

How Virtana Helped Semtech Turn Billions of IoT Events into Actionable Intelligence



ABOUT

Industry
IoT Solutions

Location
British Columbia,
Canada



CHALLENGE

Semtech was using multiple monitoring tools, which resulted in tremendous inefficiencies



RESULTS

Unifying monitoring with Virtana rapidly reduced costs and improved service levels, root-cause analysis and MTTR by 98% by reducing troubleshooting time from hours to mere minutes

ABOUT:

Semtech 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.

OVERVIEW:

Companies globally are adopting IoT to improve operational efficiency, create better customer experiences, improve their business models, and create new revenue streams. The Semtech 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.



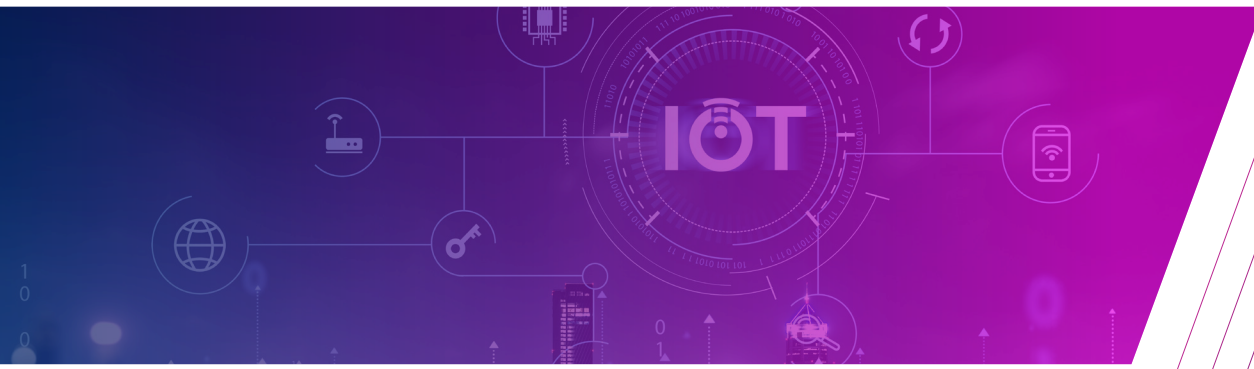
By placing Virtana Service Observability as a full-stack monitoring solution, Semtech was able to reduce licensing cost by around 57% while avoiding siloed information between teams.



IT Leader at Semtech



SEMTECH®



THE CHALLENGE:

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, Semtech 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.

Virtana partner Zen Networks was given the mission to answer these requirements for Semtech. 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 Semtech.

THE SOLUTION

In the early stages, Semtech initially deployed Virtana 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 Virtana, was able to build custom Integrations, or Virtana plug-ins, to create custom monitoring capabilities. This perfectly suited the technical and business needs at the time.

As Semtech 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.

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

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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.

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IT Leader at Semtech



THE RESULTS:

The results exceeded all expectations. Semtech 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 Virtana Service Observability is a SaaS-based platform, it was easy to deploy and manage, enabling Semtech 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.

Service Observability also offered intelligent dashboards for the Semtech 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, Service Observability is the go-to platform for incident root-cause analysis, predictive analytics, and overall visibility into the entire infrastructure.

WHY IT MATTERS:

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

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

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IT Leader at Semtech