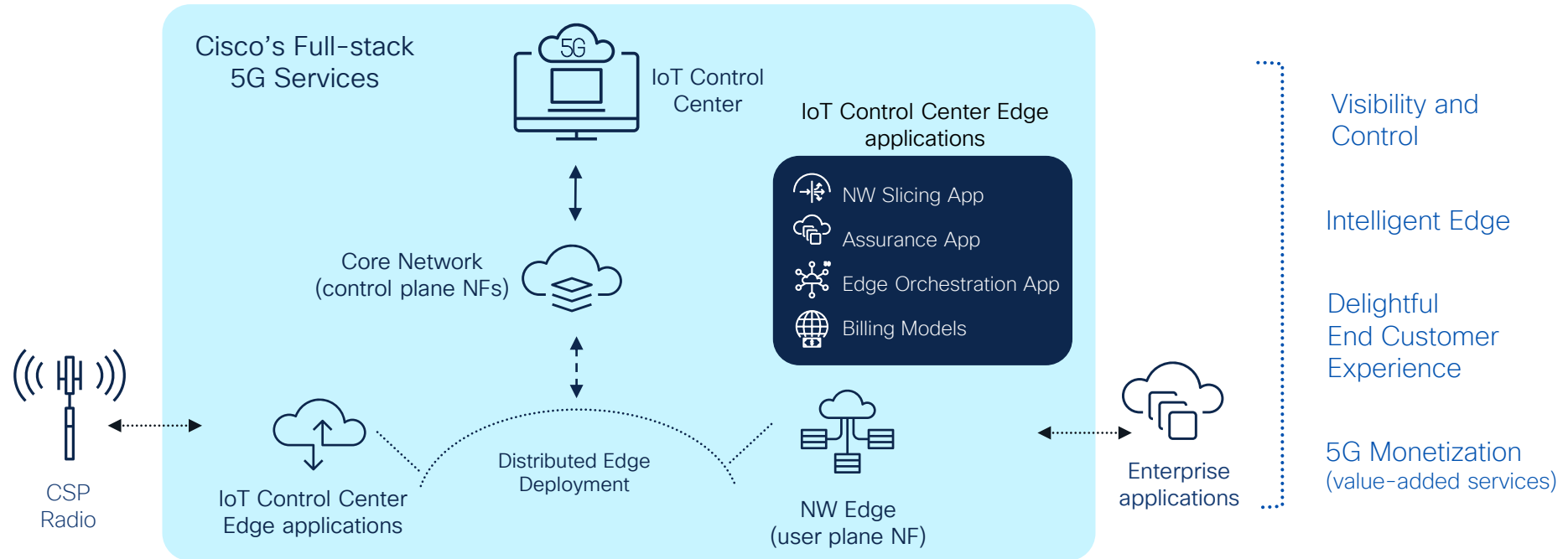
Network Integration activities will be required on a per SP basis



