



Grok AIOps Improves Operational Efficiency at Global Managed Service Provider



Reduce Monthly Actionable Incidents by

88% ↓

Reduced Daily Work Items by

80% ↓

ENVIRONMENT & BACKGROUND

As one of the largest Global Managed Service Providers, this company provides premier services to help customers adopt digital technology and deliver powerful business outcomes. With tens of thousands of customers worldwide, billions in revenues, and a workforce of close to 5000 employees, they still continue to grow and innovate to deliver services for their dynamically evolving customer environments. Helping customers to accelerate digital transformation and modernize data center and cloud services also meant that they needed to be at the forefront of change.

Through their rapid expansion, this company needed to support and manage a drastically diverse and growing customer base with personalized services, but also do it in a way that allowed them to leverage economies of scale for operational efficiency. They have multiple global operations centers and must manage hundreds of thousands of devices across the full infrastructure stack - from network, servers, databases, applications, security and cloud infrastructure. As they bring on new tools, they also have to continue to manage their own legacy tools that they've built to drive competitive and differentiated services.

Providing 24x7 proactive monitoring and management to their customers requires that this company provide their operational teams with the appropriate tools for improved visibility, resiliency and responsiveness for their customers. Any outages or performance issues could have an adverse affect on service level agreements as well as financial implications to their business.

KEY OBJECTIVES

Reduce Total Volume of Events and Data that Require Action

With the rapid expansion of new customers, services, and devices, the volume of events and data being generated also began to grow exponentially. Many of these events were either unnecessary "noise" or events that were related to similar problems. However, handling these high volumes with existing tools and personnel limited their ability to scale and remain agile as the business continued to expand. They needed an approach that would help them to intelligently organize and manage events that were critical to the services they delivered to their customers.

Further Improve Customer Uptime and Service Delivery

As a managed service provider, the lifeblood of their business was to ensure the uptime and availability of their services to the customers. Network, infrastructure, and application service outages and performance issues meant that their customers were inoperable. This company wanted to continue to further improve response times to critical incidents and reduce service outage times but also get one step ahead and to find, fix and prevent problems before they had an adverse affect on their customers.

Up-level Senior Engineering Staff from Daily Firefighting Tasks

The company prides itself in hiring and recruiting the industry's best IT staff, engineers, and architects to continue to innovate and grow their business. However, many of their senior IT employees continue to get pulled into reactive, time-consuming activities to put out "fires". They wanted an approach that would help to reduce escalations to these more expensive, experienced resources but continue to deliver on the quality and reliability of their services.



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GROK SOLUTION

As the company began to modernize their operations, they quickly identified that there was a missing intelligence layer in their architecture. After evaluating multiple platforms, there was only one platform that could provide everything that they needed, Grok AIOps. With industry-leading AI, algorithms and self-updating machine learning models, Grok AIOps was implemented to reduce their massive amount of events into manageable, actionable incidents and provide the insight to quickly identify root cause. This allowed the team to quickly fix problems at its source and reduce service impacting outages and performance issues. The company also utilized Grok's predictive machine learning capabilities to algorithmically find anomalies and predict future events so they could proactively avoid services issues. Grok provided the central intelligence layer that they needed between their LogicMonitor monitoring and ServiceNow ticketing systems to minimize noise, greatly improve response times and provide operational agility for their teams. The company deployed the following Grok AIOps capabilities to address their business needs:

- **Event Clustering:** Ingested customer event feeds through LogicMonitor and used machine learning algorithms to build a representational model of each individual customer's infrastructure. Grok automatically clusters events that are related to the same underlying root cause and presents these events as a detection to be promoted to ServiceNow as an incident.
- **Correlation & Root Cause:** Grok leveraged its machine learning models to automatically show all related events, timeline and relevant contextual information from ServiceNow (i.e. related incidents, change requests) enabling teams to quickly determine root cause and take remedial action.
- **Anomaly Detection:** With data inputs from several log monitoring and performance management tools, Grok utilized machine learning algorithms to identify anomalous behavior and subtle pattern changes that were not obvious or easily detected by their traditional tools. This also provided early signal to future incidents.
- **Incident Classification:** Utilized Grok's machine learning algorithms to quickly learn and map event clusters (Detections) to incident types to assign and categorize work that improved operational efficiency and scaled engineering resources

KEY RESULTS

Grok AIOps provided the needed intelligence layer to dramatically improve operational responsiveness and agility.

Grok's event clustering greatly reduce event and data volume from 28K incidents down to 3.5K incidents per month which represented an 88% reduction in the number of incidents needing to be manually handled by their support teams. This reduced escalations, manual work activities and helped to alleviate overworked resources. Grok also significantly improved the team's ability to efficiently respond to service impacting issues by correlating similar and related events together and suggesting probable root cause. This helped the customer continue to improve response times and SLAs. Finally, Grok's anomaly detection capability provided an intelligent and preventative overlay for their operations to find and identify problems and behavioral anomalies which would have resulted in a potential outage. This enabled them to take a more proactive posture with their operational teams.

Grok was successful in driving measurable benefits and savings into operations by providing a flexible platform that could be customized to each individual customer but also scale to massive volume of total customers to support their rapid growth.

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Noise Reduction



Probable Root Cause



Anomaly Detection



Incident Classification



Plug 'n Play Infrastructure Modeling

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