Box Achieves Google Cloud Migration Success with Kentik

box

CATEGORY

- Cloud content management

CHALLENGE

- Incomplete visibility into network performance
- Cloud visibility, specifically Google Cloud
- Tool creep

SOLUTION

- Box chose Kentik for network visibility from data center to cloud, including K8s clusters.
- Kentik's comprehensive network observability minimized costs and simplified network planning.

RESULTS

- Successful migration to Google Cloud under time and budget
- Efficient network infrastructure
- Data-driven decisions enabled by detailed network traffic
- Optimized network performance
- Visibility and ability to troubleshoot Google Cloud VMs and K8s clusters

Background

Box (NYSE:BOX) is the leading Content Cloud, a single platform that empowers organizations to manage the entire content lifecycle, work securely from anywhere, and integrate across best-of-breed apps. As a trusted provider of cloud-based content management solutions, Box places high importance on maintaining a secure and efficient network infrastructure to support its customers' needs. Founded in 2005, Box simplifies work for leading global organizations, including 68% of the Fortune 500. Box has been a Kentik customer since 2015.

Introduction

In today's digital landscape, secure content management and effective collaboration are vital for businesses of all sizes – especially those working remotely. Box, a leading cloud content management platform, has used the Kentik Network Observability Platform for years to optimize its network infrastructure and enhance business performance. Box initially engaged with Kentik to monitor its on-prem infrastructure. However, when Box decided to expand network resources to Google Cloud, they looked to Kentik to help inventory on-prem resources and monitor a complex cloud migration.

When all was said and done, Box credits Kentik's platform with helping overcome network challenges, improving visibility, and empowering the network team's successful migration of resources from on-prem to Google Cloud on a very short deadline.

The situation

Box's network team faced the challenge of migrating to Google Cloud on a very short timetable. While Google Cloud has basic native tools for monitoring cloud infrastructure and traffic, Box needed assurance that they would have on-prem visibility during and post-migration. The Box networking team was already familiar with Kentik's dashboards, templated queries, and insights the platform provided for monitoring their on-prem infrastructure.

"We love the dashboards and the custom alerts we get with Kentik. Adding another network monitoring platform would have made our jobs so much more difficult. With Kentik, we are confident that we have the visibility we need to take action to ensure our network is performing optimally," said Louis Bolanos, Staff Cloud Network Engineer.

