Visualize East-West Traffic





Catbird, powered by the HP VAN SDN Controller

View your network through an application-centric lens. Learn how applications and application tiers behave and talk to each other in preparation for micro-segmentation.

诺 Benefits

- Automatically discover and visualize an inventory of all physical and virtual server assets
- Logically group assets into similar segments based on application security and compliance demands
- Traffic visibility allows you to monitor and analyze how applications interact

Working with the HP VAN SDN Controller, we are able to group physical and virtual IT assets into logical zones (micro-segments) and visualize East-West traffic between them to fully understand application connectivity and behavior.

Overview

East-West Traffic Dominates

Organizations worldwide are moving to cloud and virtualized IT and network environments more rapidly than ever before. This reduces costs and increases agility, but this new technology's adoption has fundamentally changed security and compliance requirements needed to protect the organization.

Traffic within this new hybrid IT infrastructure is primarily East-West— meaning it exists within the datacenter or

cloud. This has rendered the

traditional model of perimeter security largely ineffective for protecting against the proliferation of attacks within an enterprise's security border.

Challenges with Existing Solutions

Existing network and security controls lack an accurate real-time inventory of all virtual and physical server assets that make up the hybrid IT infrastructure. They also lack a flexible way to group workloads and visually represent them in a way that's understandable to the business. The business is not interested in long lists of server names. What does interest them is understanding how their applications behave and want to make sure they are well protected and shielded from other compute resources that should not interact with them.

Move to SDN

The benefits of SDN speak for themselves. SDN allows for a much more flexible way to structure, operate and secure networks than traditional networking. However, when it comes to defining how to segment the network, organizations struggle. They don't understand existing application connectivity, and as such struggle how to model Access Control Lists for different micro-segments.

For those same reasons they have a hard time convincing application owners to signoff on migration plans towards SDN. Application owners want visual reassurance that applications will continue to work correctly in new micro-segmented SDN infrastructure.

HP's SDN solution combined with Catbird's software-defined security suite address

those challenges head-on

Why Catbird & HP

Catbird – Leader in software-defined security

Catbird is a pioneer and leader in softwaredefined security for virtual infrastructure. Catbird's software suite of products was designed from the ground up to provide visibility into and protection of private clouds and virtual Data Centers, and is available for both VMware and OpenStack based infrastructures.

HP Open SDN Architecture

The HP SDN architecture spans the infrastructure, control and application software layers, making the network easier to manage with maximum agility.

The HP Virtual Application Network (VAN) SDN Controller platform, paired with network infrastructure supporting the industry standard OpenFlow protocol, provides centralized control of a programmable. end-to-end network designed to dynamically adjust to your evolving business needs. The platform's reliability, consistent APIs and rich features, empower applications, such as Catbird to deliver greater network efficiency, plus more advanced security, Quality of Service management, and rapid application or service delivery.

How it works

Once Catbird has been deployed within the infrastructure, a secure communication channel is being set up between the Catbird



Control Center and the HP VAN SDN Controller. Catbird will ask the HP VAN SDN Controller to mirror specified traffic and send it to Catbird. The HP VAN SDN Controller will in turn steer underlying network devices like routers and switches to deliver the corresponding traffic flow information.

Once Catbird starts receiving the flow information from the HP VAN SDN Controller, it will start populating an inventory of all physical assets discovered in the environment, along with virtual assets discovered by Catbird's own Virtual Machine Appliances (VMA) that collect similar flow information from within the virtual fabric.

Next Catbird allows to group both physical and virtual assets into logical zones called Catbird TrustZones[®]. Based on the flow data captured through both the HP VAN SDN Controller and the Catbird VMAs, Catbird allows visualizing and analyzing traffic flows between the different logical zones, providing detailed and real-time insight into East-West traffic flows across the enterprise.

By defining Catbird TrustZones around applications or application tiers, organizations get a deep understanding of how applications and users are connected, and allow validating that firewall controls are working properly.

SDN makes the difference

The HP VAN SDN Controller allows Catbird to expand its scope beyond the virtual fabric and capture traffic flows from other parts of the network. This results in an enterprise-wide view of East-West traffic flows, between both virtual and physical workloads.

By layering Catbird's unique logical zoning construct on top of HP's SDN solution, organizations get an unparalleled understanding of how their applications communicate and behave, which in turn allows them to move towards a truly microsegmented and thus much more secure network.

Based on actual flows between the

different zones you can determine which flows should be allowed, but also what type of traffic you should not be seeing and thus should be disallowed. Catbird allows you to set baseline configurations and receive alerts when real-time traffic drifts from a previously set baseline occur, allowing for example for the capture of infrequent connections.

Summary

By combining HP SDN with Catbird's revolutionary suite of software-defined security solutions, you get unmatched visibility into your hybrid IT infrastructure and are able to smoothly move to microsegmentation.

Learn more

hp.com/sdn

catbird.com

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