

IoT Fleet Management: Operate Smarter with Intelligent Cellular Connectivity Management



Internet-of-Things (IoT) fleet management has come a long way since its beginnings in location tracking. Today, fleet managers collect real-time data from sensors, video cameras, and operational systems to keep close tabs on vehicle and cargo conditions and driver behavior. Outcomes include:

- Lower costs with predictive maintenance and increased fuel efficiency
- Reduced Greenhouse Gas (GHG) emissions
- Improved driver safety
- Prevention of cargo damage or spoilage
- Reduced insurance premiums based on real-time safety records

With 5G rollouts underway, fleet managers are eyeing new telematics use cases. One is collecting information from road infrastructure like road markings, traffic lights, and signs. Communications between infrastructure and the vehicle help to optimize routes, improve safety, and enable advanced autonomous driving capabilities like decelerating based on driver drowsiness or slippery roads.

Essential to all these use cases is reliable cellular connectivity.

“The global IoT fleet management market was valued at approximately \$7.03 billion in 2023 and is projected to grow at a compound annual growth rate (CAGR) of 17.0% from 2024 to 2030. By 2031, the market is expected to reach around \$16 billion driven by the increasing adoption of connected vehicle technology, the need for operational efficiency, and advancements in technologies like 5G, AI, and big data.”

— [Grandview Research 2023](#)





Growth and profitability hinge on smart cellular connectivity management

As your install base of telematics devices grows to hundreds or thousands, monitoring and managing all those cellular connections can become overwhelming. Delayed awareness of a broken or compromised cellular connection can hurt the customer experience – and even expose you to liability for cargo spoilage because trailer conditions weren't reported. Failure to promptly switch rate tiers when data usage exceeds forecasts can lead to hefty data overage charges.

To keep costs down and customers happy, you need a smart connectivity management platform, or CMP. It's key to the great customer experience at the root of growth and profitability. Imagine it: Proactive alerts about outages or suspicious data patterns. Automated rate-plan optimization to avoid overage fees. Automated onboarding to the cellular network. Insights for future planning.

“The time from device testing to deployment used to be four days. With Cisco IoT Control Center it's now five minutes.”

– CEO, Industrial Monitoring Company

Challenges of cellular connectivity management

Ensuring reliability. Delays in discovering a lost cellular connection can lead to cargo spoilage and safety issues like undetected driver fatigue or imminent engine or chassis problems.

Security. Unusual network activity is often the first sign of a breach. Missing the signs buried in connectivity data can delay remediation, disrupting your business as well as your customers' fleet operations.

