

Unified Wireless and the role of Private 5G in the OT environment

Simple. Intuitive. Trusted

Hannover Messe 2025



We are in a 'Wireless-First' World

Reliable

Always-on, low latency

Scalable

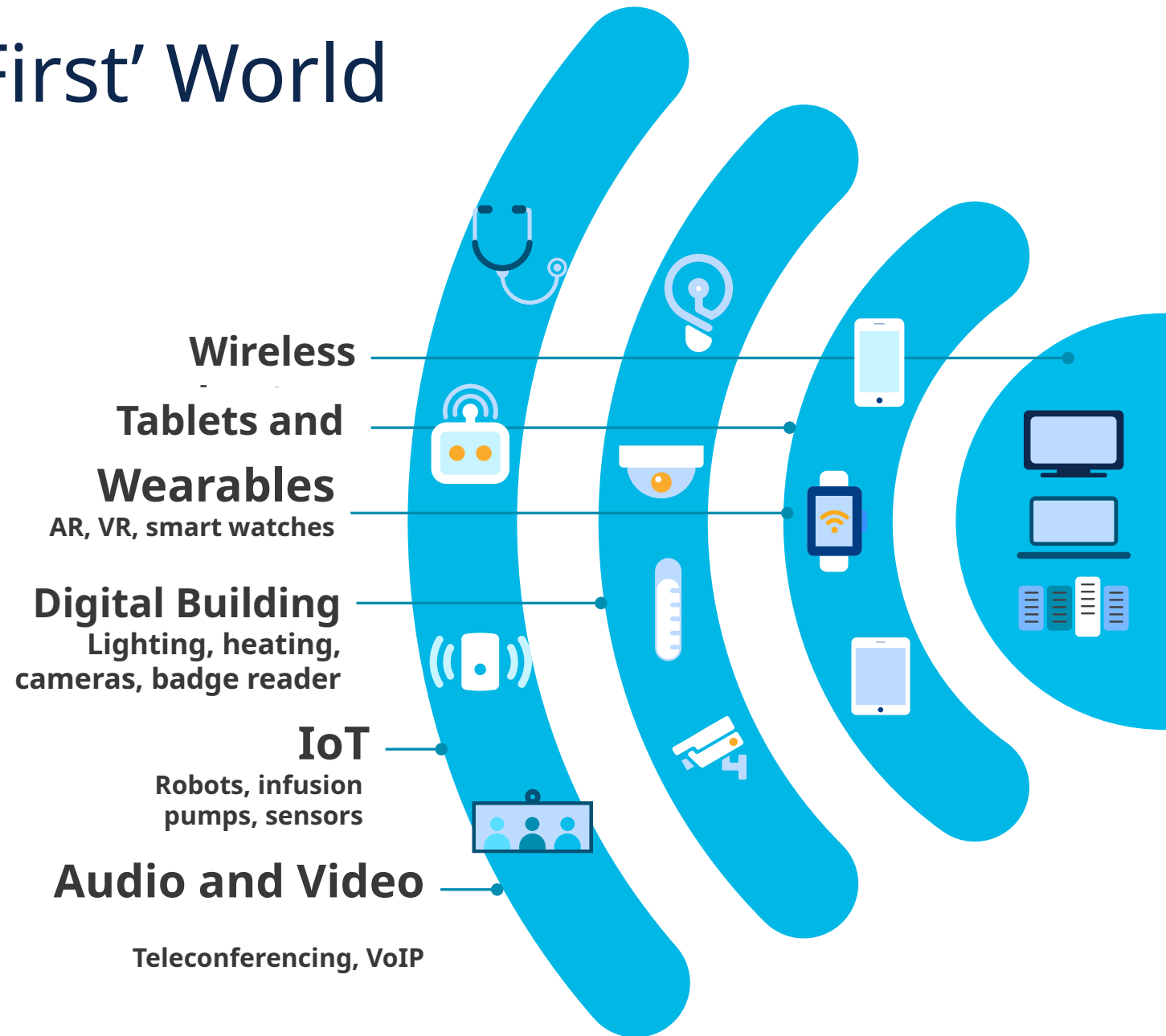
Wired for wireless

Secure

Software-defined fabric

Everywhere & Mobile

Heterogeneous Access



Industry 4.0 - Demanding a New Class of Networking



More Network Bandwidth

Video, AGVs, thermal imagery, sensors with remote personnel



Low Latency Data

Real-time control of unmanned vehicles and support for critical applications



Cyber Security

Explosive growth in connected devices & connection of previously air gapped networks



