



Cisco IoT Control Center Anomaly Detection

Keep high-value customers happy with proactive support

Building a sustainable IoT business requires providing a superior customer experience—while keeping costs down. Meet both goals

with Cisco® IoT Control Center Anomaly Detection, our early warning system for issue troubleshooting and resolution.

Overview

Enterprise IoT customers have high expectations for service reliability. To rise to the challenge, Communications Service Providers (CSPs) are forming Customer Experience (CX) teams to detect and resolve service and security issues before they disrupt the customer's operations. That's tricky for customers with tens of thousands of Internet of Things (IoT) devices. The problem? Summarized reports can mask anomalous activity for, say, a particular device type or region. Delays in detecting anomalous

activity can lead to service disruption, security breaches, and unexpected data charges that chip away at customer loyalty.

Cisco IoT Control Center Anomaly Detection uses an AI/ML-based early warning system for potential issues affecting your customers' IoT devices and connections. It helps your CX teams deliver white-glove service by pinpointing issues hidden in massive amounts of device and connectivity data so you can resolve them quickly—before they affect customers' business.

Benefits

- **Increase service reliability.** Discover unusual activity that typically escapes notice. Prompt action helps to avoid service issues or unexpected customer data charges.
- **Strengthen security.** Receive detailed alerts about suspicious behavior so you can pinpoint affected devices and take the right action to protect your customers' assets, information, and business.
- **Reduce costs.** Avoid trouble tickets and escalations. Reduce manpower spent on monitoring—it's automatic. Avoid having to issue credits to appease customers whose bills include unexpected data charges.

Spotting connected device issues—needles in haystacks

Building a sustainable IoT business requires providing a superior customer experience, including high service reliability, device security, and cost management. Sustaining your IoT business requires keeping support costs down.

But when you serve customers with 10,000 or 100,000+ devices—Electric Vehicle (EV) chargers, smart meters, connected vehicles, rented power tools, and more—potential service and security issues can remain hidden in massive amounts of data. For example, suppose a summary report shows that 99.8% of a particular customer’s 100,000 devices are online. Looks good on the surface. But if the 0.2% of devices are offline, say all of their delivery trucks, or all devices in a small region, there can be a significant impact to business. Identifying outlier events early and taking swift action are required—delays in detecting and resolving issues alienate customers and increase support costs and customer credits.

Early warning system pinpoints hidden service and security issues

IoT Control Center Anomaly Detection is built for CSPs who want to deliver a superb customer experience for their high-value IoT customers. Consider it if you have customers with 10,000+ devices, maintain a dedicated CX team, or want to earn more managed services revenue.

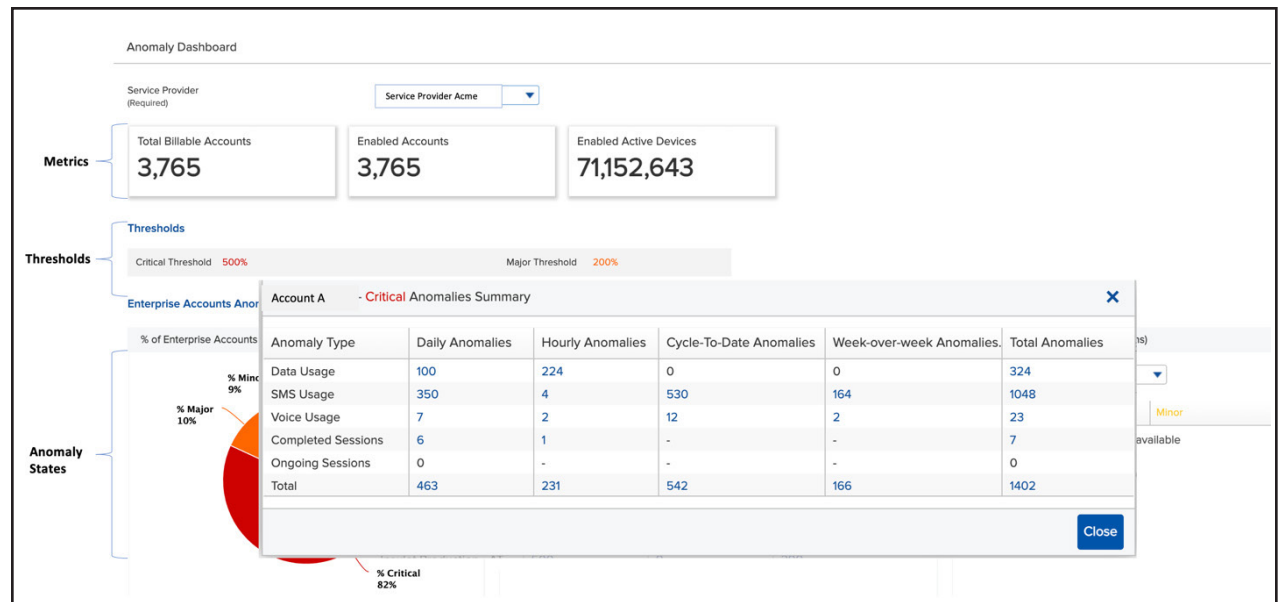
How it works

IoT Control Center Anomaly Detection:

- Uses AI/ML to analyze your network’s data consumption and device connectivity patterns over months to understand normal behavior
- Detects anomalous device or network behavior—for example, a spike in activity at

unusual times—and swiftly alerts your CX team

- Helps you focus effort where it’s most important by grouping anomalies by severity (critical, major, minor)
- Helps you troubleshoot affected devices by providing details such as:
 - Issue type and duration
 - Device type, geography, rate plan
 - Six months of historical behavior
 - Root cause analysis
 - And more



Visualize anomalous behavior and trends by geography, device type, rate plan, and more.

Benefit from the experience of the global market leader

Anomaly Detection is part of Cisco IoT Control Center, the trusted Cellular Management Platform (CMP) used by:

- 50+ service providers around the world
- 220M+ connected devices
- 2M+ new devices per month

What's unique about IoT Control Center Anomaly Detection

More accurate insights. The accuracy of anomaly detection depends on the volume and variety of data used to train the machine learning model. We continuously train IoT Control Center Anomaly Detection with data from 220+ million IoT devices that have connected to IoT Control Center since 2018. The data represents many use cases, device types, and device behavior patterns, giving you more accurate insights about potential service or security issues.

Learning without human intervention. IoT Control Center Anomaly Detection autonomously learns normal behavior patterns in your network without any effort from your staff, speeding insights and lowering costs.

Rapid service introduction. With easy one-touch service enablement, all your customers' IoT device connections are immediately monitored without having to be explicitly added. This helps you rapidly launch a white-glove service for your most valuable customers.

Learn more

[Cisco IoT Control Center website](#)