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That visibility enabled Box to discover lingering dependencies between cloud and on-prem services, helping to ensure an exceptional experience for customers.
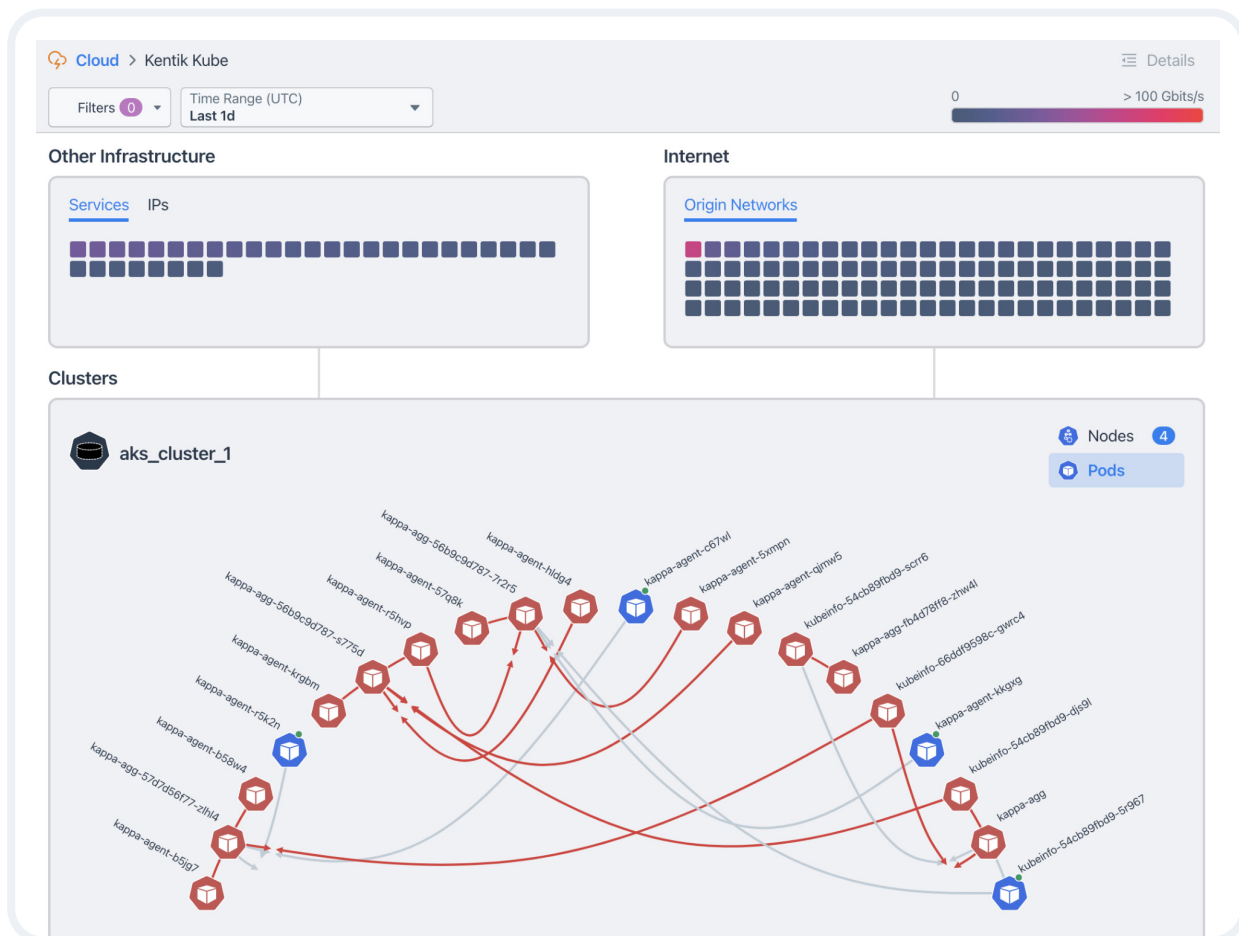
But, Box's existing on-prem infrastructure still needed maintenance throughout the migration. Google's native cloud tools lack comprehensive visibility into network traffic, especially between on-prem and cloud, and within container workloads. Monitoring and maintaining on-prem, cloud, and Kubernetes networks simultaneously without additional headcount would challenge this migration. Additionally, Box knew they needed to pinpoint latency issues, bandwidth utilization, and hairpinning between on-prem and cloud services.

Meeting security and compliance requirements was also an important consideration. Box needed to ensure stringent security measures were in place to protect sensitive customer data and comply with industry regulations, while maintaining its high standard of seamless content collaboration and data sharing.

