

## CASE STUDY:



**SIERRA  
WIRELESS**

**Sierra Wireless  
IoT Solutions  
British Columbia, Canada**

## Highlights:

- SW was building out a growing, complex IoT solutions infrastructure
- SW was using multiple monitoring tools, which resulted in tremendous inefficiencies
- SW sought the expertise of the Zen Networks team as integrators and monitoring experts to assist in this challenge
- SW chose Zenoss due to extensibility, reliability, scalability
- Unifying monitoring with Zenoss rapidly reduced costs and improved service levels, root-cause analysis and MTTR by 98% by reducing troubleshooting time from hours to mere minutes
- Zenoss extensibility enabled monitoring of every type of system and device
- Event correlation eliminated 99.99% of noise
- Zenoss reporting and intelligent dashboards provided key intel to all SW groups
- Zen Networks enhanced Zenoss solution by developing mobile network-centric plug-ins

## The Challenge

Sierra Wireless is the leading IoT solutions provider that combines devices, network services and software to unlock value in the connected economy. The company has more than 1,300 employees globally and operates research and development centers in North America, Europe and Asia.

Companies globally are adopting IoT to improve operational efficiency, create better customer experiences, improve their business models, and create new revenue streams. The Sierra Wireless challenge was to find the best way to reliably deliver industry-specific solutions for advanced IoT endeavors. This includes securely connecting edge devices to the cloud, developing software/API services to help manage processes associated with billions of connected assets, and offering a platform to extract real-time data to help customers make the best business decisions.

The company embarked on a mission to identify efficiencies and cost improvements through modern IT monitoring solutions. With a highly diverse set of software and hardware systems, Sierra Wireless sought to deploy an enterprisewide troubleshooting solution to get complete visibility and prevent IT service incidents, going far beyond simple health checks from traditional IT monitoring tools. Part of this endeavor was finding a way to aggregate and correlate massive volumes of events to sift through the noise to get only meaningful alerts about impacted services — then, automate alert assignments to teams with external integrations by accurately routing them. They also sought to build capacity planning and trending dashboards to dynamically monitor ongoing network evolutions.

Zenoss partner Zen Networks was given the mission to answer these requirements for Sierra Wireless. With the domain-specific knowledge they have on IoT and the mobile industry as well as their ITSM and monitoring portfolio, Zen Networks had the right positioning to seek a high-value solution for Sierra Wireless.

## The Solution

In the early stages, Sierra Wireless initially deployed Zenoss Core, a leading open-source infrastructure monitoring tool. Core enabled the company to monitor many types of infrastructure, came with no license costs, and allowed for a high level of customization. Zen Networks, as an official partner of Zenoss, was able to build custom ZenPacks, or Zenoss plug-ins, to create custom monitoring capabilities. This perfectly suited the technical and business needs at the time.

As Sierra Wireless experienced rapid, continuous growth in their IoT ecosystem, they outgrew the capabilities of the open-source IT monitoring tool. The company realized that they needed to make a strategic commitment to a carrier-grade monitoring infrastructure.

**They would need to modernize their monitoring architecture to meet performance and reliability requirements in the increasingly complex production environment.**

After comparing the capabilities of multiple commercial options, the team decided that Zenoss Cloud was the solution that best matched their needs and their vision. The key aspects where Zenoss got the highest marks were in extensibility, reliability and scalability – all of which are crucial for monitoring IoT environments.

## The Results

The results exceeded all expectations. Sierra Wireless was able to more rapidly deploy new technologies, deliver new levels of service to their customers, and dramatically reduce the risk of health or performance issues.

Because Zenoss Cloud is a SaaS-based platform, it was easy to deploy and manage, enabling Sierra Wireless to focus on business results and analytics instead of the software itself. The new platform also enabled the entire infrastructure to be monitored from a single pane of glass, automatically correlating the different layers of the infrastructure and applications into IT services.

**This also allowed the team to build a more advanced alerting architecture, which correlated and deduplicated events, eliminating 99.99% of the noise and surfacing only the actionable alerts.**

Zenoss Cloud also offered intelligent dashboards for the Sierra Wireless 24/7 global network operations center. The dashboards included built-in templates to suit many personas within the organization, from IT operators to business executives. Today, Zenoss Cloud is the go-to platform for incident root-cause analysis, predictive analytics, and overall visibility into the entire infrastructure.

**By placing Zenoss Cloud as a full-stack monitoring solution, Sierra Wireless was able to reduce licensing cost by around 57% while avoiding siloed information between teams.**

Zen Networks was able to provide more value out of Zenoss Cloud by integrating it efficiently with the Sierra Wireless network while adding customizations to monitor the telecommunications layer and corresponding network virtualized functions.