

A mid-size Pan India Bank's Journey to Secure Hybrid Cloud Applications and Crown Jewels with Micro segmentation Use Cases

BANKING

## **BACKGROUND**

Financial institutions, driven by the need for cost savings, automation, and enhanced security, are increasingly embracing agile technologies like hybrid cloud solutions. Amid this digital transformation, security remains a paramount concern. This case study explores how a mid-size Pan India Bank successfully addressed these challenges by implementing a Microsegmentation solution, focusing on Application Ring Fencing.

## **CHALLENGES**

**Third-party Access Complexity:** The bank heavily relied on third-party applications, partners, and outsourcing vendors, leading to complex access routes. The de-facto use of open-source software libraries in most of the Software these days has further expanded the attack surface, demanding granular access control up to the application library and process level.

**Hybrid Environment Complexity:** The bank's mix of cloud, container technologies, standalone, and legacy systems created a complex and challenging environment to visualize, audit, and protect. The bank needed a way to monitor and secure lateral network communications effectively.

**Ransomware Threats:** Ransomware attacks were on the rise, necessitating a rapid response mechanism to contain infections should they occur.

**Lack of Data Visibility:** The bank lacked comprehensive data, including Software Bill of Materials (SBOM) and communication channel information, which hindered policy definition for Ring Fencing and cloud migration.

## **SOLUTIONS**

The bank engaged QOS to propose the Akamai Microsegmentation (formerly Guardicore) Solution:

**Demonstration and Education:** QOS demonstrated various use cases of the Akamai Microsegmentation solution, showcasing process-level policy definition and ring-fencing capabilities. This addressed the bank's concerns regarding cloud migration and ring fencing.

**References:** Akamai provided references from other large banks, including one in the US and a prominent Indian private bank, which successfully implemented the solution and met regulatory requirements.

**Expert Consultation:** QOS deployed a team of certified GCSE consultants, leveraging in-house accelerators to automate labelling and select authorized communication channels. They achieved Ring Fencing for two critical applications within the first month and 28 applications within three months.

**Legacy System Support:** The bank's mix of AIX, Solaris, Windows, and Linux servers posed challenges. Akamai's product support and 24x7 Customer TAC assistance helped overcome initial deployment hurdles on legacy systems.

**Policy Definitions:** QOS used past experience and in-house templates/accelerators to create skeletal policy definitions for Ring Fencing and Zone-wise Microsegmentation, down to the process level.

**Sustenance Partner:** Post-successful deployment, the bank approached QOS for an annual contract to provide ongoing support and subject matter expertise.

## **BENEFITS**

**Regulatory Compliance:** The bank achieved compliance with regulatory directives by successfully implementing Ring Fencing for all banking and treasury applications.

**Reduced Attack Surface:** By enforcing east-west security policies, the bank significantly reduced its attack surface and gained the ability to contain malicious activities, such as malware or ransomware propagation.

**Zero Trust Model:** The bank now has enhanced visibility into process-level communications and can enforce policies based on a Zero Trust Network Access (ZTNA) model, laying a strong foundation for core applications and underlying compute.

**Unified Application Labelling:** The bank established a ubiquitous application labelling framework that seamlessly covers on-premise and public cloud applications, ensuring smooth transitions without compromising security.

In conclusion, this case study demonstrates how a mid-size Pan India Bank successfully addressed complex security challenges and achieved regulatory compliance through the implementation of the Akamai Microsegmentation solution supported with a unique set of deployment accelerators by QOS, creating a secure and agile environment for its hybrid cloud applications and crown jewels.

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