SASE

Secure Access Service Edge

WITH THE REVENUE EXTRACTION GATEWAY

rgNets

The Edge. Redefined.

DEEPLY INTEGRATED APPLICATIONS AT THE EDGE

For decades, network operators have found significant benefit in pushing more features and functionality closer to the network edge. Moving critical functions closer to their consumers reduces latency, improves available bandwidth, offers greater LAN and WAN scalability, and makes the network much more efficient and responsive for users and network-connected devices. One of the most important results of this push to increased edge functionality is security; the push to move NAC, firewall and content filtering functionality to the network edge enables network operators to present the most secure network posture possible
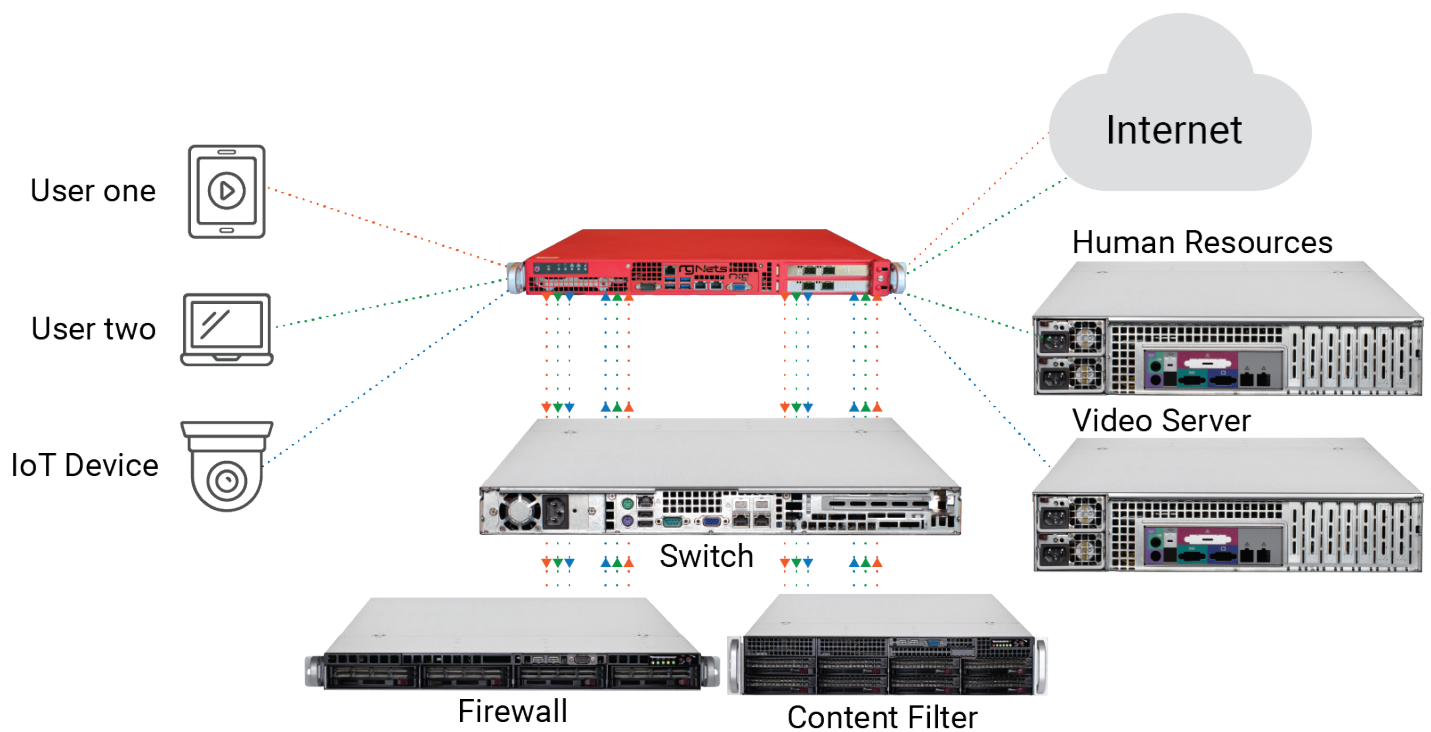
BUILT-IN SECURITY, ENHANCED INTEGRATIONS