Simplified Scale

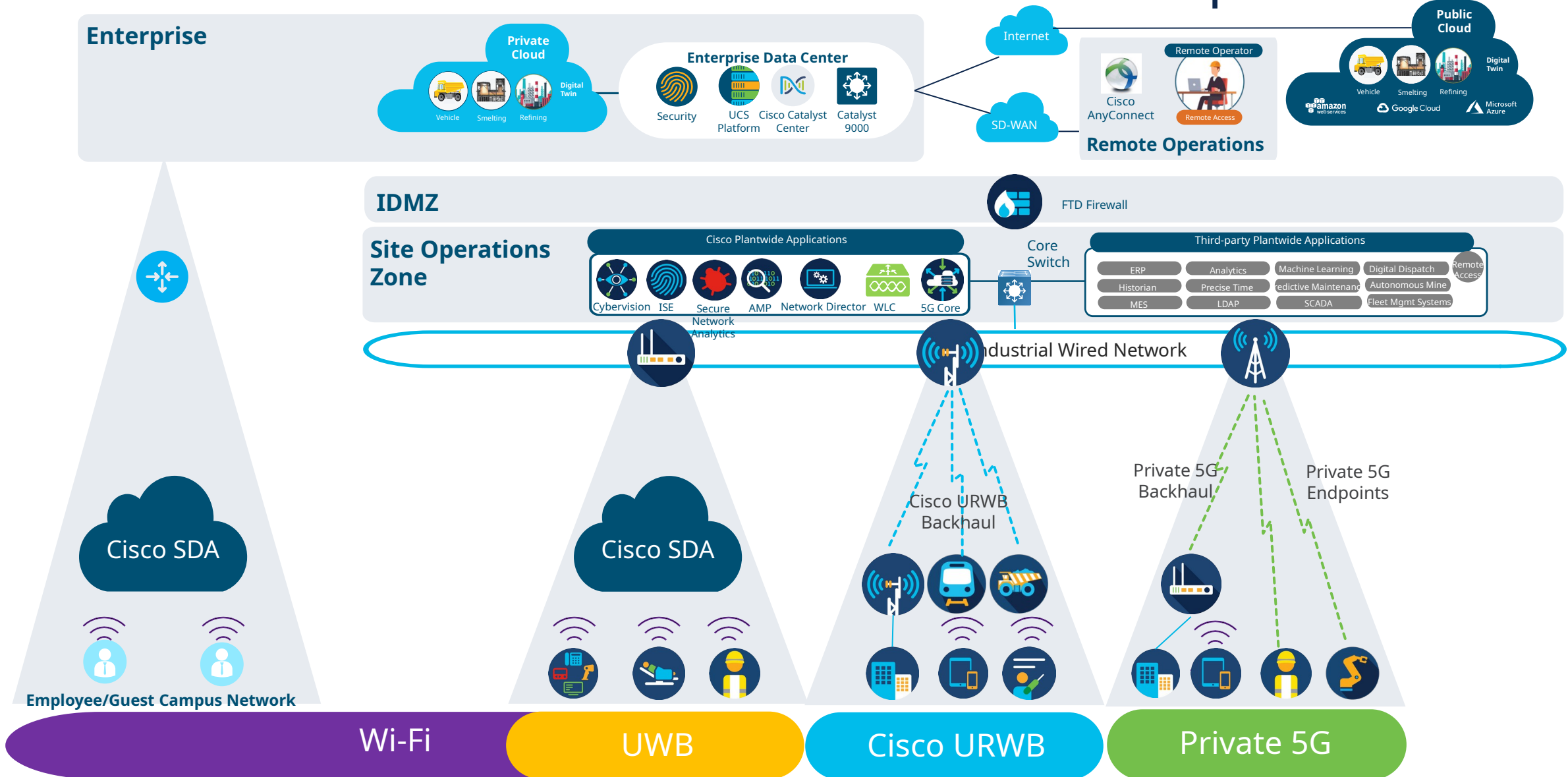
Deploy & manage more devices across more locations with the same resources



Edge Compute

Process and act on data faster when it is closer to its source. Maintain compliance & save costs.

