SmartSecure Hosted VM: Check Point CloudGuard Edge Firewall

Next Generation Firewall Virtual Network Function with Check Point
Aryaka SmartSecure Hosted VM Firewall Service

Aryaka’s Network Access Point (ANAP) integrates a Next Generation Firewall (NGFW) that runs as a virtual network function (VNF) on its ANAP 2600 and ANAP 3000 network appliances. Technology partner Check Point Software provides NGFW functionality with CloudGuard Edge.

The combined solution delivers on a converged branch solution with best of breed capabilities in both networking and advanced security, optimally configured via intent-based policies. Enterprises can choose between deployment models that optimally fit their needs: self-managed if they have the resources and expertise to optimally configure and maintain their NGFW, or as a managed service if they would rather outsource basic configuration and day-to-day management to Aryaka experts and merely want to supervise operations.

The Challenge

With more than half of all enterprise WAN traffic moving to and from the cloud, global businesses are moving away from legacy architectures like MPLS. In a legacy WAN architecture, internet traffic was backhauled across the WAN to centralized firewalls to maintain security. However, in today’s cloud-centric context, ensuring application performance over such a backhauled setup becomes a challenge. In addition, security is not scalable when the organization has globally distributed users, locations and ever-increasing cloud presence.

Furthermore, optimally configuring, maintaining and extracting maximum benefits from specialized, best of breed security tools has become complex and time intensive.

Enterprises require a cloud-first SD-WAN platform that integrates private connectivity, application acceleration and security without adding network complexity and cost. Furthermore, enterprises must simplify optimal configuration and ongoing maintenance of advanced network and security tools.

Aryaka: The Cloud-First WAN

Aryaka’s SmartServices solution enables enterprises with fast global connectivity along with accelerated access to mission and business critical applications. Aryaka uses a global private network with built-in optimization and security capabilities that include a multi-layer security approach with a global private core network, fortified security on the POPs, end-to-end encrypted tunnels and stateful firewalls.

Aryaka implements an open, flexible and best of breed security model that empowers enterprises. Instead of being locked into a singular SD-WAN vendor’s security solution, enterprises can choose between best-of-breed security models, express the desired security posture with intent and delegate the implementation to Aryaka experts.
Aryaka SmartSecure: The Power of Choice

Several surveys prove that a majority of global enterprises trust a multi-layer, multi-vendor security strategy to address their individual needs based on global coverage, compliance requirements and their application mix.

The Aryaka SmartSecure solution provides an advanced set of software-based security functions, including stateful firewalls, micro-segmentation and partnerships with industry-leading security providers, allowing enterprises to optimally tailor a multi-layered, multi-vendor security solution to their very own needs.

Aryaka SmartSecure: The Power of Intent

Moreover, network security is complex to plan, configure and manage. Network and security professionals are faced with a myriad of functions and vendor solutions to simultaneously manage. Extracting the best possible performance and maintain the optimal, up-to-date configuration of every component represents a huge challenge. With the optional managed model in Aryaka SmartSecure, enterprise IT can simply define their desired security posture with high level business intent and delegate the implementation to Aryaka’s orchestration and certified product experts on a customer approved configuration.

Note that the MyAryaka customer portal always provides full visibility and control over the VM life cycle management.

Figure 1: Aryaka Security Architecture: A World of Options
VNF Performance Visibility with MyAryaka

Delivering on additional functions with NFV deployment allows enterprises to simplify network operations and lower overall cost of ownership. But with NFV deployments it is important to get thorough, consolidated insight into a variety of performance aspects: enterprises now need to pay attention to CPU, memory utilization and its allocation to different VNFs. Visibility into VNF performance through packet data analysis of the traffic flowing across your entire network is critical to successful NFV deployments. Simultaneously, CPU and memory resources need to be closely monitored.

Figure 2: Virtual Machine CPU and Memory Utilization in MyAryaka
Solution Components

The Aryaka managed NGFW solutions consists of the following solution components:

- **Aryaka’s Network Access Point (ANAP)**
  - Models:
    - 2600 (Medium Site License)
    - 3000 (Large Site License)
  - Supported VNF: CloudGuard Edge

- **Check Point CloudGuard Edge Next Generation Firewall**
  - Models:
    - CloudGuard Edge: engineered to consume minimal resources and support CPU oversubscription yet deliver up to 1 Gbps of Next-Gen Threat Prevention performance for customer scenarios from virtual branch office/customer-premises equipment to high-density, multi-tenant environments. Cloud Guard Edge delivers hybrid cloud, segmentation, and internet gateway access.

- **Aryaka ANAP Network Function Virtualization**
  - Aryaka’s ANAP models 2600 and 3000 support the KVM Hypervisor, which is part of the Linux OS.

- **MyAryaka Customer Web Portal**
  - With NFV deployment, it’s imperative to have full visibility into resource utilization for every deployed VNF: bandwidth, CPU, memory.

- **Check Point Visibility**
  - Check Point security management will be leveraged to manage the security policies by the customer and/or Aryaka Operations team.

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**SmartSecure Hosted VM Firewall Datasheet**

- **Models**
  - 2600 (Medium Site License)
  - 3000 (Large Site License)

- **Supported VNF**
  - CloudGuard Edge

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- **Aryaka’s Network Access Point (ANAP)**

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- **Check Point CloudGuard Edge Next Generation Firewall**

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- **Aryaka ANAP Network Function Virtualization**

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- **MyAryaka Customer Web Portal**

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- **Check Point Visibility**

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**Aryaka**

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Aryaka Hosted VM Firewall with Check Point

Complements built-in Aryaka FW and segmentation capabilities with best of breed, next gen firewall capabilities

Consolidates branch functions (security, protocol acceleration and application optimization) in a single device (Aryaka’s ANAP) by leveraging built-in virtualization and container technologies.

Delivers on branch network performance and redundancy needs with a choice of ANAP platforms and redundancy configurations.

Allows enterprises to gain constant, consolidated and granular visibility into the NGFW VNF’s performance via the MyAryaka management portal.
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<tr>
<th>Benefits</th>
<th>Description</th>
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<tr>
<td><strong>Managed Secure SD-WAN</strong></td>
<td>With WAN security top-of-mind, Aryaka’s SmartSecure offers enterprises a managed, secure SD-WAN service on an end-to-end secure infrastructure, first-mile, middle mile, and into the cloud.</td>
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<td><strong>Operational Simplicity</strong></td>
<td>With a managed edge and cloud security service that leverages Tier-1 partners, Aryaka’s end-to-end managed SD-WAN effectively hides complexity from the enterprise.</td>
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<td><strong>Best of Breed Network Security</strong></td>
<td>Check Point virtual firewalls allow enterprises to consistently manage network security for applications hosted on-premises, in private and public clouds and across branch locations.</td>
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<td><strong>Lower TCO</strong></td>
<td>By consolidating SD-WAN network and security functions on a single device as well as simplifying operations, Aryaka SmartSecure helps enterprises generate the maximum return on their SD-WAN investment.</td>
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About Aryaka Networks

Aryaka, the Cloud-First WAN company, brings agility, simplicity and a great experience to consuming the WAN-as-a-service. An optimized global network and innovative technology stack delivers the industry’s #1 managed SD-WAN service and sets the gold standard for application performance. Aryaka’s SmartServices offer connectivity, application acceleration, security, cloud networking and insights leveraging global orchestration and provisioning. The company’s customers include hundreds of global enterprises including several in the Fortune 100.