



CASE STUDY

Microland enhances security operations, efficiency, and scalability for a global public services provider

Overview

Our client, a leading public service provider in Australia, renowned for its commitment to operational excellence and client-focused service, collaborates closely with government agencies to deliver innovative solutions across sectors such as health, immigration, and defense. To enhance scalability and operational efficiency, Microland migrated business applications from their on-premises datacenters in Sydney and Perth to the cloud. This migration required establishing a new landing zone on the existing Azure infrastructure, following Microsoft guidelines and the well-architected framework.

Scope and Business Challenge

The scope for this project involved successfully migrating over 20 business applications from on-premises datacenters to the Azure Cloud, necessitating the establishment of a new landing zone based on a Hub and Spoke model to ensure robust network efficiency and security. This entailed implementing ExpressRoute for secure and reliable network connectivity, deploying Palo Alto Firewall for comprehensive traffic filtering and security policy enforcement, and utilizing NetScaler ADC VPX for load balancing to ensure high availability and scalability of web applications.

Challenges included managing the seamless migration of applications with minimal downtime, maintaining efficient network traffic between on-premises and Azure environments, and enforcing consistent security policies across the network.

Microland Solution

Microland's approach to establishing a robust and secure infrastructure involved implementing a comprehensive Hub and Spoke architecture. The centralized hub in Azure was designed to provide essential network services, while remote spokes were deployed to connect various application environments. Azure Virtual Networks, Peering, and Security Groups were utilized to ensure secure communication between the hub and spokes, creating a scalable and efficient network architecture.

To enhance security and traffic management, Microland deployed the Palo Alto Firewall within the Azure Hub. This deployment enabled effective filtering of network traffic, with defined and enforced security policies ensuring that only authorized traffic flowed through the network. Centralized management was achieved using Panorama, streamlining policy enforcement across the network and maintaining consistent security standards.

For load balancing, Microland utilized the NetScaler ADC VPX Load Balancer to manage web-based applications. This implementation allowed for the distribution of incoming web traffic across multiple servers, ensuring even load distribution and preventing server overloads. By dynamically adjusting to traffic demands, the solution ensured high availability and scalability for web applications, thereby enhancing overall application performance and user experience.

The implementation approach also included the integration of ExpressRoute to manage network traffic between on-premises datacenters and Azure. This provided a private, reliable, and high-speed connection, crucial for maintaining seamless communication and data transfer. Security was further enhanced by deploying Palo Alto Firewall in the Azure Hub, which filtered traffic and enforced strict security policies. The deployment of NetScaler ADC VPX for load balancing ensured that web applications remained highly available and scalable, meeting the demands of the migrated business applications.

Business Benefits

Since its implementation, Microland has significantly transformed the client's operations, delivering impressive results:

- **Operational Efficiency:** Streamlined the migration of over 20 business applications, enhancing scalability and operational efficiency.
- **Network Security and Efficiency:** Established a secure and efficient network architecture using ExpressRoute and the Hub and Spoke model.
- **High Availability and Scalability:** Ensured high availability and scalability for web applications through the implementation of NetScaler ADC VPX.
- **Improved Security:** Enhanced security posture with the deployment of Palo Alto Firewall and centralized management via Panorama.

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