Different Wireless Solutions for Different Requirements



Wireless Technologies – Attributes and Sweet Spots



- Unlicensed bands
- High density
- Most devices offer built-in Wi-Fi support



- Low latency
- Reliability – hitless
- High speed mobility

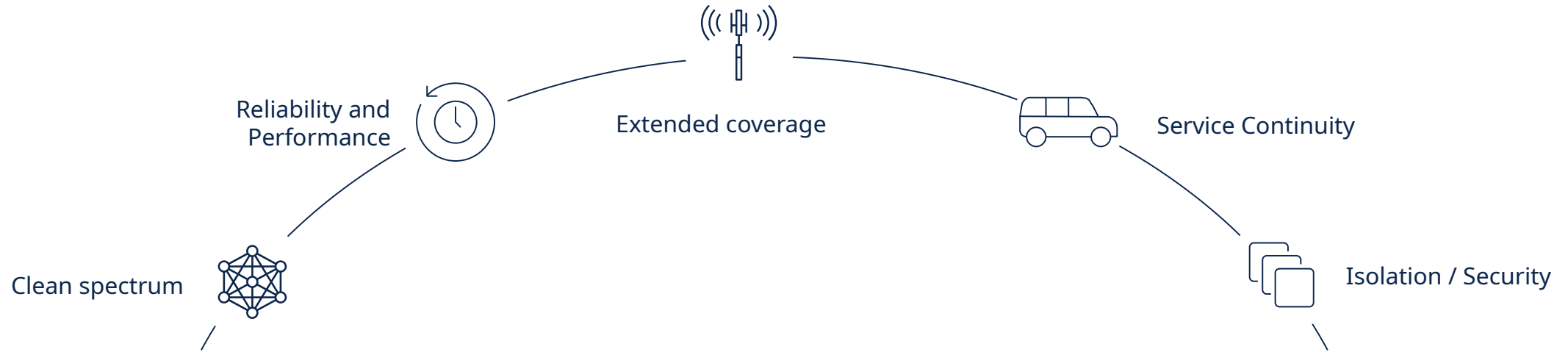


- Clean spectrum
- Large, outdoor coverage
- Macro mobility
- High Speed Mobility

Sweet Spots

- Reliable indoor coverage and short range outdoor
- Office, retail, healthcare, education, venues
- Growing support for IoT devices
- Backhaul scenarios
- Rail
- Ports, mining
- Manufacturing
- Ports, bases, large outdoor areas
- Fixed wireless access
- Manufacturing, warehousing, Ports
- Guaranteed video transmission
- Combination of backhaul and end devices

Enterprise needs and use case sweet spots



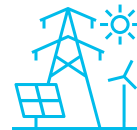
Industrial and manufacturing

- Precision robotic control
- High speed SW downloads
- Smart tools
- Industrial Connectivity (Profinet)



Distribution and warehouses

- AGVs and driverless vehicles
- Automated conveyance
- Distribution line automation



Ports, hubs and energy

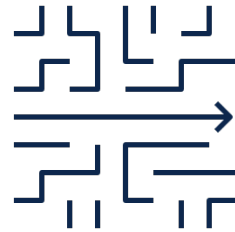
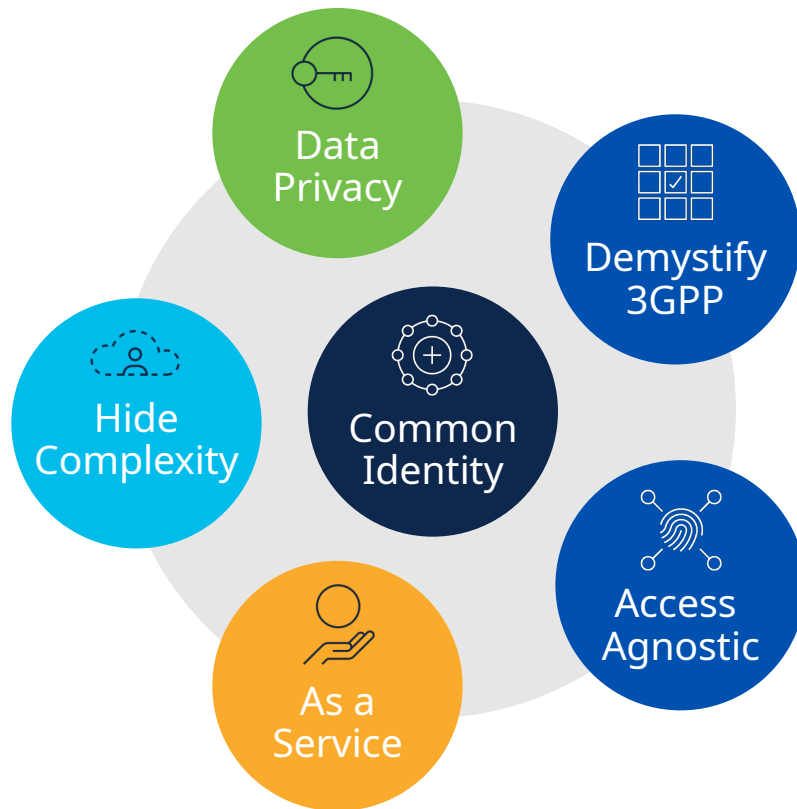
- Video surveillance
- Push-to-talk
- Unmanned autonomous vehicles
- Data offload
- Remote Expert
- Gantry, Cranes, Tug connectivity



