Overture and Brocade Deliver Virtual Managed Enterprise Router Solution

Network Function Virtualization (NFV) Solution Helps Service Providers Increase Flexibility, Reduce Costs and Offer High-Value Managed Services

The Time for Virtual Managed Solutions is Now

Many enterprises are looking to offload capabilities that are not core to their business to service providers, so they can, in turn, focus on developing the differentiated value they bring to market. Addressing the needs of enterprise customers, however, at a cost and pace that keeps the service provider competitive and the customer satisfied, is ever more difficult with managed services that rely on hardware-based customer premise equipment (CPE).

With an increasingly mobile and geographically dispersed enterprise workforce, deploying multiple CPE appliances to each and every location and relying on expensive aggregation routers at the service provider’s central office is simply not a scalable or sustainable way to deliver the services enterprises need.

It is extremely expensive, time consuming and resource intensive to do a truck roll every time a new service is added. Plus, supporting the diversity of CPE appliances required to address the varied needs of enterprise customers significantly increases supply chain complexity, driving up inventory, stocking and forecasting costs.

The managed CPE appliance approach also limits upsell and trial opportunities that are vital for revenue generation. This is because service changes often require upgrades or new appliances, further confirming that investment protection for CPE appliances is low and the total cost of ownership high. It’s time for a change – it’s time for virtual managed services solutions.

What is a Virtual Managed Services Solution?

It is intuitive that delivering managed services in software is a much more scalable, flexible and cost-effective approach; it is not, however, easy to do. To accomplish, the services need to be decoupled from the hardware-based CPE appliances that are traditionally used to deliver them.

This is the promise of Network Functions Virtualization (NFV) solutions, which use standard IT virtualization technologies to enable the services to be deployed on virtual machines running on commercial off the shelf (COTS) hardware. Once virtualized, Service Providers can offer managed services, such as routing, firewalls, intrusion detection, WAN optimization, digital voice, among others, to their enterprise customers.
Overture and Brocade: The Right Partners for the Right NFV Managed Router Solution

The virtual managed router solution from Overture Networks and Brocade enables Service Providers to accelerate the delivery of managed services to address their customer’s changing requirements, while reducing the overall capital and operating costs associated with the traditional CPE model. Service Providers can use the pre-integrated solution to create new, cost-effective offerings that will help them increase customer loyalty and mitigate competitive pressures.

A Quick Look at the NFV Solution for Service Providers from Overture and Brocade

The virtual managed router solution from Overture and Brocade integrates the Ensemble Open Service Architecture (OSA) software with the advanced Vyatta virtual routers (5400, 5600) and enablement services to provide a fully integrated managed router solution. Service Providers can use the Ensemble Service Orchestrator (ESO) to coordinate virtual resources and physical network elements to create, activate and assure services using one or more virtual network functions.

The solution provides Service Providers an open, extensible carrier-class NFV services lifecycle management and orchestration system. They can use this solution to manage their virtual compute environment and offer performance-assured managed enterprise services, without the costs associated with installing and maintaining multiple CPE appliances.
As a cloud-based deployment, the solution can be optimized for small, medium or large COs, PoPs, or Data Centers, enabling Service Providers to cost-effectively roll out and scale their managed services to address customer needs. For those deployments that require an on-premise platform, Service Providers can use the Overture 65vSE to support virtualization at the service edge. It provides a single platform for both network access and services, which can be turned up, turned down, expanded and removed dynamically to ensure resources are only used when needed.

**Service Provider Use Cases for the Overture and Brocade NFV Solution**

The joint solution can be used by Service Providers to:

- Host centralized or distributed NFV infrastructures
- Simplify full service lifecycle management
- Centralized or Distributed NFV Infrastructure
- Designed specifically for the metro service edge, Service Providers have the flexibility to host the virtual managed router where it makes is most appropriate, based on latency, security and resource availability requirements/constraints. ESO supports the placement of the Vyatta virtual router in either a centralized location or on the enterprise premise/branch office. While in the centralized location, general purpose commercial off the shelf (COTS) compute platforms may be used; for on-premise deployments, Overture offers a carrier-grade appliance, the 65vSE, specifically designed to deliver connectivity and virtual functionality on the customer premise.

