

Managing Wireless Network Performance

Wireless Networks based on WIFI are massively deployed.

4G today and in a short future 5G private networks are the hot technology for various site sizes such as airports, harbors, mining, utilities, and manufacturing. Smart Industry or Industry 4.0 is the new way to optimize processes and wireless network is now a must have.

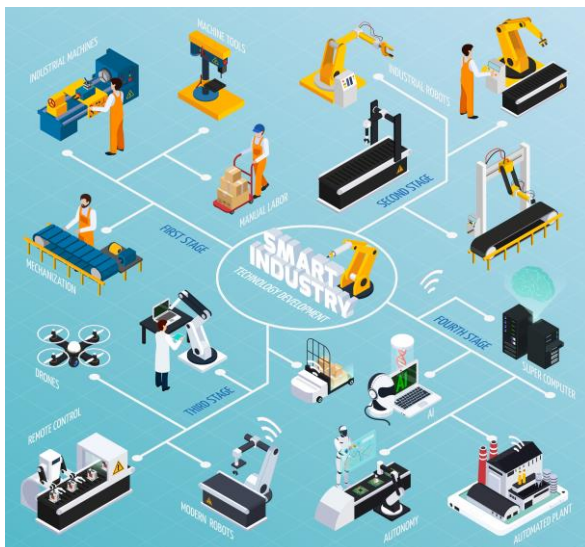
Then, managing availability and performance is the challenge.

Opale Systems provides tools that will help IT managers to control performance on wireless infrastructures.

For enterprise, WIFI is massively deployed and is coming to WIFI 6 (802.11ax) and 6E (extended to 6Ghz frequency band). WIFI is used on laptops and mobile devices with enhanced authentication and encryption for data protection.

WIFI 6 brings performance for latency sensitive applications, implementing reliability, higher scalability and allowing more connected devices.

4G/5G private networks are suitable for wide sites like industry due to the native scalability, the easy deployment with cost sensitive solutions. Mobile networks empower QOS, prioritizing traffic with high reliability and optimized performances for mobile devices and IoT.



At a glance...

- ▶ **Planning** – Test and validate in LABs
- ▶ **deployment** – Secure the services, validate network QOS and Voice QOE
- ▶ **WIFI Service Testing** – Verify connectivity and monitor network service issues
- ▶ **Wireless performance monitoring** – 24/7 network metrics with alerting
- ▶ **Fast performance checking** – identify in few seconds network bottlenecks
- ▶ **Voice quality assessment** – test and monitor SIP networks with Quality of Experience for real humans, validate mobile and softphones voice quality through wireless devices
- ▶ **Data/Voice/video traffic** – generate traffic to qualify QOS and performance in service classes
- ▶ **Data visualization** – export results to Elastic Stack for data aggregation and correlation

Making the difference

Opale Systems tools are based on active testing. They are network technology agnostics. Measurements rely on application layer. You just need IP (v4/v6) connection to start a test.

Wireless

Performance

- ▶ **Low bandwidth flow** – almost non intrusive test flow
- ▶ **Latency** - node to node latency and node to service response times
- ▶ **Jitter** – inter packet delay variation
- ▶ **Packet Loss** – percentage, number and burst loss
- ▶ **Throughput** – validate bandwidth
- ▶ **Wifi info** – levels, quality, SSID, AP mac addresses
- ▶ **Wifi connection tests** – provide informations on Wireless services
- ▶ **Voice Quality Metrics** – MOS G107, PESQ, POLQA

IoT

- ▶ Multiplatform compatibility
- ▶ Android
- ▶ Linux for x86
- ▶ Linux for x64
- ▶ Linux for ARM
- ▶ Windows
- ▶ Hardware boxes
- ▶ Virtual Agent

Elastic features

- ▶ Web Dashboards
- ▶ Metric trends with baselines and percentiles
- ▶ Site visibility
- ▶ Multi-user support
- ▶ PPT reports like through Canvas
- ▶ Event Logging based on alerts
- ▶ Data consolidation with external log sources