Venues

- Efficient and reliable backhaul for Wi-Fi-connected endpoints
- Clean spectrum for venue operators
- Mission-critical broadcasts
- Security & Video surveillance

Private 5G designed for Enterprises



Easily Integrated into Enterprise

Pre-tested and ready to integrate with your existing systems

Management Simplicity

Intuitively simple to manage so you can focus on your business objectives, we'll handle the backend as part of the service

Trusted reliability

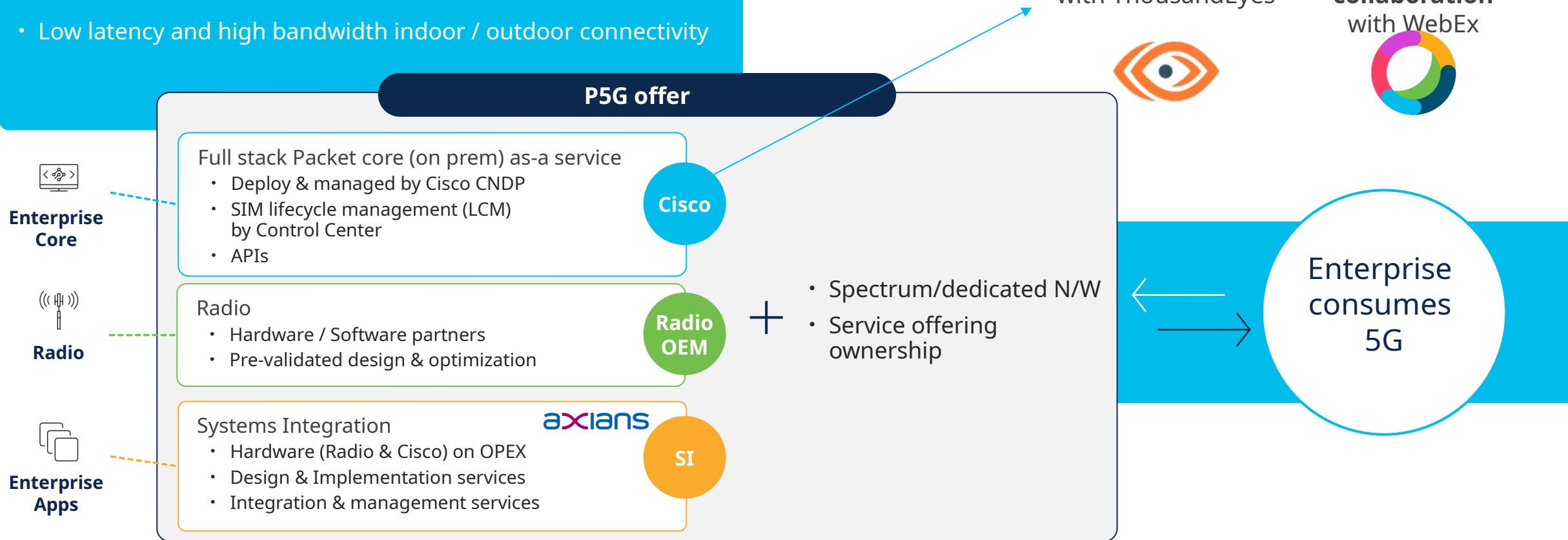
High availability (99.999% uptime) with support for mission critical applications with and without cloud connectivity

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Private 5G as a Service

- Private 5G data connectivity delivered as a *fully managed service* for mission- and business-critical outcomes
- Low latency and high bandwidth indoor / outdoor connectivity



