



# Network Performance Optimized for a Large 5G Carrier

A 5G carrier with a massive network needed to manage the complexities of service assurance while delivering flawless performance to its subscribers. The growing complexity of network architecture, the velocity of network changes, and the endless number of potential endpoints exacerbated their service assurance challenges. To address these challenges, the carrier implemented VIA AIOps, a next generation AIOps application to sustain end-to-end service assurance and their subscribers' experience while optimizing their network operations.

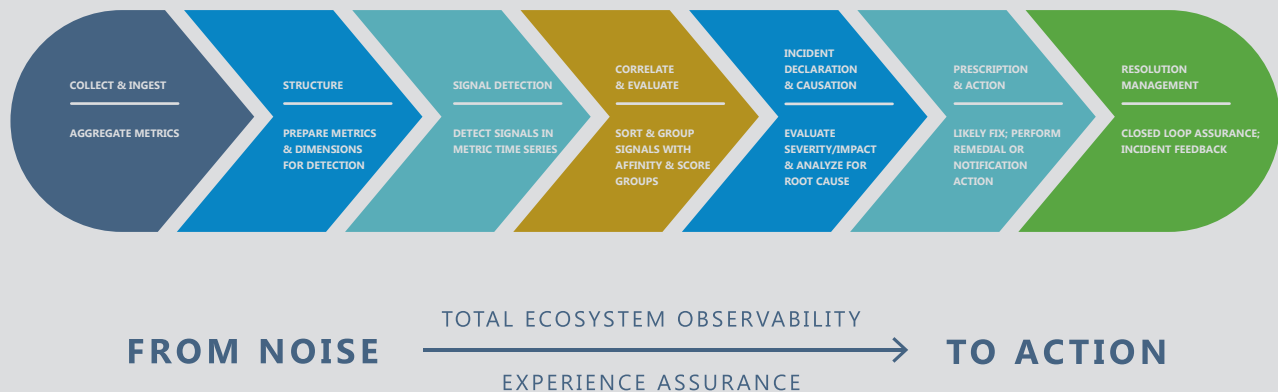
## Service Assurance Challenges:

- Network complexity with **massive scale** and programmable, software-driven architecture presents challenges for traditional assurance management processes
- With zero-touch provisioning, adding new network elements or functionality is enabled automatically but introduces failures that are **difficult to rapidly detect and resolve**
- Subscriber dissatisfaction in an **extremely competitive environment** is untenable

## The Solution:

VIA AIOps operates across domains in this massive 5G network. Within the data center and across the software defined network, **advanced analytics, machine learning, and AI** reduce noise, detect service-impacting events earlier, and **prescribe actions automatically**.

VIA combines fault and performance management concepts to segregate real issues from noise and define the relevance and scope of performance-impacting faults quickly to address and resolve issues. **Understanding root cause requires seeing and reacting to the interplay across physical and virtual elements in the 5G network.** An operator can not only focus on signals and anomalies coming from IT elements, end points or independently from the network but rather must look across these and understand their impact on the overall performance of the service and the subscriber experience. VIA AIOps delivers full stack observability and sustained service assurance optimization.



## VIA AIOps for 5G Network Assurance

- Detects events before the subscribers' experience is impacted
- Automatically analyzes for probable root cause, defines severity of impact and the customer populations affected.
- Delivers automated detection, analysis, and prescription of the next best action for service impacting events across service domains
- Enables prioritization and rapid resolution of customer impacting events
- Automates workflows with taught and learned intelligence
- Delivers measurable improvement in service assurance