Monitor enterprise wifi with IBM SevOne

Gain complete and unified visibility across wifi infrastructures

In today's mobile-first business environment, users depend on quality wifi services. That's especially true when they're on an enterprise campus. Employees, customers, partners and others expect wifi that's accessible and reliable and always delivers high performance. Anything less is unacceptable.

But meeting these expectations can be difficult for IT and NetOps teams. One reason is the enormous number of wifi-enabled, connected devices—and users' growing dependence on them. Another reason is evolving technology; "wifi 6" is bringing more bandwidth, higher speeds and more complexity. For teams trying to manage their wifi infrastructures using traditional monitoring tools, it's an uphill battle.

To address these challenges, organizations need to modernize their wifi systems—and include next-generation monitoring in their upgrades. By doing so, enterprises and managed services providers (MSPs) gain the power, flexibility and scalability they need to meet their wifi service delivery and monitoring needs now and into the future.

When it comes to future-proofing their wifi monitoring and management capabilities, the clear choice among leading enterprises and top-tier MSPs is IBM® SevOne®.

IBM

Industrial-strength wifi monitoring

IBM SevOne is a modern system. Designed to be paired with the latest wifi offerings from vendors such as Cisco and Aruba Networks, it provides wifi monitoring and management capabilities that complement and extend the capabilities of built-in, vendor-provided wifi management tools.

IBM SevOne is an integrated offering that provides teams with real-time and historical visibility into their entire wifi infrastructures, end to end. Coverage starts with wireless devices, continues into the wireless infrastructure, encompasses enterprise campuses, and extends seamlessly into data centers and cloud-based services and applications. And now, with over 20 out-of-the-box reports, multiple teams across an enterprise — from network operations to network engineering and wifi-specific users — can access sets of curated workflows to help users speed the time to resolution for wifi-related issues in their environment.

Superior speed, flexibility and scalability, along with complete and unified visibility into modern wifi deployments, are among the capabilities that make IBM SevOne for enterprise wifi monitoring a cut above.

Top capabilities

- **Address issues before they become problems.** The solution includes out-of-the-box troubleshooting workflows for rapid, proactive identification and mitigation of performance-impacting events and streamlining wifi infrastructure maintenance.
- **Gain comprehensive wifi infrastructure visibility.** The solution supports wifi system offerings from Cisco and Aruba along with unmatched coverage of wifi clients, wireless access points (APs) and wireless LAN controllers (WLCs), including support for Cisco Catalyst 9800 Wireless Controllers.
- **Detect rogue access points.** The solution enables teams to detect when unexpected, non-IT-deployed access points are found within their environments on a per-controller basis and instantly displays the relevant details.
- **Understand traffic impact.** The solution can display in granular detail what traffic was flowing through specific wifi interfaces at which times to identify how traffic behaviors impact users and applications.
- **Isolate and view "breadcrumbs".** The solution enables users to follow the performance of end user wifi stations over time to gain new insights and helps them troubleshoot up to a year's worth of wifi device to wireless controller performance.

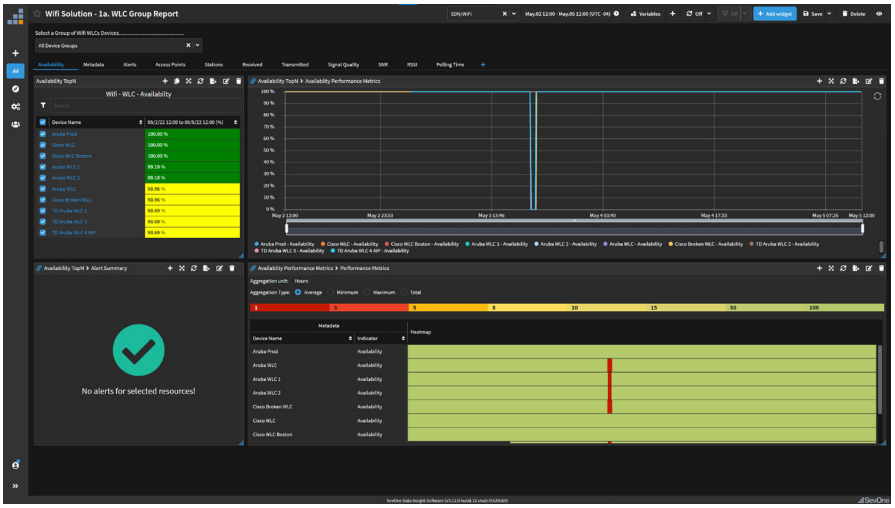
Wifi component	Key performance indicators
Wifi client	– **Wifi client list:** by device, frequency and operating system – **Domain name system (DNS) and dynamic host configuration protocol (DHCP) services:** status and availability of these key network services
Wireless AP	– **Frequency** (# of antennae) – **Connection utilization:** baseline AP utilization over day, week and month – **Wired power over Ethernet (PoE) connection:** baseline wired PoE connection – **Channel management:** understand wireless baseline against full spectrum and channel design plan – **Service set identifier (SSID) management:** understand how SSIDs are used and configured. Optimize beacon time, data rates. Eliminate low or unused existing frequencies (802.11b) – **Power levels:** monitor, report and optimize power levels against physical coverage areas
WLC	– **WLC network egress/ingress:** baseline and alert on traffic on flow data, quality of service (QoS) and link utilization – **WLC/endpoints:** use flow data to know which endpoints are accessing the network and what QoS is being applied to what traffic types

Out-of-the-box reporting

IBM SevOne delivers over 20 different interactive reports to give IT, NetOps and engineering teams detailed visibility into their enterprise wifi and campus infrastructure deployments. The solution's extensive flexibility makes it easy for teams to take advantage of these reports or further customize them to meet their specific operational requirements.

