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EBOOK

5 Ways To Differentiate Managed SD-WAN Services



5 Ways To Differentiate A Managed SD-WAN Service

Most enterprise digital transformation initiatives embrace a cloud-first strategy for hosting today's evolving mix of applications.

The migration from data center-hosted to cloud-hosted applications is a perfect storm for implementing an SD-WAN solution. CIOs need the flexibility to provide secure connectivity of their business users to corporate applications from anywhere and across any type of WAN and from any device. For many enterprises, the optimal route is to turn to a service provider for a managed SD-WAN service.

Managed SD-WAN services pave the way for service providers to compete for additional managed service opportunities outside of their footprint, improve customer retention with agile service delivery, provide opportunities to acquire new customers and enable more enterprise "stickiness" for additional higher-margin tiered managed services.



This eBook highlights five ways service providers can differentiate managed SD-WAN services with the Aruba EdgeConnect SD-WAN solution.



It covers the key benefits of delivering these services, how they can improve your competitive edge and dramatically improve customer loyalty.





5 Key Differentiations

-  **1 Tiered SD-WAN Services** 4
-  **2 High Application Performance and Availability** 5
-  **3 Application Visibility and Control** 6
-  **4 Integrated WAN Optimization-as-a-Service** 7
-  **5 Service Chaining to Best-of-Breed Network Security Services** 8



1 Tiered SD-WAN Services



One of the most important considerations in selecting an SD-WAN solution is the solution's flexibility to support service differentiation and to enable tiered managed SD-WAN services. A tiered SD-WAN service strategy offers the opportunity to quickly create a menu of value-added WAN services, tailored with a different set of service attributes for a range of use cases and customer requirements that can generate new revenue streams.

“ *Flexible, tiered SD-WAN services offerings include additional non-disruptive software services such as WAN optimization-as-a-service or analytics-as-a-service that provide additional performance and visibility benefits for enterprise customers.* ”

Roopa Honnachari
Vice President of Research, Network and Edge Services
Frost & Sullivan



How Can You Generate New Revenues From A Tiered Managed SD-WAN Service Offering?

Service providers can create new managed SD-WAN service tiers similar to how they offer managed MPLS VPN service with multiple service tiers. A premium service may contain such features as **high application performance and availability, four levels of QoS, WAN optimization for all mission critical applications, analytics-as-a-service and optimization of SaaS connectivity.** This combination will enable service providers to fully support application-based SLAs.

An entry level SD-WAN service may include only two levels of QoS, support high availability for some mission critical applications, optimize latency for select business-critical applications but won't include detailed analytics.

This tiered SD-WAN service strategy enables service providers to offer **new value-added services** that can be created for a specific group of applications, each with an associated SLA, based on customer requirements. As a result, tiered, managed SD-WAN services offer providers an opportunity to **increase their managed services revenues.**

Service providers can also offer a co-managed SD-WAN service which provides enterprises with the flexibility to view and self-manage their application and security policies, while enabling the service provider to manage the overall network connectivity, customer experience and network SLAs.

Service Providers can leverage **Aruba EdgeConnect** business intent overlays as a configuration template for building such tiered SD-WAN services. Easily configured using the centralized, multi-tenant **Aruba Orchestrator**, these templates can be **automatically deployed** for hundreds or thousands of unique customers.



2 High Application Performance And Availability



Enterprises demand application performance and availability, regardless of whether the applications are hosted in the cloud or the data center. They expect their service provider to manage and monitor application performance over any WAN transport and ensure optimum connectivity, even during brownouts and blackouts.

Traditional managed services include SLAs associated with network performance for in-region locations. However, when it comes to managing application performance of an SD-WAN overlay network, it's challenging to provide SLAs for an out-of-region location. How can a service provider deliver application performance SLAs if they are not providing the underlying WAN transport service? In a transport brownout or blackout condition, it can be difficult or impossible to predict, track and troubleshoot.

How do you deliver a high-performance managed service that can enable SLAs over multiple diverse WAN transports for in and out-of-region?

To deliver application performance SLAs over any network requires optimal connectivity. Providers can deliver on this commitment by using an SD-WAN that can **monitor and adjust traffic** based on the availability of transport service, independent of the carrier.

The high-performance EdgeConnect SD-WAN solution has the ability to **bond multiple WAN transport services into a single logical tunnel**. Packet-based load sharing can send all traffic from a single application across multiple physical links to maximize the use of all available bandwidth, **maintaining application performance and availability**. If a transport service fails, the remaining links forming the tunnel continue to carry traffic without application interruption. This enables the service provider to offer **SLAs for managed SD-WAN services both in-region and out-of-region**.





3 Application Visibility And Control



Enterprises continue to increase their adoption of SaaS applications and public cloud including IaaS services such as AWS™, Google Cloud™ and Azure™.

An application-driven SD-WAN enables direct and secure access to any SaaS application between the branch office and the application, without having to backhaul traffic to the data center for security services. Service providers are challenged to offer granular cloud application visibility, and an SD-WAN that provides full insight into all applications while maintaining QoS for both in-region and out-of-region sites.



What if you could offer a new application monitoring and visibility managed service for any application no matter where they reside?

