The Client

Zendesk is a cloud-based industry leader that provides help desk management solutions offering customizable tools to build customer service portals, knowledge bases and online communities. They are a service-first CRM company that builds software designed to improve customer relationships. EverOps has worked with Zendesk on a variety of projects from office build-outs and retiring its physical data centers to kubernetes adoption. We're proud to continue growing with Zendesk as we enter our second decade of partnership.

The Challenge

Zendesk has an IT network that supports over 5000 users across five continents. As both traffic volume and use case complexity increased, Zendesk IT found that the network required a rigorous maintenance process that was not scalable or easy to recover from in the event of an outage. They were looking to reduce network latency from all global regions as well as improve overall network availability. Zendesk approached EverOps to tackle this challenge all while reducing the mean time to recovery (MTTR) for any failures that occurred within its network.

The Solution

EverOps worked with Zendesk leadership and engineering teams over several weeks to review the current state of the network architecture and traffic patterns. This resulted in a multi-phased roadmap that targeted the following functional areas:

- *Panorama Templates –* Variablized VPN Config elements across multiple regional firewalls were developed to keep HA VPN configurations in sync
- *Codified DNS Records in Terraform –* 500 existing DNS records were imported through custom scripting and redeployed via Terraformed modules in conjunction with Terragrunt for zero down time changes
- *AWS Load Balanced DNS Records –* Deployed in an active-active configuration in geographically disparate regions to optimize global traffic flow and provide seamless and automatic DNS record failover between nodes

The Business Outcome

Within 5 weeks, EverOps was able to implement all segments of this solution including proactive testing and verification of the architecture which provided the following outcomes to the Zendesk network:

- Achievement of 99.999% uptime availability for remote access services globally
- Resolution of VPN configuration sync challenges across multiple firewalls reducing maintenance burden and configuration error rate through a repeatable, parameterized approach
- Implementation of Gitops best practices for maintaining DNS configurations across the entire Zendesk organization
- Improved global traffic flow to closest regional VPN node for 50% reduction in latency

In Addition to the above outcomes, Zendesk now has a codified, repeatable network configuration solution that drastically increases the frequency with which they can release changes into their network while reducing the effort required.