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They soon realized that cloud costs could quickly spiral out of control without visibility into inter- and intra-cloud traffic flows. Identifying inter-region traffic volumes to perform cost attribution easily, even down to the level of Kubernetes clusters, was a recognized challenge.
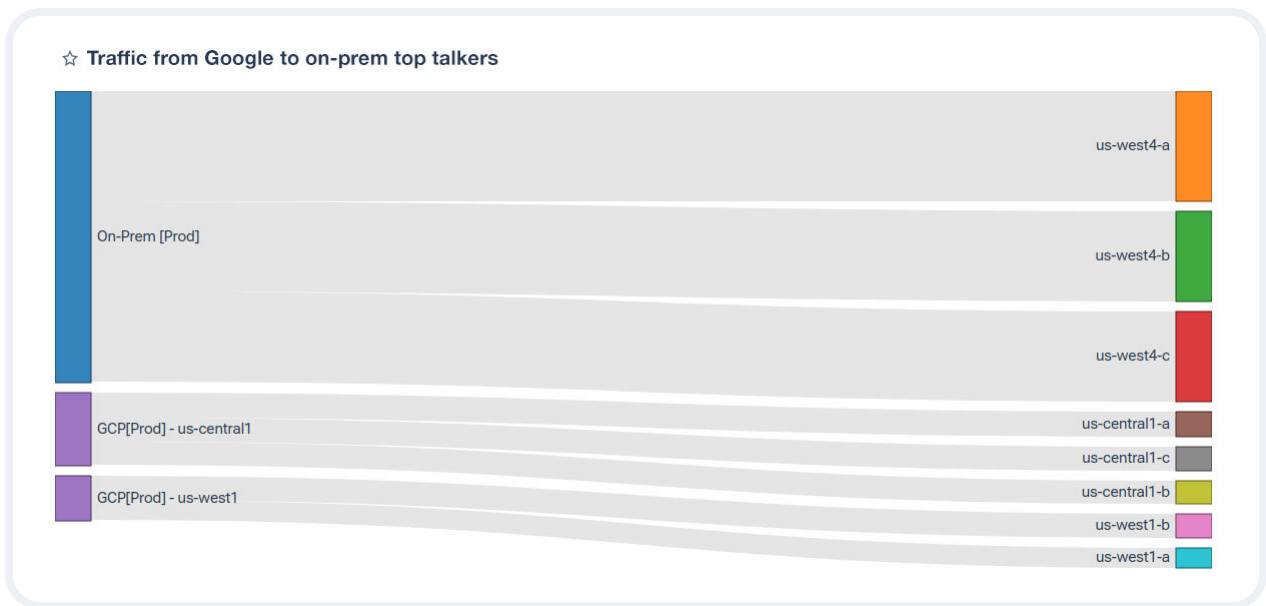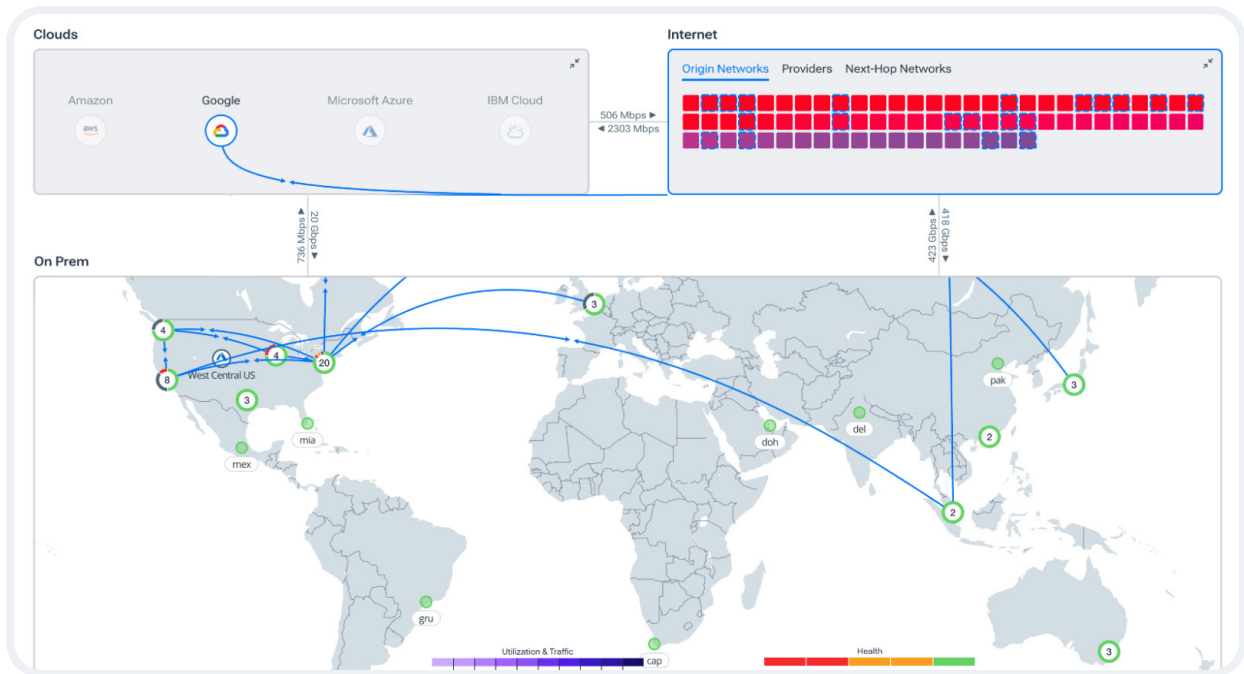