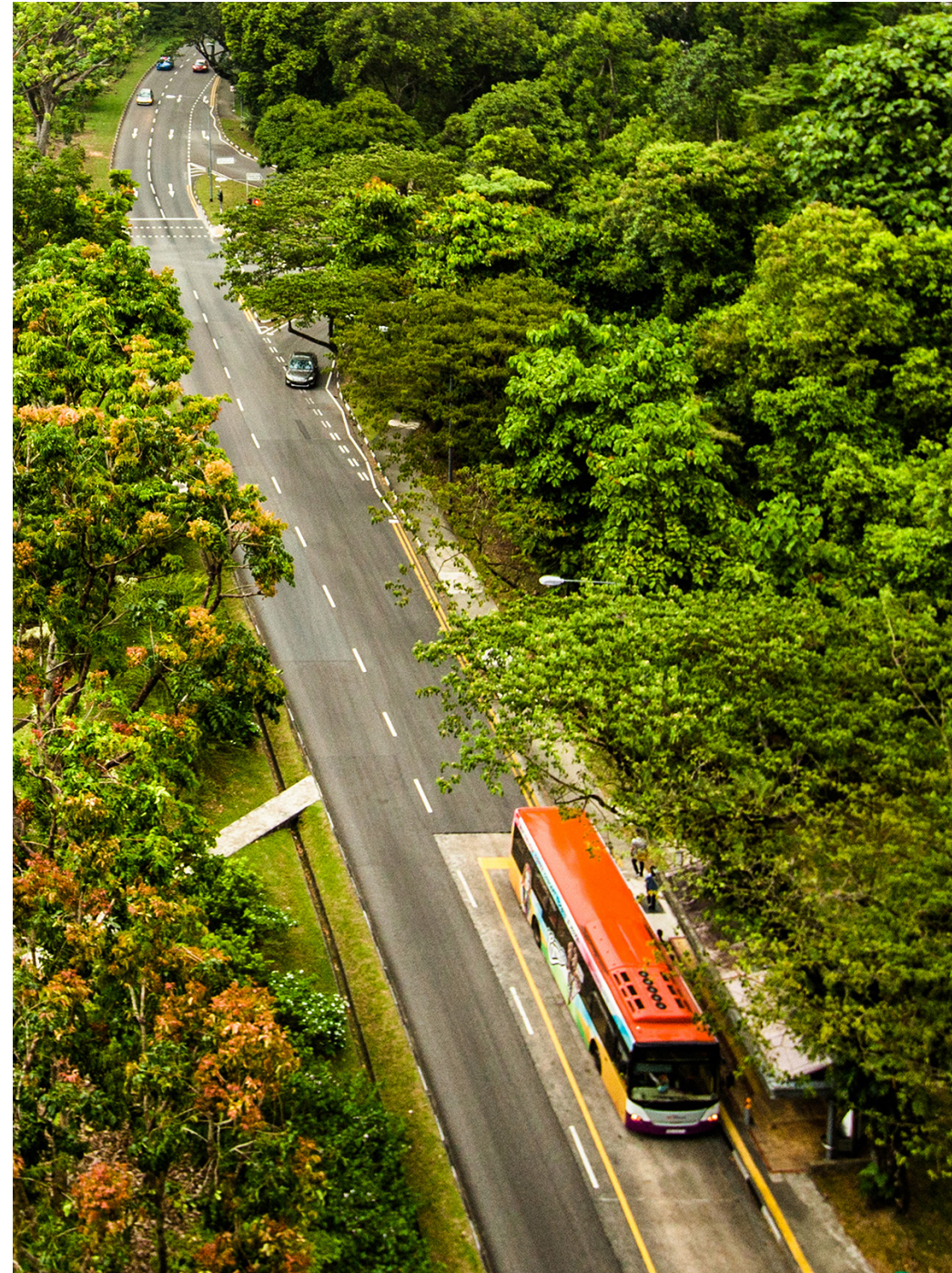
Onboarding new telematics devices at scale. Onboarding IoT gateways to the cellular network one by one is costly and time consuming, delaying time to revenue.

Insight into usage trends. Manually exporting needed cellular usage data to other enterprise applications is tedious, time-consuming, and can postpone insights.

Rate-plan management and overage charges. Assigning the right rate plans to thousands or tens of thousands of fleet gateways is excruciatingly complicated. Getting it wrong can lead to unexpected data overage charges.

“Using Cisco IoT Control Center, we dropped our monthly per-car network cost in Europe by 88%.”

