Global Telco Cuts Time, Costs and Security Risk in Massive Migration to Microsoft Azure

A Fortune 100 global telecommunications company ('Global Telco') – one of the largest in the world – has hundreds of millions of customers. The business services are supported by more than 350 global data centers. Global Telco needed to consolidate data centers, reduce operational expenses, and improve scalability.

Complex migration with multiple objectives

The goal was to quickly and securely migrate thousands of applications and hundreds of thousands of workloads to Microsoft Azure cloud. In this complex migration journey, multiple teams were involved and they have diverse and sometimes conflicting objectives to address:

- The transition team wanted to simplify migration process, and reduce outage risk and cost

- The security team wanted to improve the security posture; streamline audits; identify and respond to threats faster across a hybrid infrastructure

- The risk and compliance team wanted to reduce risk and maintain compliance across cloud and on-premises applications

- The IT ops team needed to consolidate and decommission applications

To succeed with these objectives, Global Telco needed a solution that can do the following:

- Gain complete visibility into application relationships and policy behaviors in the data centers to reduce risk during Microsoft Azure migration

- Deploy automated policy building to ensure continuous compliance during migration

- Monitor and enforce consistent policy across their Microsoft Azure AD, Sentinel, and Azure Security Center environments to ensure application resiliency and security post-migration

Challenges: Existing tools and processes not up to task

However, Global Telco's security tools and visibility processes ensured little chance of timely success and reduced confidence in the overall migration effort due to:

Why vArmour?

"We moved 400,000 workloads and 5,800 applications in just over 18 months with ZERO incidents. We couldn't have done it without vArmour."

The Challenge

Global Telco wanted to quickly and securely move 5,800 applications spanning 400,000 workloads to public cloud Microsoft Azure but faced difficult challenges:

- Existing tools and processes could not provide complete visibility of application relationships

- Existing security controls were inadequate to enforce consistent policies during and post-migration

- Existing controls could not orchestrate and enforce consistent compliance policies across the enterprise

The Results

- Accelerated the secure migration to Azure public cloud from 4 years to 18 months

- Reduced risk and cost of application outage

- Streamlined audits and maintain compliance

- Identified and responded to threats faster

- Ensured post-migration performance and security

- Existing tools and processes could not provide complete visibility of application relationships, workloads behaviors, or security policy impacts across the entire infrastructure, from on-premises to cloud—both pre-and post-migration. The data received from multiple configuration management database sources were disparate and conflicting.

- The traditional security methods could not drive and orchestrate implementation of consistent compliance policies across the enterprise. Global Telco could not baseline existing security policies and enforce the same policies post-migration.

- Existing security controls were insufficient or ineffective in reducing the compliance burden of their hybrid cloud environment.

Solution: vArmour Application Controller

Global Telco turned to vArmour for complete application and workload visibility to reduce the complexity, costs and security risks during migration. vArmour Application Controller automates the visibility and understanding of application relationships and dependencies across all environments. The solution labeled and categorized all 5,800 applications spanning 400,000 workloads quickly, and customized its reporting output to meet Global Telco's requirements.

vArmour's solution provided:

- **Centralized application and workload visibility:** Enabled workload visibility and asset identification across geographically dispersed data centers. Contextual data compiled from three separate CMDBs in one single place to make operations and decision-making easier.

- **Vulnerability and threat management for faster incident response:** Monitored policies around critical applications including those with recent vulnerability, and internal/external applications for threat and vulnerability management for incident response.

- **Continuous compliance to security policies:** Mapped application behaviors pre- and post-migration over time to ensure performance, and security policy compliance, including NIST and PCI.

- **Automated security policy analysis:** Integrated with Global Telco's policy orchestration and management tool for more than 10,000 global internal and external applications; configuration and change control tools; and threat and vulnerability management platforms.

> "vArmour is committed to ensuring that all migrated applications are resilient and compliant with all of our performance and security policies."

Application visibility speeds, secures migration

vArmour Application Controller visually modeled Global Telco's application dependencies and policies. It resulted in fast and secure migration of applications to Microsoft Azure without disrupting business services. The vArmour solution enabled cloud engineers to understand and view dependency mapping and functions of workloads; security engineers to automatically set control and policy for applications from legacy to cloud; and network teams to take targeted action against abnormal or unexpected application relationship behaviors.

The partnership with vArmour brought Global Telco the following benefits:

- Accelerated the secure migration to Azure public cloud, reducing schedule of operation from 4 years to 18 months

- Reduced risk and cost of application outage during and after migration

- Streamlined audits and compliance process to reduce the burden of maintaining compliance

- Identified and responded to threats faster across hybrid environment

- Ensured post-migration performance and security

About vArmour

vArmour has helped to discover and secure hundreds of organizations' critical assets globally. Our solution has been leveraged from the world's largest banks to multi-national telcos to SMBs and even small churches, justifying our solution and its ability to scale.

Find out more about vArmour