How Kentik solved cloud migration for Box

Box turned to Kentik to help expedite and troubleshoot their migration to Google Cloud. Kentik's comprehensive platform offers the following key features:

Cloud monitoring: Kentik's advanced analytics and real-time traffic monitoring provide Box with deep visibility into its hybrid network infrastructure. Network behavior within and between container workloads, particularly Kubernetes, was also critical to the Box networking team.

Visibility into hybrid cloud network infrastructure: The relationship between cloud and on-premises networks, and their connectivity to the internet.

Kentik Cloud emerged as a perfect solution for Box's cloud migration needs. It allowed them to analyze traffic patterns, identify bottlenecks and hotspots, and optimize network performance.

"Visibility into cloud-deployed Kubernetes clusters in Kentik is super clear and makes troubleshooting so much easier," said Bolanos.

Anomaly detection and alerting: Kentik's intelligent anomaly detection enabled Box to promptly identify and respond to unusual network behavior. Real-time alerts empowered their IT teams to proactively prevent potential service disruptions.

Security analytics: Kentik's platform helped Box monitor network traffic for potential security threats. With Kentik Protect, the team can easily monitor the network for malicious or anomalous activity.

> **"Kentik saved us time and gave us full confidence that we'd be aware of and be able to respond to any cloud or on-prem network issues on a timely basis."**

Scalability and flexibility: Kentik's cloud-native architecture seamlessly integrated with Box's existing infrastructure and provided scalability to handle its growing user base and evolving business requirements.

"We were able to provide custom migration dashboards for internal service owners, giving them the ability to observe traffic declines on services that were being sunset and discover misconfigured services routing calls to the wrong locations."

Cloud costs: Kentik provided the visibility needed to ensure traffic flowing to, from, and within Google Cloud was optimized for performance and cost.

Results and benefits

Kentik played a critical role in helping the Box network team transition to Google Cloud. "Kentik saved us time and gave us full confidence that we'd be aware of and be able to respond to any cloud or on-prem network issues on a timely basis," said Bolanos.

> **"To save time and costs and improve the performance of hybrid networks, there's no need to retool if you use Kentik."**

With Kentik, Box could inventory and track migration progress efficiently, collaborate without pivot fatigue, and monitor/validate the performance of Box services during migration.

"As our network continues to evolve, we have confidence that Kentik will continue to meet our network observability needs. With the network diversifying into various flavors of virtualization on top of cloud migrations, this drove us to look at various aspects of network performance in different tools. Kentik's Google Cloud and Kubernetes observability allowed us to investigate traffic on Google Cloud VMs and K8s clusters, including the separation of workload namespace to help simplify our suite of tools used for reporting and troubleshooting."

Kentik was instrumental in Box understanding and tracking traffic patterns between on-prem and public cloud-hosted services and between public cloud ones and regions. Thanks to Kentik, service-owning teams can optimize network latency and reduce egress spending.

Conclusion

The Kentik Network Observability Platform helped Box achieve the visibility and responsiveness native tools couldn't provide while migrating to Google Cloud. Box can rely on Kentik when they need to introduce or extend to a cloud network, perform cloud migrations, or maintain hybrid cloud networks. "To save time and costs and improve the performance of hybrid networks, there's no need to retool if you use Kentik," said Bolanos.

Implementing Kentik's network-agnostic advanced analytics and real-time monitoring capabilities enabled Box to optimize network performance, ensure data security, and improve overall operational efficiency. As a result, Box can continue to deliver a seamless collaboration experience while upholding the highest standards of content management and security standards.

Kentik is the network observability company. Our platform is a must-have for the network front line, whether digital business, corporate IT, or service provider. Network professionals turn to the Kentik Network Observability Platform to plan, run, and fix any network, relying on our infinite granularity, AI-driven insights, and ridiculously fast search. Visit us at kentik.com.