



Achieve secure cross-account connectivity to your Amazon MSK clusters via AWS PrivateLink with the Aklivity Private MSK Proxy.

Key Challenges

One of the advantages of Amazon MSK over other managed Kafka solutions is that it is always deployed within your own VPC. This provides a high degree of network security as your MSK clusters are isolated from the public internet and other Amazon accounts. However, while you have complete control over how co-located Kafka clients access your MSK clusters, extending access to clients running in a separate VPC is operationally complex. As a result, aligning with AWS Well-Architected requirements that call for a separation of workloads across accounts based on function, compliance requirements, or a common set of controls, is increasingly difficult.

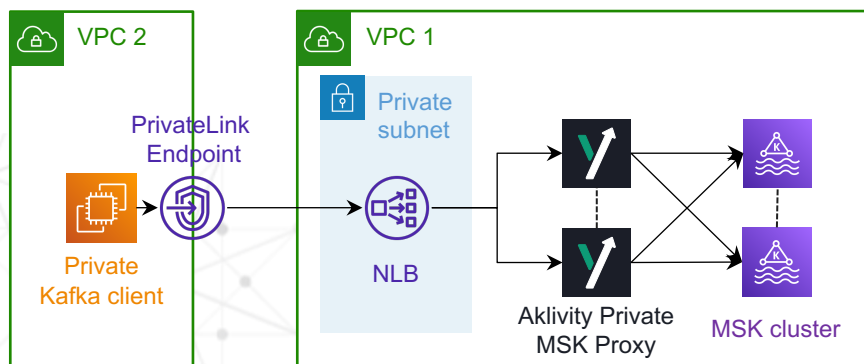
For private Kafka clients running in a VPC different from that of your MSK cluster, existing approaches to cross-account connectivity have limitations:

- VPC peering requires fine-grained network access controls
- AWS PrivateLink relies on excess NLBs

Solution Overview

Aklivity's Private MSK Proxy helps organizations achieve cross-account connectivity between their Kafka clients and MSK clusters - securely, reliably and at scale. Delivered as two CloudFormation templates, it automates the configuration of a VPC Endpoint Service for your Amazon MSK cluster as well as corresponding VPC Endpoints. These endpoints enable secure access to your MSK cluster via AWS PrivateLink from a different VPC, even if that VPC is owned by a different AWS account. Kafka clients in each consuming VPC will be able to connect, publish messages and subscribe to topics in your Amazon MSK cluster.

The Aklivity Private MSK Proxy is available for customers to deploy within minutes in the AWS Marketplace and is consumed through a flexible, usage-based pricing model.



Solution Highlights

- Simplified VPC endpoint configuration for secure access to MSK clusters via AWS PrivateLink
- Targeted connectivity between Kafka clients and each Kafka broker in your MSK cluster without excess NLBs or NLB listeners
- Support for MSK clusters that are scaled out to add more Kafka brokers, even after configuring a VPC Endpoint
- High performance runtime that maximizes throughput and minimizes latency

Key Benefits & Outcomes

- ✓ Secure, distributed and scalable cross-account MSK access
- ✓ Kafka clients configured to use MSK directly from within the same VPC can now be migrated to a consuming VPC without any changes
- ✓ Alignment with AWS Well-Architected best practices across the operational excellence, security, reliability, and cost optimization pillars

For More Information

Available on
AWS Marketplace: [amzn.to/37r9AVT](https://aws.amazon.com/marketplace/pp/prodview-amzn-to-37r9avt)
Twitter: [@aklivityinc](https://twitter.com/aklivityinc)
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