– Head of Connectivity, International Electric Vehicle Company



Respond quickly to hidden connectivity challenges

Managing 1000's of vehicles requires real-time visibility and control

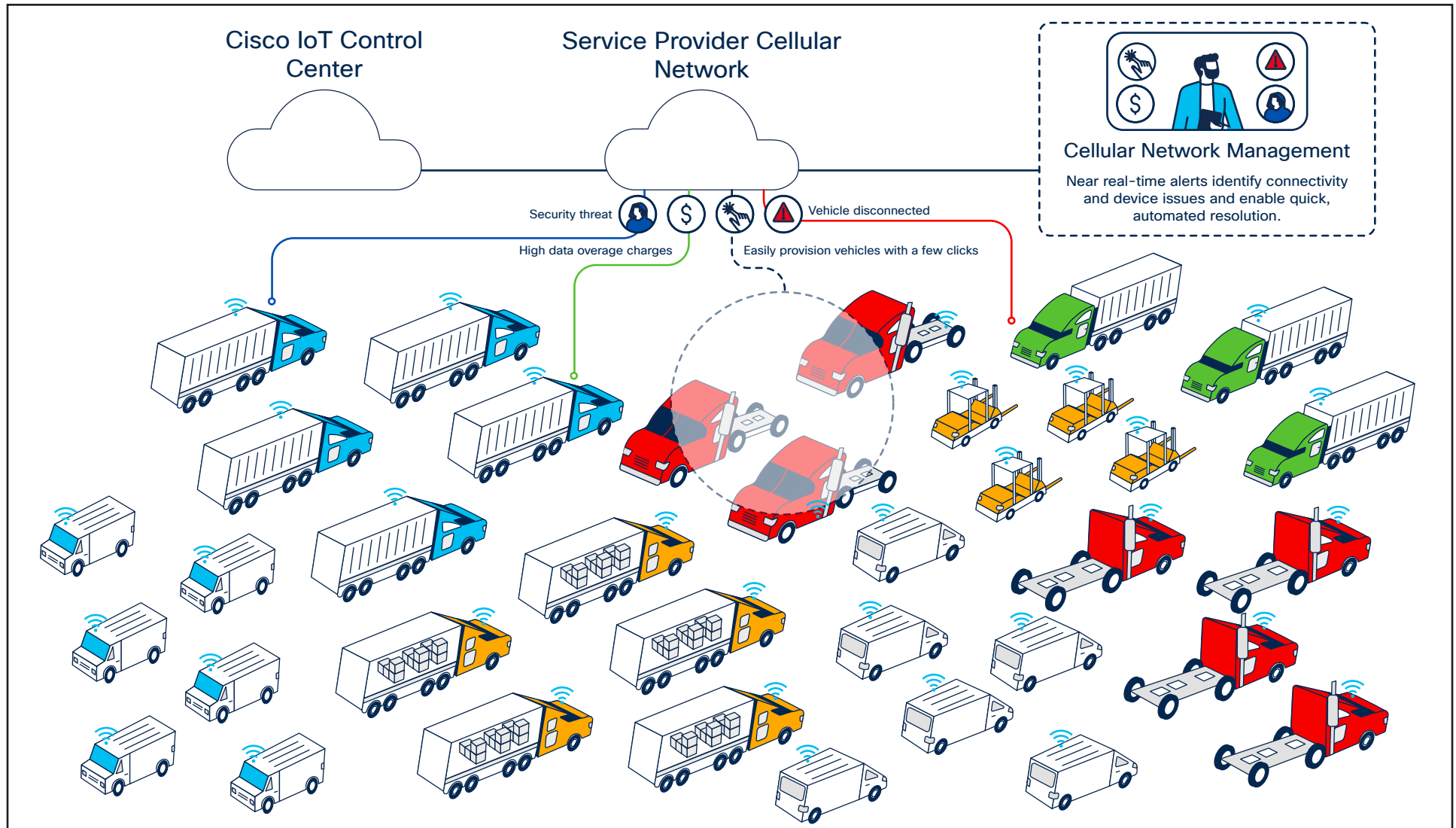


Figure 1. IoT Control Center on-boards and manages telematics devices at scale



Benefit from the experience of the global market leader.

Cisco IoT Control Center is the trusted CMP used by:

270+ million
connected devices

100+ million
connected cars

20M+
Fleet Management Telematics

50+
service providers in
120 countries

30+
thousand enterprises

Contain costs and keep fleet managers happy with Cisco IoT Control Center

Accelerate your growth and strengthen operations with Cisco IoT Control Center, the industry-leading platform for cellular IoT and fleet connectivity management. As a core component of Cisco's Mobility Services Platform, it provides unmatched control and protection for your connected devices. Whether you're just starting out or already manage tens of thousands of connected devices, Cisco IoT Control Center helps to keep costs down and simplify operations. Unlike CMPs that simply connect IoT devices, Cisco IoT Control Center also helps you:

- **Scale faster.** Large contract? Gain a competitive edge with faster delivery. Provision thousands of SIMs with a few clicks.
- **Protect better.** Protect your data and backend systems with multi-layer, enterprise-grade security. Plus, text and email alerts allow you to quickly respond to suspicious device behavior.
- **Operate smarter.** Improve the experience for your fleet management customers by giving your network teams near real-time visibility and control over cellular connections. Optimize rate plans with AI/ML-based analytics.

“We have so much more insight and control over our units now than we did before. Cisco IoT Control Center has paid for itself, tenfold.”

– Project Lead, Metering, Regional Utility Company

→ Learn more at [Cisco IoT Control Center](#) and [Cisco Mobility Services Platform](#)