Below are some examples of out-of-the-box reports available in IBM SevOne.

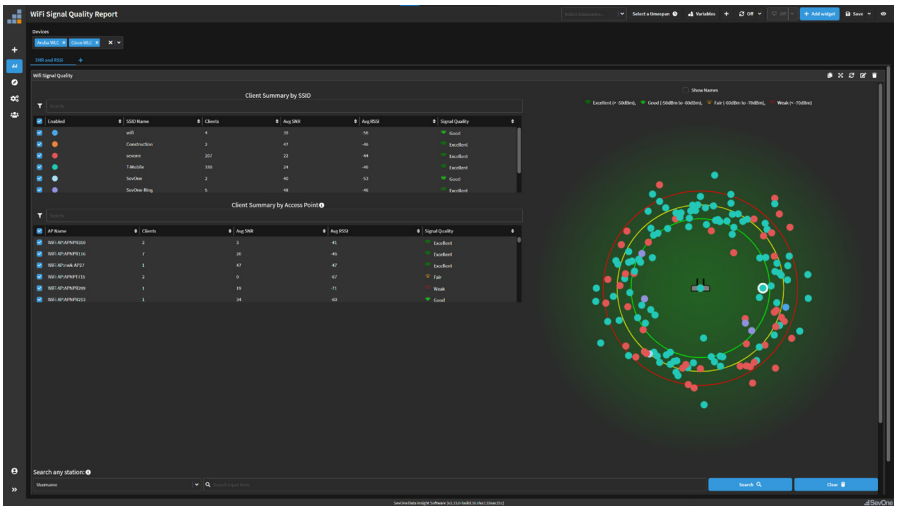
Wireless LAN controller availability and health
What is the current status of your WLAN controllers across your enterprise campus? What has the availability trend been? Does availability correlate at all with central processing unit (CPU) and memory usage?



IBM SevOne helps network teams view wireless LAN controller availability and health.

Wireless signal quality dashboard

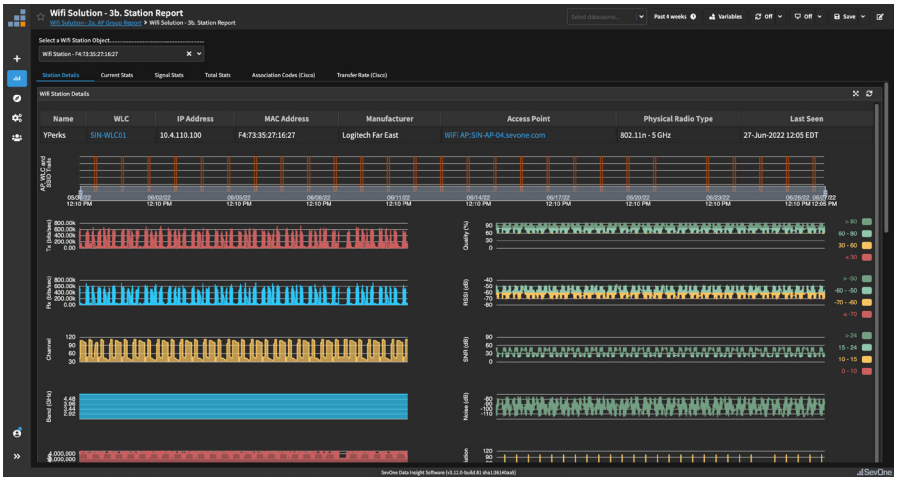
How does signal quality compare from one AP—or one user—to another? Where is the user located? Which AP are they associated with? Which user has sent or received the most data? Does the user need to easily link to historical station data?



IBM SevOne helps network teams track wifi signal quality across different users.

"Breadcrumbs" per user historical troubleshooting

What wireless access points, WLCs and SSIDs has a wifi user used over the past day, week or year? What was the signal-to-noise ratio, transmit/receive rate, percentage error and retry percentage, channel history and band use at a particular point in time across multiple APs, WLCs and SSIDs?



IBM SevOne helps network teams look back in time to view wifi usage per user.

Conclusion

With wifi being a critical part of networking today, users expect reliable connectivity and high-quality services. To meet these expectations, enterprises and MSPs need two things: modern wifi infrastructures and monitoring systems that can keep up. IBM solidly delivers on the second of these two requirements with IBM SevOne.

IBM SevOne makes it easy for IT, NetOps and engineering teams to ensure that their wifi infrastructures "just work"—reliably, transparently and seamlessly with the rest of their network environments. The solution helps networking teams tackle wifi performance issues quickly and effectively so they can meet and exceed users' expectations today and into the future.

Why IBM?

IBM SevOne delivers a comprehensive view of what's happening in the hybrid cloud network and how that performance affects the applications driving modern businesses. IBM SevOne can automate tool integrations and network actions based on ML observations, reduce repetitive tasks, and ensure coverage and compliance.

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