CASE STUDY

Communication Service Provider Gains End-to-End Service Assurance for their Complex Cloud Infrastructure

Traditional service assurance applications can easily be overloaded with operational data, impeding operator productivity. Explosive data volumes, disparate data formats combined with interdependent technology layers, microservices, and applications with more virtualization makes service level fault and performance management extremely difficult.

Traditional management systems rely upon siloed monitoring tools and support workflows within each service layer. These independent practices constrain operational productivity and the overall service assurance process. Independent operational teams are often chasing symptoms within their silo when the root cause of the problem lies outside their visibility and control. Multiple support teams may be addressing the same or different symptoms but all of them attributable to the same root cause. Addressing these service issues is slow and extremely labor intensive.

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SERVICE PROVIDER CHALLENGES

A large Middle Eastern Communications Service Provider operating across multiple countries and providing land line, mobile, data and cloud services faced these same challenges. They needed to optimize their service performance while reducing operating cost across service domains. They chose VIA AIOps as the service assurance solution for their entire Telco cloud infrastructure.

Must Have Solution Requirements

This Middle Eastern provider required a system capable of monitoring the health and performance across a complex cloud-based service ecosystem. Core functions of the solution needed to include fault and performance management, noise reduction, and root cause analysis.

Must have capabilities of the solution included:

INGESTION, CLASSIFICATION AND ENRICHMENT

- Ingesting metrics, logs, event, and trace data
- Syslog data classification by the domain and service originating the event
- Syslog and metric data enriched with reference data on inventory, topology, and service dependencies of all the domains monitored

DETECTION AND ALERTING

- AL/ML-driven alarm noise reduction on fault data (event signals)
- AI/ML-driven anomaly detection on KPIs (metric signals)
- Correlation of event and metric signals for determination of service performance or customer experience issues
- Identification of root cause, key symptoms, and impact of incidents prior to wide-spread experience degradation

NOTIFICATION AND INTEGRATION

- Ability to easily integrate with the operator's existing workflows and Incident Management systems, including automated opening, updating, assignment and closing of tickets.
- Intuitive UI with persona-based views

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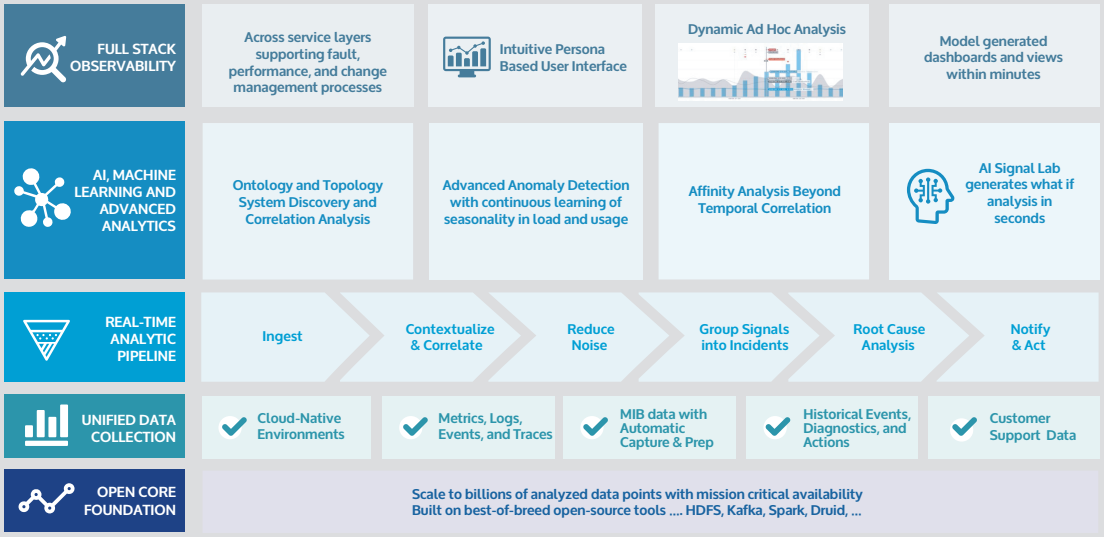
Vitria VIA AIOps Delivers the Solution

VIA AIOps met all the must have functional requirements and then some. VIA AIOps is a next generation application for fault and performance management across the service delivery stack. Offering end-to-end service assurance, VIA AIOps reduces noise with earlier detection of anomalies and outliers, uncovers the root cause from the symptoms, prescribes action, and integrates with existing systems to improve their value. Operations teams are more effective using a single pane of glass that delivers the unique operational insight to detect issues in seconds, troubleshoot in minutes, and provide customers with a superior level of service.

FIGURE 1: VIA AIOPS END-TO-END SERVICE ASSURANCE ARCHITECTURE



VIA's unique strengths are its ability to deliver end-to-end process optimization for fault, performance, and change management across service domains in both cloud and traditional infrastructures. VIA differentiates with its AI, Machine Learning and Advanced Analytics that enable:

- Creation of a comprehensive ontology through learned and taught application and service dependencies
- Advanced anomaly detection using intraday seasonal baselines computed automatically for metrics and event streams
- Capturing signals and outliers that simple threshold boundary conditions miss
- Identifying behavioral changes to accelerate diagnostic analysis
- Finding the root cause through affinity analysis that goes far beyond temporal correlation to include ontological overlap
- Grouping signals from across the technology stack to reduce noise and discover root cause

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OUTCOMES ACHIEVED WITH VIA AIOPS IMPLEMENTATION

This Communication Provider is now able to detect and solve more incidents faster within and across service domains. VIA AIOps implementation:

- Improved the overall service level delivered to subscribers
- Significantly improved service operations effectiveness and efficiency
- Consistently delivers the best information at the right times to the right people
- Reduced service operational cost

Contact us today for a demonstration.
https://www.vitria.com/contact

ABOUT VIA AIOPS

VIA AIOps is a next generation AIOps application that enables intelligent automation across all layers of service delivery to improve the customer experience and optimize operations. VIA AIOps provides total ecosystem observability, and explanatory AI to increase confidence in automation. VIA AIOps delivers noise reduction, correlation, and intelligent automation across operational silos to enhance customer experience and reduce operational cost by enabling more rapid issue detection, mitigation and resolution.

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