Check Point + Nutanix

Automated and Agile Threat Prevention For Hyperconverged Infrastructure

Challenges of Securing Modern Data Centers

Organizations today demand an agile data center environment to reduce IT costs, increase business agility and remain competitive. At the same time, integrated applications, increasing utilization of virtualization technology and dynamic environments have led to a dramatic increase in network traffic going east-west, or laterally within the data center. When it comes to security, the focus has mainly been on protecting the perimeter—or north-south traffic—going into and out of the data center. There are few controls to secure east-west traffic inside the data center. This presents a security risk where threats can traverse unimpeded once inside the data center. Traditional security approaches to this problem are manual, operationally complex and slow, and are unable to keep pace with dynamic virtual network changes and rapid virtual application provisioning.

Nutanix delivers a web-scale, Hyperconverged Infrastructure (HCI) solution purpose built for virtualization and both containerized and private cloud environments. This solution brings the scale, resilience, and economic benefits of web-scale architecture to the enterprise through the Nutanix enterprise cloud platform, which combines the core HCI product families—Nutanix AOS and Nutanix Prism management—along with other software products that automate, secure, and back up cost-optimized infrastructure.

Check Point CloudGuard Network Security for Nutanix delivers advanced threat prevention security to HCI environments. Designed for the dynamic requirements of cloud-based data centers, CloudGuard provides automated security provisioning coupled with the most comprehensive protections. Fully integrated security features include: Firewall, IPS, Application Control, IPsec VPN, Anti-Virus, Anti-Bot, Threat Extraction and Threat Emulation.

Centrally managed across hybrid infrastructures, CloudGuard provides consistent security policy enforcement, full threat visibility across physical data centers, Hyperconverged Infrastructure, and public cloud environments.

Automated Threat Prevention Security For Hyperconverged Infrastructure

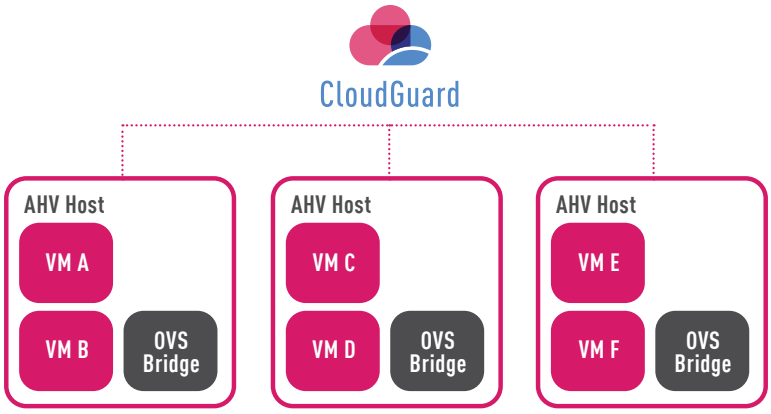
Nutanix native security capabilities, automation and extensibility framework are leveraged by Check Point to dynamically insert, deploy and orchestrate advanced security services inside the HCI. Network isolation and segmentation inherent to the Nutanix platform enable feasible micro-segmentation, allowing the HCI to deliver a fundamentally more secure approach to data security. Policy is enforced at the virtual interface, and security policies follow workloads.

The integration of Check Point CloudGuard Network Security with Nutanix brings consistent policy management and enforcement of advanced security protections automatically deployed and dynamically orchestrated into software-defined data center environments. CloudGuard provides industry-leading threat prevention security to keep data centers protected from even the most sophisticated threats. Fully integrated multi-layered security protections include:

- Stateful Firewall, Intrusion Prevention System (IPS), Anti-Virus and Anti-Bot technology to protect data centers against lateral movement
- SandBlast Zero-Day Protection sandbox technology provides the most advanced protection against malware and zero-day attacks
- Application Control to help create granular policies based on users or groups—to identify, block or limit usage of applications and widgets.
- Data Loss Prevention protects sensitive data from theft or unintentional loss

