

CASE STUDY



Cathay Pacific Gains First-Class Micro-Segmentation with Illumio Core

Protecting critical applications and coming in ahead of schedule



Customer Overview & Challenge

Their name has been on just about every "who's-who of airlines" list, ranking top 10 from aircraft safety to ticket sales. These accolades have been all but inevitable for Cathay Pacific as they've focused on delivering worldclass airline operation. But when they were targeted by an attack, a new inevitability in today's cybersecurity landscape, the Hong Kong-based carrier redoubled their focus on their security program in short order.

"Zero Trust and least privilege came into the discussion right away. We knew we had to implement microsegmentation for the right level of protection for our most critical applications," explained YC Chan, Head of Infrastructure Engineering at Cathay.

If the end goal of micro-segmentation is to prevent lateral movement and protect "crown jewel" applications, they had to know their network better than anyone else from the start. The team required visibility into application traffic across the entire network. But more than that, YC sought a solution that would help them achieve their visibility and segmentation goals in the most efficient way possible.

"We had discovery tools that provided some visibility and insights, but ultimately did not integrate visualization and policy workflow. In order to achieve our goals by the year-end deadline, we needed an interface that showed us application and workflow traffic and enabled us to act quickly and efficiently to block or allow flows."

Illumio Solution

YC and team turned to Illumio Core™ and quickly realized it was "the easiest way to do micro-segmentation." For one, the real-time application dependency map lets them see all connections between servers and what their applications are talking to. With that capability, they understand what needs to be protected and can take immediate action on flows to block them or authorize. And with 600 applications at stake, the team exceeded expectations.

Summary

Industry: Airlines

Environment: 3,000+ servers and ~600 applications, on-premises and multi-cloud including Azure and AWS.

Challenge: Tighten internal security controls and protect applications to uphold the criticality of their cybersecurity program initiatives

Solution: Illumio Core for precise protection of critical applications, enabling Zero Trust control against the spread of potential attacks

Benefits: Easy-to-deploy microsegmentation with quick time to value; reliability and confidence from testing; visibility for cross-team collaboration; and millions in savings vs. ACI and NGFWs

The ability to run policies in test mode before going into enforcement played an essential role in the success of their deployment. This empowered ongoing collaboration between infrastructure and security teams and application owners. The results? A reliable, thorough process for enforcement that helped them beat their most pressing deadline.

"We partner with application owners to review flows and help define policies. You couldn't ask them to read firewall rules, but Illumio's App Owner View map and plain language labels make it infinitely easier for them to understand the flows and apply policy. We are confident that our applications are protected with the right level of segmentation – with no disruptions during enforcement."



Not only do YC and team continue to use Illumio to bolster their internal defenses, but it is also helping solve another challenge: PCI DSS compliance. Securing cardholder data is of paramount importance to Cathay. With Illumio Core's mapping and policy creation capabilities, they're able to meet many PCI compliance requirements. The team is also leveraging SecureConnect on over 1,000 workstations for instant workload-toworkload encryption of data in motion. The alternative route for this compliance initiative was installing tens of data center firewalls to shore up their call center offices, amounting to an estimated \$5M. With far less effort and spend, they're well on their way to PCI peace of mind.

Customer Benefits

Fast time to value

The team came in ahead of schedule, faster than anticipated, in segmenting their most critical and vulnerable applications.

Less risk, more uptime

The ability to test the impact of new policies without any changes to the network gives them much-needed confidence that enforcement will never break applications.

Greater visibility, cross-functionally

Using the real-time map to involve application owners in the segmentation process improves policy accuracy and ultimately increases Cathay's security posture.

Clear path to compliance

Saving millions in potential firewall costs for PCI compliance, the team has Illumio Core's encryption, visibility, and segmentation capabilities at their disposal for compliance mandates.

Whenever we introduce new servers or applications, Illumio is part of the commissioning process. It's proven to be easy to deploy and implement and has helped us be more application centric.

YC Chan, Head of Infrastructure Engineering



Illumio enables organizations to realize a future without high-profile breaches by preventing the lateral movement of attackers across any organization. Founded on the principle of least privilege in 2013, Illumio provides visibility and segmentation for endpoints, data centers or clouds. The world's leading organizations, including Morgan Stanley, BNP Paribas, Salesforce, and Oracle NetSuite, trust Illumio to reduce cyber risk. For more information, visit www.illumio.com/what-we-do.



See what customers have to say about Illumio.

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