Access-agnostic, different frequencies, and capabilities



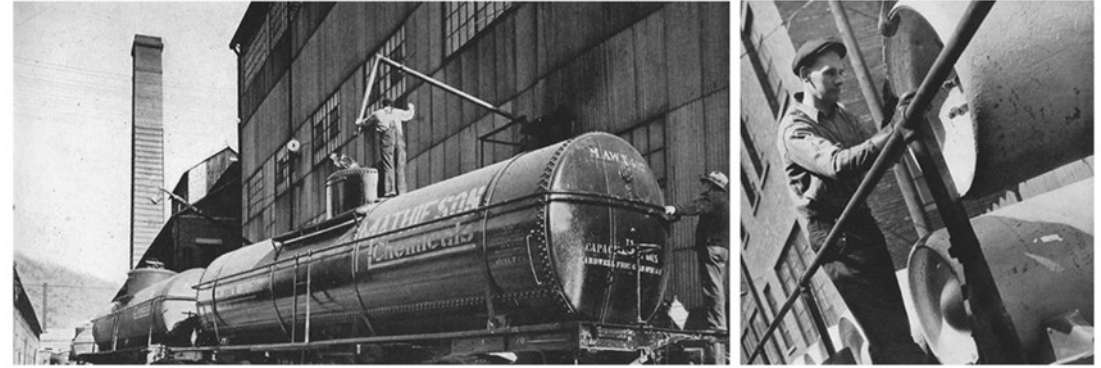
Cisco Private 5G: Chemical Plant

Chemical Plant Operator: USA

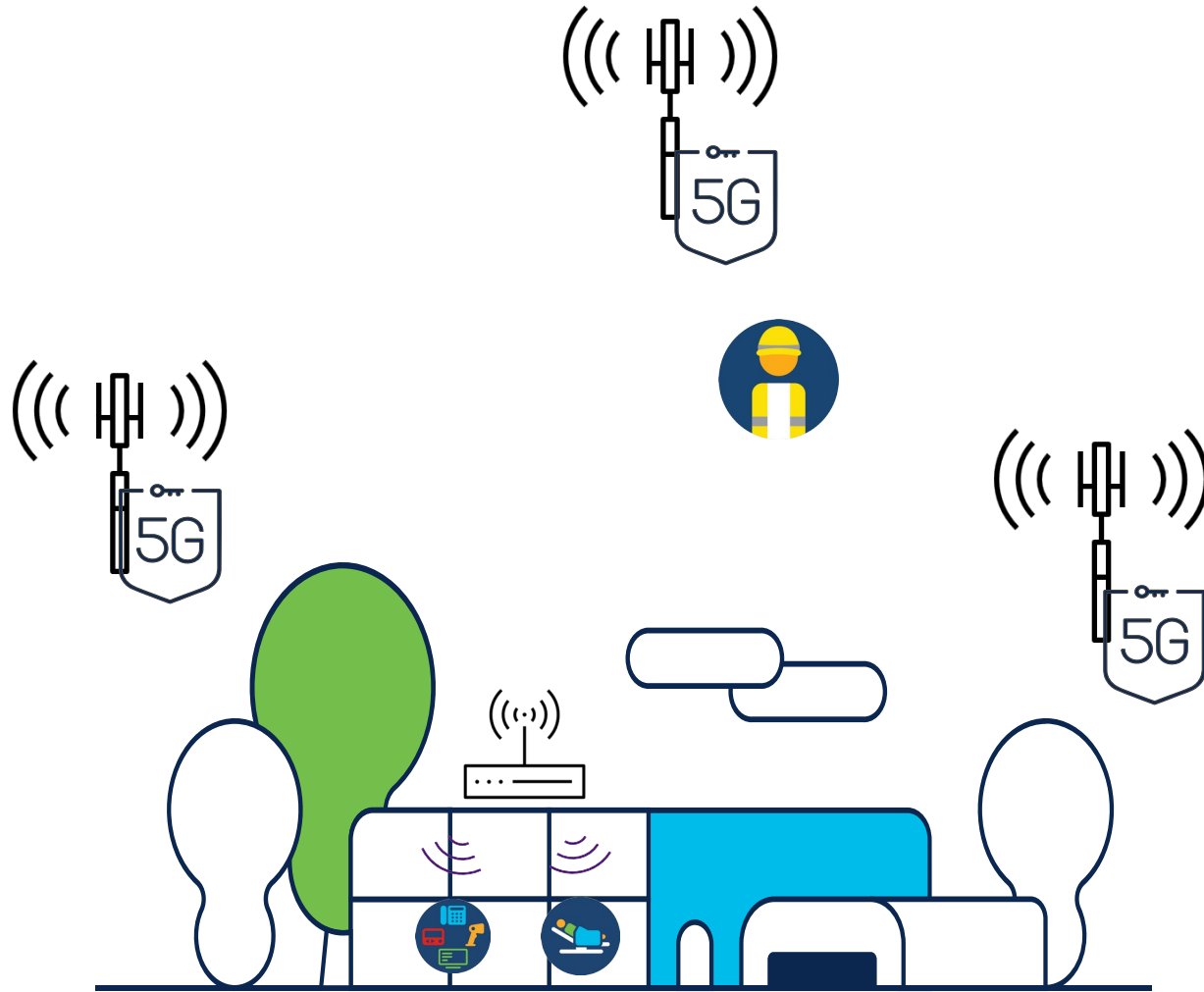
Uses Emerson Delta-V Process control system
PLC to MMI handled via Cisco P5GaaS