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Full Service Lifecycle Management

ESO features a full service lifecycle orchestration system to enable Service Providers to quickly and easily manage the deployment, management and maintenance of their virtual managed services. Lifecycle processes are implemented using a BPMN 2.0 compatible workflow engine to make them completely field extensible and adaptable to the Service Provider’s individual operational processes. They are policy driven, using a tightly integrated rules engine. They are designed to control workflows and tasks, but can be easily modified at run-time in accordance with operator policies.

The Overture – Brocade Advantage

The open, cloud-enabled virtual managed enterprise router solution powered by Overture and Brocade reduces the need for multiple CPE appliances, driving down the Provider’s overall cost structure, while helping them increase their offerings and grow revenue. The solution:

Is Purpose-Built for NFV

- As the first virtual router for telco-class networks, the Brocade® Vyatta® 5400 and 5600 vRouter are purpose-built for NFV.
- The Ensemble Solution Pack makes it easier for Service Providers to create more flexible and cost-effective alternatives to CPE-based managed services.

Offers Unmatched Performance

- Brocade delivers the highest-performing software router in the industry, achieving 10+ Gbps performance, which is up to 40 times faster than competitive virtual routing products.
- Pre-integrated virtual functions ensure rapid deployment and trouble-free service

Reduces Costs and Labor

- Frees up capital by minimizing expensive, proprietary hardware investments and ongoing operational costs (management, space, power and cooling).
- Eliminates truck rolls for service roll outs and upgrades.
- Open, flexible designs ensure the solution can integrate within any environment – cloud-based and on-premise deployments.
- Turnkey solution to accelerate service delivery.

Delivers Advanced Functionality

- Service Providers can offer managed routing, stateful firewall, intrusion detection, digital voice WAN optimization and other services in software, without sacrificing the reliability and carrier-class performance of hardware networking solutions, to confidently support the needs of enterprise customers.

Service Providers Can Roll Out High Value Managed Services to Increase Competitiveness and Drive Growth

With Overture and Brocade, Service Providers can roll out managed network services for their enterprise customers to address their changing needs, without sacrificing functionality or performance. The virtual managed routing solution from Overture and Brocade gives Service Providers the turnkey solution they need that enables them to fuel their competitiveness and drive their growth.

Harmony Solution Partners
With Overture and Brocade, Service Providers can:

- Lower Overall Total Cost of Ownership (TCO) – enables providers to cost-effectively offer performance-assured managed enterprise services:
  - Reduces CAPEX: minimizes expensive, proprietary hardware investments and reduces inventory, stocking and forecasting costs.
  - Reduces OPEX: minimizes operational costs by eliminating truck rolls for service activation and upgrades and reducing the management, space, power, and cooling requirements of the infrastructure.
- Increase Flexibility – over-the-top services require minimal changes to the network, making it easy to customize deployments and trial and roll out new offerings; full customization of service workflows adapts to any provider’s environment.
- Optimize Performance - multiple deployment options – centralized or distributed–allows optimal placement of functionality, based on latency, security and resource availability; pre-integrated virtual functions ensure reliable service.
- Accelerate Service Delivery – turnkey solution accelerates service creation and roll out.
- Grow Revenue – increase product and service portfolio, with low risk “try before you buy” opportunities, that enable providers to seize new and changing business requirements.

ABOUT BROCADE
Brocade networking solutions help organizations transition smoothly to a world where applications and information reside anywhere. Innovative Ethernet and storage networking solutions for data center, campus, and service provider networks help reduce complexity and cost while enabling virtualization and cloud computing to increase business agility. Learn more at www.brocade.com.

ABOUT OVERTURE
Overture is the preferred provider of Carrier Ethernet solutions for the metro service edge. By leveraging Overture’s Carrier Ethernet expertise and its new Ensemble Open Service Architecture™ for software-defined services, network operators and service providers worldwide are maximizing operational efficiencies and introducing new revenue-generating services on a scale never before possible. Learn more at www.OvertureNetworks.com.