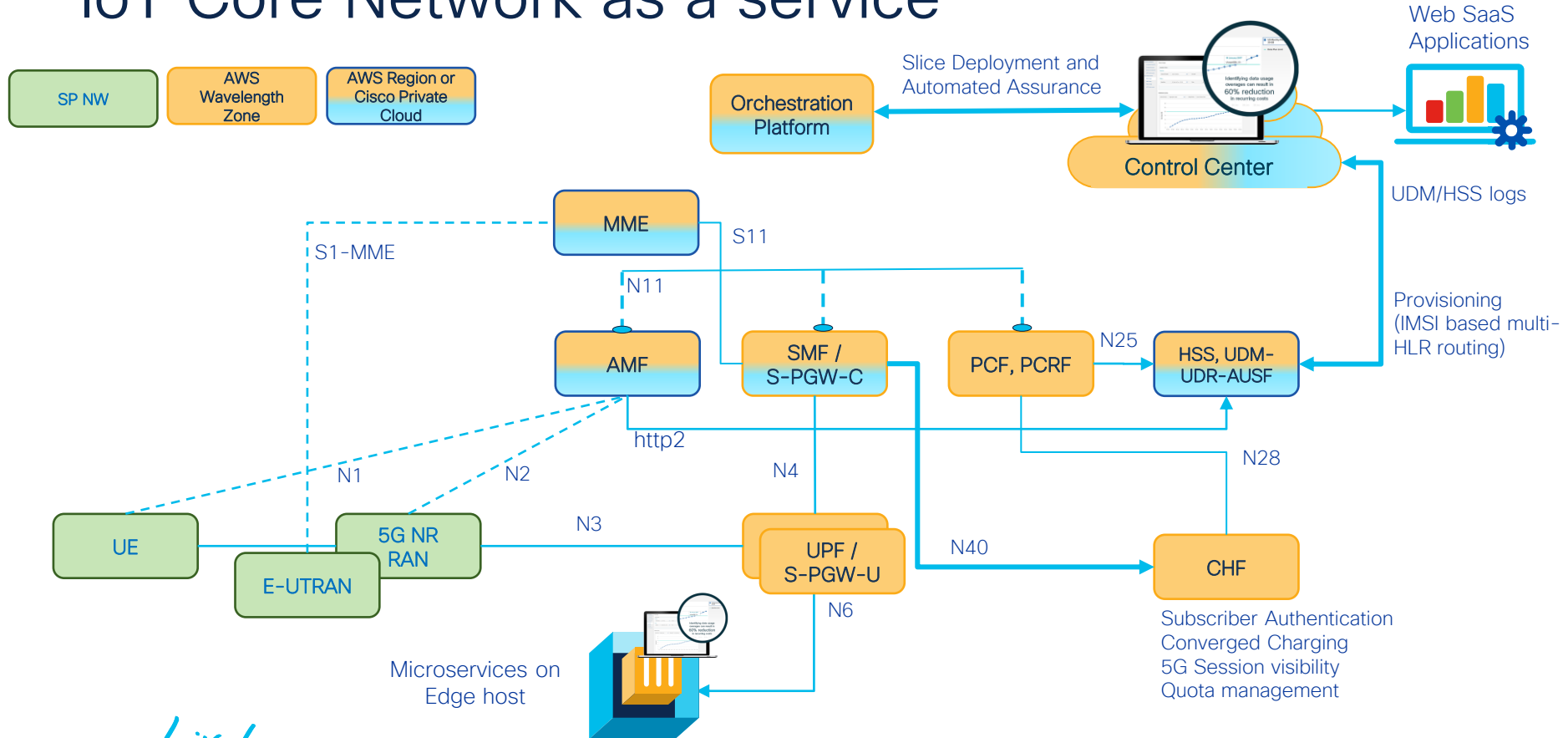
- ✓ 31 provinces and multiple core networks
- ✓ Direct core network integration to accelerate TTM
- ✓ Launch and monetize 5G services across market segments
- ✓ Cisco hosted CHF to enable rapid innovation with session visibility

Cisco's full stack 5G service

Enabling global IoT deployments with agility



IoT Core Network as a service



Introducing Cisco MSP



Mobility Services Platform



Service catalog



Visibility

5G

MNO
(B2B, B2E, eMBB/FWA)

PUBLIC



Private 5G
(Enterprise)

PRIVATE



IoT
(Things)



Connectivity



Security



Programmability

Public & private hybrid infrastructure deployment models

Why Cisco?



Why SPs and Enterprises should consider Cisco

- Footprint / Global Enterprises
- Innovative features
- Cisco has built this platform for 20 years implementing requirements from Service Providers and Enterprises
- Common User Interface for CMP, Private/Public 5G
- Integration with Device Management Platforms / Simple Device Onboarding
- We are here to stay

Next steps

As a service provider

Talk to us if you already use the Cisco platform and want to use advanced features, or if you are interested in replacing or supplementing your current IOT CMP solution

As an enterprise customer or reseller

Talk to one of our existing SP customers to get connected through our platform, or convince your current SP to start offering the Cisco solution





The bridge to possible

Thank you

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The Cisco Live! logo features the word "CISCO" in a bold, black, sans-serif font, followed by "Live!" in a black, cursive script font. The background of the entire image is a vibrant, multi-colored abstract pattern of overlapping, wavy bands in shades of red, orange, yellow, green, and blue, creating a sense of motion and energy.

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Let's go