Success Criteria:

- Critical Infrastructure: Needed dual RF/backhaul & Aggregation path for each PLC
- Security following Purdue zone based architecture
- Support IT wireless traffic separately, following Purdue Framework
- Outdoor based Infrastructure: Challenging RF environment



Cisco Private 5G: Campus and outdoor plants



- Hybrid 5G / WiFi coverage
 - Warehouses
 - Outdoor / parking lots
- Rural areas
- Cabling is expensive!
- Evolving use cases / set-up
- Wireless coverage for
 - Quality Control
 - Process Digitisation
 - Future automation: sensors, drones, autonomous vehicles.
 - Health & Safety

Cisco Private 5G: Immersive experience



- Live broadcast
- Instant media upload for press agencies

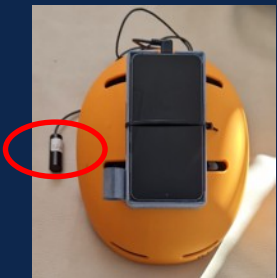
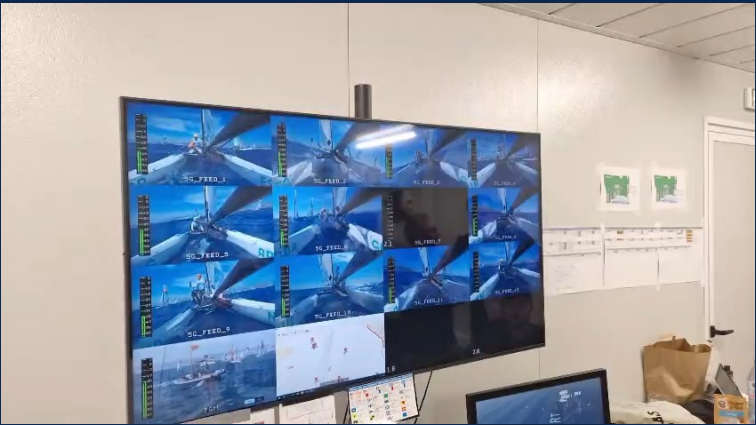
Solution

- Cisco Private 5G with MSP and RAN partners
- Combining multiple technologies

Outcome


- Immersive video broadcast experiences
- Expandable to all video markets





For more
information visit:
cisco.com/go/private5g



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Cisco Private 5G


A private 5G service that simplifies both 5G and IoT operations for enterprise digital transformation.

[Watch video \(1:59\)](#)

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We take the complexity out of private 5G and IoT

The Cisco Private 5G service is simple to get started; just give us a call. The operations are intuitive enough to provision, manage, and troubleshoot within minutes—and it is built on a foundation of trust to securely integrate IoT across your wireless network deployments.




Simple to start

Start your journey with a complete assessment and site survey. We will guide you through all the details.



Intuitive to operate


Provision, manage, and troubleshoot your 5G and IoT environment on a platform that intuitively integrates with your network.



Trusted to work

Experience carrier-grade reliability, securely supporting the most demanding applications with 24/7 global support.

[Read solution overview](#)



IDC: Evaluating private 5G as an enterprise-grade solution

All the data you need to fully evaluate private 5G for enterprise and industrial networks.

- Architectural details
- Channel information
- Spending forecasts

[Read the report](#)

Private 5G networks in four easy steps

Start your journey to IoT digital transformation now.

1

Contact
Cisco and an expert will help you get started.

2

Buy
You will receive a tailored private 5G and IoT solution.



The bridge to possible