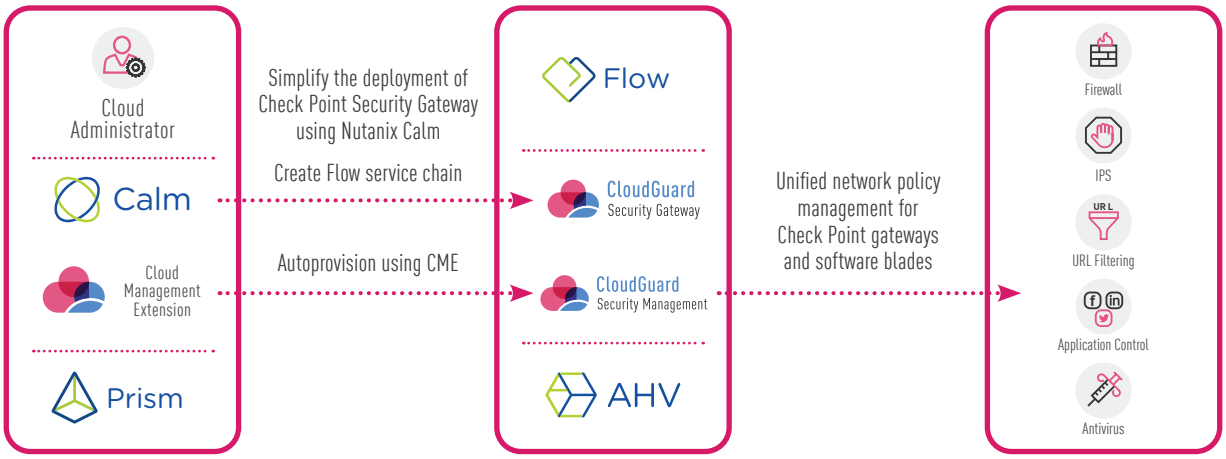
Ubiquitous Security Enforcement

Check Point CloudGuard integration with Nutanix allows dynamic insertion of advanced security protection between workloads enabling distributed enforcement at every virtual interface. The integration automates and simplifies the provisioning of CloudGuard gateways into the Nutanix virtual fabric to protect east-west traffic from lateral movement of threats enabling feasible micro-segmentation. Nutanix basic firewalling capability can be extended with Check Point's CloudGuard, whose layered security policy approach makes it easy to segment a policy, and provide granular rule definitions specific to network segments.



Automation and Orchestration

Check Point CloudGuard leverages Nutanix Flow security automation for dynamic distribution and orchestration of CloudGuard for protecting east-west traffic. In the data center environment, there is often a need to integrate different systems that manage the security workflow. Also, repetitive manual tasks must be automated to streamline security operations. Check Point's security management API allows for granular privilege controls, so that edit privileges can be scoped down to a specific rule or object within the policy, restricting what an automated task or integration can access and change. This ability to automatically provision trusted connectivity provides security teams with the confidence to automate and streamline the entire security workflow.



Context-Aware Security Policies

The integration with Nutanix Flow shares context with the Check Point CloudGuard Controller allowing security groups and VM identities to be imported and reused within Check Point security policies. This reduces security policy creation time from minutes to seconds. Real-time context sharing of security groups is maintained so that any changes or additions to the infrastructure are automatically tracked without the need for administrator intervention. Security protections are dynamically applied to newly created applications regardless of where they are hosted.

Centralized Security Management

Security management becomes dramatically simplified with centralized configuration and monitoring of CloudGuard. Traffic is logged and can be easily viewed within common dashboard. Security reports can be generated to track security compliance across both the data center and hybrid network. A layered approach to policy management allows administrators to segment a single policy into sub-policies for customized protections and delegation of duties per application or segment. With all aspects of security management such as policy management, logging, monitoring, event analysis and reporting centralized via a single dashboard, security administrators get a holistic view of the security posture across their entire organization—from legacy premises to HCI to hybrid cloud.

Key Features and Benefits

- Dynamic insertion and orchestration of Check Point's advanced threat prevention security
- Operationally feasible secure micro-segmentation for east-west traffic protection
- Fine-grained access control policies tied to Nutanix defined objects, security groups and virtual machines
- Unified security management and visibility across physical networks, HCIs and hybrid cloud environments
- Security services provisioned in minutes for fast application deployments
- Shared security context to enable better alignment across security controls
- Improved day-to-day operational efficiencies by automating routine tasks and integrating security into workflow and change management processes
- Advanced security services seamlessly provisioned and orchestrated at the speed of DevOps processes.

Solution Components

Check Point CloudGuard Network Security Gateway

The CloudGuard Network Security gateway provides industry-leading advanced threat prevention security and is deployed within the Nutanix platform to prevent malware and other sophisticated threats from affecting customer cloud environments.

Check Point Security Management Server with Cloud Management Extension (CME)

The Check Point CME integrates with Nutanix. It supports the import of Nutanix objects, dynamically tracks object changes and allows using security groups in the Check Point security policies, reports and logs.

Nutanix Prism Central

Prism Central is a Multi-cluster manager responsible for managing multiple Nutanix Clusters to provide a single, centralized management interface.

Nutanix Flow

Nutanix Flow offers policy-based network security integrated into Nutanix AHV and Nutanix Prism Central. It can also separate groups of virtual desktops with a security policy and work with CloudGuard Network Security Gateways on Acropolis Hypervisor (AHV) to inspect and enforce application layer traffic along with blocking threats across the virtual desktop infrastructure.

About Check Point

Check Point Software Technologies Ltd. (www.checkpoint.com) is a leading provider of cyber security solutions to governments and corporate enterprises globally. Its solutions protect customers from cyber-attacks with an industry leading catch rate of malware, ransomware and other types of attacks. Check Point offers a multi-level security architecture that defends enterprises' cloud, network and mobile device held information, plus the most comprehensive and intuitive one point of control security management system.

Check Point protects over 100,000 organizations of all sizes.

About Nutanix

Nutanix is a global leader in cloud software and a pioneer in hyperconverged infrastructure solutions, making clouds invisible, freeing customers to focus on their business outcomes. Organizations around the world use Nutanix software to leverage a single platform to manage any app at any location for their hybrid multicloud environments.

Learn more at www.nutanix.com or follow us on social media @nutanix.

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