Service providers can deliver a richer customer experience by providing **real-time application visibility and control**. This enables service providers to offer **co-management through their web portal**.

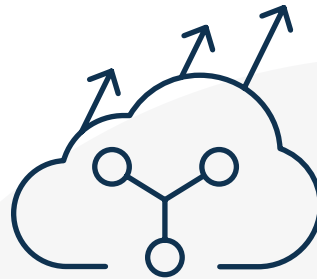
Aruba Orchestrator delivers granular visibility into thousands of customer branch deployments for **both data center and cloud applications**. It also provides the unique ability to centrally configure and manage secure SD-WAN deployments for each customer while providing customized views and reports. This provides an opportunity for service providers to **offer enterprises a flexible, co-managed configuration option** via the provider's web portal.



IT managers can group and manage their own applications within the managed SD-WAN service while the service provider maintains overall management, reporting and consulting services to help optimize application connectivity.



4 Integrated WAN Optimization-As-A-Service



Geographically distributed enterprises with locations around the world can experience impaired application performance for important, latency-sensitive TCP/IP applications such as transaction processing or data backup caused by excessive round-trip delays. It does not matter how much WAN bandwidth is available, as latency is caused by geographical distance between sites.



Can I offer a managed WAN optimization service with my managed SD-WAN service without requiring a dedicated WAN optimization appliance?

Aruba Boost WAN optimization software includes **data deduplication**, **data compression** and **caching techniques** that minimize repetitive transmission of data across the WAN. This allows service providers to provide **SLAs for business-critical backup applications**. Boost enables service providers to offer a differentiated, higher value managed **WAN optimization-as-a-service** option to their customers.

With the optional Boost WAN optimization software license, service providers can offer a value added, **chargeable option** that can be turned on with a simple check-box in the **Aruba Orchestrator** management software.



This provides service providers with an opportunity to deliver an even higher performance service for latency-sensitive applications without having to provision and monitor a separate solution.



5 Service Chaining To Best-Of-Breed Network Security Services



Service providers must ensure that all traffic crossing the managed SD-WAN service is secured at all times. Security policies must cover all applications being accessed by any type of transport in order to support the requirement for more traffic to utilize public broadband services.

Service providers can leverage security service chaining within a managed SD-WAN environment, integrating security policies as part of an SD-WAN virtual overlay.

Ways to service chain managed security into an SD-WAN environment include:



Using a managed secure web gateway



Next-generation branch firewall(s)



Or a data center/hub firewall(s)

How easy is it to integrate our managed security and managed SD-WAN services?

A key feature of an application-driven SD-WAN is an **integrated zone-based stateful firewall**, which allows traffic out but only allows ingress traffic in response to user-initiated sessions. This creates a trusted whitelist of **SaaS and internet applications** and automatically steers them directly to the internet while directing other application traffic to a **secure web gateway** or **cloud-hosted security service** or **next-generation firewall** at a regional hub or headquarters. This enforces secure end-to-end zones across any granular perimeter security policies across LAN-WAN-LAN and LAN-WAN-Data Center use cases.

An SD-WAN platform should also facilitate cloud-hosted or appliance-based security services that can be service-chained or integrated via REST APIs to deliver granular, application-specific security policies. Aruba's **First-packet iQ** application classification intelligence can identify more than **10,000** of each application flow and **300 million web domains** on each application flow. Identifying applications on the first packet is required to steer them onto the correct path in compliance with security policies in accordance with business intent.

Untrusted, suspicious and unknown applications are steered back to a **hub or headquarter-based next-gen firewall** from leading security companies like **Forcepoint, McAfee, Symantec** or **Palo Alto®**. The EdgeConnect platform is integrated with automation or service orchestration to a cloud-based secure web gateway such as **Zscaler®, Checkpoint, Netskope** or **Palo Alto Prisma Access**. Security policies are enforced **end-to-end through micro-segmentation** by application using business intent overlays configured in Orchestrator^{SP}. By providing the highest level of security, service providers can realize **increased revenues and enhanced customer stickiness**.



Aruba EdgeConnect For Service Providers

The Aruba EdgeConnect is a best-of-breed SD-WAN platform that offers unique flexibility, enabling service providers to differentiate their managed SD-WAN services in the five following ways:

- ✓ Support for new tiered services
- ✓ Ability to deliver performance-based SLAs
- ✓ Application delivery and WAN transport visibility services
- ✓ Integrated WAN optimization-as-a-service
- ✓ Service chaining with managed security solutions

An EdgeConnect SD-WAN platform contributes to a new generation of cloud-enabled, tiered managed services. It enables service providers to leverage advanced software automation to rapidly create and deploy varying tiers of new and customized managed SD-WAN services. Service providers can bring new, differentiated services to market that quickly and cost effectively drive new revenue streams, expand their market reach, and ultimately improve customer loyalty.



The Aruba logo is rendered in a bold, lowercase, orange sans-serif font. The letters are closely spaced, with the 'a' and 'u' having a distinctive shape. The background of the entire page is a dark blue with a fine, light-colored dot grid pattern. A large, light blue curved shape is positioned on the right side of the page, partially overlapping the Aruba logo and the HP text below it.

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