The rXg is the multi-services gateway that - in addition to myriad routing, network and subscriber management functionality - can fundamentally secure your network edge. Network Access Control (NAC) functionality, Zero Trust Network Access (ZTNA) policy enforcement, user and subscriber credential verification, and so much more can be configured and implemented from the simple rXg admin interface. And the rXg can easily integrate with best-in-class security solutions to further provide incredibly comprehensive and customizable edge security tailored to the specific needs of the organization's foals and requirements.
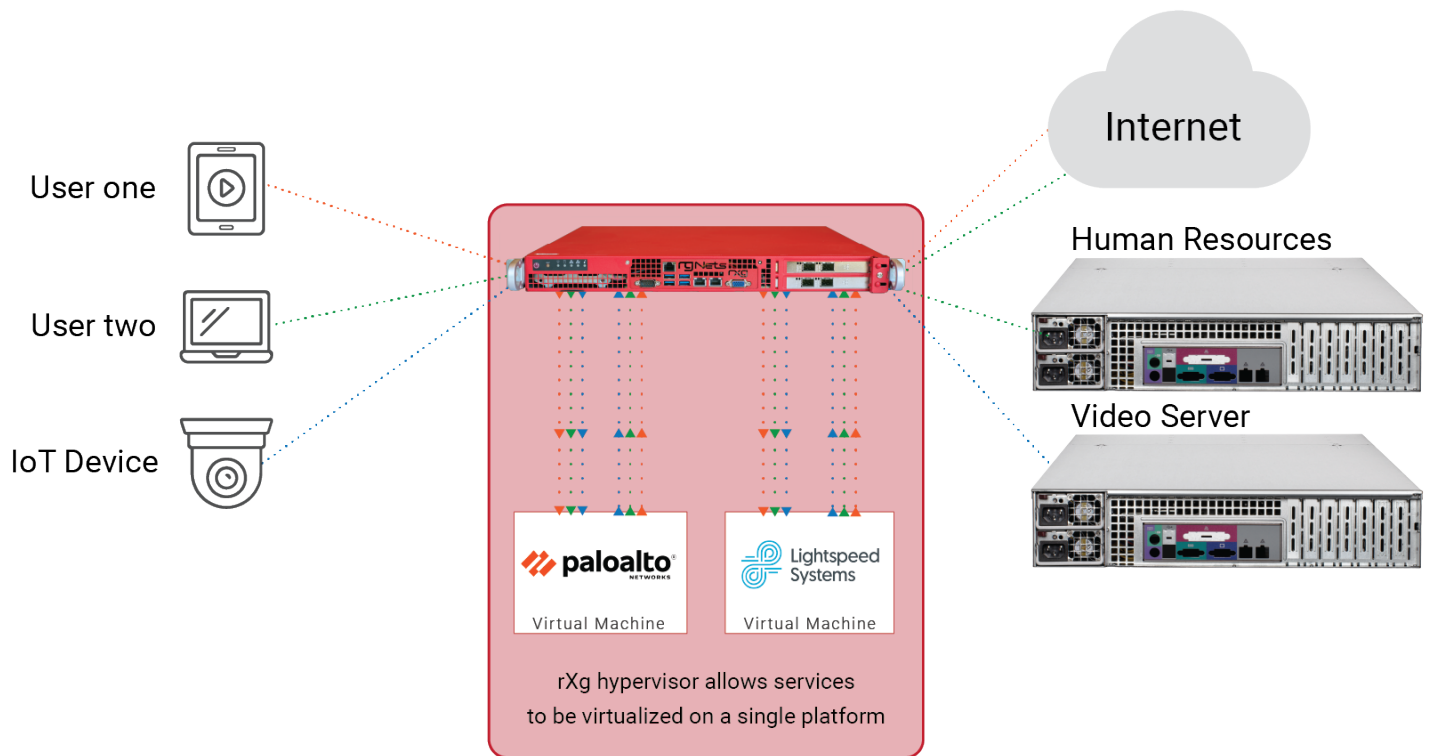
MORE FUNCTIONALITY, LESS COMPLEXITY

Traditionally, moving additional application functionality to the edge meant more complexity at the edge; more compute, more specialized hardware and software, more management. And, more opportunities for interoperability challenges, policy enforcement conflicts, more resources devoted to managing each in an unique and non-centralized management platform.

The rXg eliminates many of the potential pitfalls of an increasingly demanding edge by coordinating and managing individual application functionality and responsibility through seamlessly integrated service chaining; this integration allows the sequential execution of a series of network services or functions to process and secure network traffic as it flows across the network edge. This allows network operators to create customized service paths for specific types of traffic, optimizing the flow of data and applying different services in a specific order.

Importantly, service chaining allows the rXg to perform its core competencies on the data, control and management planes, while orchestrating the operations of integrated applications to further process and secure the network in real-time. And service chaining allows best-in-class integrated tools to operate at their peak, without compromising their configurations or available functionality.

Internet

User one

User two

IoT Device

Human Resources

Video Server

paloalto
NETWORKS

Virtual Machine

Lightspeed
Systems

Virtual Machine

rXg hypervisor allows services
to be virtualized on a single platform

SIMPLIFY THE EDGE, ELIMINATE THE BOXES

The rXg can effectively service chain these specialized services deployed individually on their own platforms on the network edge; more importantly, however, is that the rXg has the ability to run these services as VMs within the same appliance - significantly contributing to the efficiency of the edge architecture. Each rXg includes hypervisor functionality, enabling multiple operating systems to share the single hardware platform, coordinating each application running in its isolated virtual environment. Resource allocation, application isolation, OS compatibility… all seamlessly handled by the rXg.

SERVICE INTEGRATION: K-12 EDUCATIONAL INSTITUTIONS

The rXg can deeply integrate various network and security processes, coordinate service operations, virtualize and run specialized applications. Let's take a look at what that looks like in a real-world example.

Secure network infrastructure is critical in K-12 education environments. Protecting the network from nefarious access and

protecting the network users from dangerous content are highly critical functions for the network operators; advanced firewall and content filtering applications are deployed at the network edge. With the rXg, these functions can be virtualized, orchestrated and managed through a single point of interaction.

The rXg has deep integration capabilities with best-in-class Palo Alto Networks firewalls and Lightspeed Systems content filters. By service chaining these applications, while maintaining the data plane and integrating the control plane, the rXg can significantly improve the efficiency and efficacy of these operations. Information available to the rXg via L5-L7 intelligence can be parsed and provided to the Palo Alto or Lightspeed applications in order to provide critical context beyond the MAC address information they traditionally collect. When a student signs in via the rXg custom portal, information such as user type, permissions and restrictions can be delivered to the firewall and filter applications providing additional detail mated with the MAC address information. The result is greater granularity in per-user service delivery and increased network security, without creating any unnecessary complexity for the network user.

CONCLUSION

The rXg is a sophisticated multi-services edge platform that can simultaneously increase the security and reduce the complexity of your network edge. Delivering customizable service chaining while integrating with best-in-class specialized security offerings, including a robust hypervisor for complete virtualization, the rXg offers unmatched security, control and efficiency for your network edge.

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