Vitria VIA AIOps 3.0 Reaffirms Commitment to Continued Improvement in Customer Assurance

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VIA
AIOps

"At some of the largest carriers, with VIA, the Mean Time to Resolve (MTTR) improved by up to 40% for full scale outages and 80% for service impairments."

Chris Menier, General Manager, VIA AIOps, VITRIA

The complexity of managing performance and faults in a public service provider is complex, very difficult, and requires great scale. Vitria focuses on the service provider market segment and network operations improvement. Cisco chose Vitria as their partner because of their focus on service providers and improving the fault management process.

Cisco and Vitria have worked on projects for Major 5G service providers in the United States who are building out and expanding and need to ensure that there is an end-to-end assurance solution in place. They also work with providers in the MEAR region. With some of these providers, the assurance is focused on the mobile packet core but is likely to expand to transport or RAN as well. Similar projects are being addressed in Asia Pacific.

VIA AIOps NEW release

The new version focuses on openness. Openness as it relates to VIA entails how data is ingested, how VIA integrates into existing workflows, as well as how actions are automated. VIA extends into multiple service domains and across different types of opportunities and deployments. This version provides the ability to build out persona views easily to support different deployment opportunities. VIA continues to improve the use of ontology and affinity analysis to better capture root cause across

the entire service ecosystem and adds a digital finger printing feature to combine human intelligence to AI to continuously improve algorithms and root cause analysis. And then finally, it's simpler to use, not just from the UI perspective, but in the installation, the operations, and the ongoing care and feeding. These are some of the major features included with this new release.

Integration into workplace processes

The objective with VIA AIOps is to integrate with workflows and make them smarter and more reactive. If a team is collaborating using WebEx, VIA can integrate with WebEx and not give them a new queue that they must manage. If a team is used to having a system like ServiceNow, or any other incident management system, VIA integrates with that system as well.

The new version includes deep linking into other tools integrating directly with the tools and systems already being used. Customers can start getting value out of VIA immediately versus having to reeducate or re-architect workflow processes.

Out of the box deployment

VIA's out of the box deployment doesn't require much manual configuration. Algorithms are ready to go as soon as data starts hitting VIA.

With out of the box algorithms, our clients see their data analyzed in a completely different way and better results immediately. But, a three-to-six-week soak period is needed to see if any tuning or tweaking needs to be done to conform to operational best practices. After that several week period, our clients begin pushing on more automated action.

UI supports multiple personas

Use cases have various types of personas, whether they're SREs, or network operations analysts, or even business folks who want to see the value that VIA is creating. With the new VIA AIOps software release, custom dashboards can be built in the UI in minutes to support multiple personas.

Improved Analytics with Ontology and Affinity Analysis

One of VIA's differentiations is the ontology-based approach. It goes beyond your basic enrichment or set data schemas, the tags, or dimensions and enriches data streams with inventory, topology, and service dependency. Inventory includes entity type, make, model, and those sorts of things. Topology is understanding where it lives, its neighbors, connecting points, node edges and endpoints. And finally, the service dependency side which entails which services are impacted if what is running on this entity fails. This approach allows VIA to correlate across the entire service delivery ecosystem and get to probable root cause. Without this, other systems are just doing noise reduction and not getting to the root cause.

VIA couples this ontology approach with affinity analysis. Think of affinity like similarity. It's a way of determining if two signals detected might be correlated. And once correlated, VIA then takes a combination of artificial intelligence and human intelligence to constantly inform those affinity algorithms and improve the accuracy.

In this newest release, investments have been made in better explaining the entire analytic pipeline. And most importantly,

continued improvement in the analytics and combining human and artificial intelligence significantly reduces the mean time to resolve issues. At some of the largest carriers, the Mean Time to Resolve (MTTR improved by up to 40% for full scale outages and 80% for service impairments.

Digital fingerprinting and model learning.

Digital fingerprints are tied to model learning capabilities. For example, a user can reject VIAs suggestion for root cause, and if rejected, this will inform future suggested actions. VIA also detects that an incident reopened or that maintenance was needed sometime later. Learning those patterns, tying those incident management and change management systems for continuous learning improves the whole automation process. Digital fingerprinting builds the trust that a suggested action is the right action, and then further automation can be enabled.

Cisco's expectations and benefits for the new VIA AIOps release

With VIA's ontology approach, knowing the network environment, the data structures that are coming from network elements or from other network assurance tools, and enriching this data with service dependencies in addition to the topology and inventory information automatically means a lower cost of implementation and quicker time to value.

Cisco is working on a reference architecture for transport network assurance where VIA is tightly integrated into the other Crosswork Automation applications in our Crosswork Automation suite, so that it's an out of the box transport assurance reference architecture that includes the VIA ontology.

Click here if you'd like to listen to the full audio interview with Chris Menier and Marc Austin.

About VIA AIOps

VIA AIOps easily integrates with monitoring systems located in silos across the service hierarchy. Enabled by explainable AI, VIA prescribes remedial actions to the designated system of action and predicts problems before they impact customers. VIA AIOps can be deployed from the cloud, on premises or in hybrid operating environments.