



Enhance Your Network With NFV

Achieve greater deployment flexibility & hardware independence

vmware[®]

“Procera is a great example of the new ecosystem and new supply chain that NFV not only facilitates but requires to be successful. Specialist vendors are coming together in an ecosystem to build ‘innovation potential’ into the Telco network - the Telco becomes empowered to innovate through best in class technologies working in an open environment driven by APIs.”

David Wright
VP of Operations,
VMware, Telco NFV Group

Network operators have demanded the rapid evolution of virtualization and NFV as a way to achieve greater deployment flexibility and hardware independence within their networks. By transforming their core networks through virtualization, network operators can leave their non-virtualized, proprietary solutions behind and take advantage of best-of-breed ecosystem vendors to build intelligent, next generation solutions.

THE SOLUTION

- **Procera Networks - PacketLogic/V** A leader in subscriber experience solutions, Procera Networks delivers policy enforcement and charging (PCEF) and traffic management solutions that revolutionize the way that operators view their networks and take action to optimize their subscribers' experience. Using deep packet inspection (DPI) technology, Procera's PacketLogic/V measures Quality of Experience (QoE) for relevant consumer applications and enforces network policies in real time.

PacketLogic/V provides operators with a solution that promises increased agility, greater scalability, and lower costs than legacy, hardware-centric network architectures. Virtualization and NFV allows service providers to capitalize on new and differentiated services that can increase average revenue per user (ARPU) and create a competitive advantage.

The PacketLogic/V solution also supports analytics efforts by gathering information about what devices are being used, who's using them, how they are being used, and how these statistics may differ across different network venues. These analytics help operators understand what their subscribers need and want, allowing them to deliver a better overall experience.

- **VMware – vCloud NFV™** VMware vCloud NFV brings together the core virtualization and management components required to accelerate NFV deployment. VMware vCloud NFV enables communication service providers to deploy a horizontal, multi-vendor NFV platform that supports any application at all stages of NFV cloud evolution. The platform enables IT to leverage existing skills and operational experience with VMware virtualization, providing a faster and smoother implementation and ongoing management of Telco Clouds.

VMware vCloud NFV aligns with Telco industry open standards and open platform directives to deliver an out-of-box secure, multi-tenancy Telco cloud at commercial scale. The platform features the newest releases of VMware's production-proven solutions for Network Functions Virtualization Infrastructure (NFVI) and Virtual Infrastructure Management (VIM), as well as advances capabilities for service assurance.



“Working closely with VMware allows us to provide our customers with a proven virtualization option that will, in turn, allow them to begin taking advantage of the cost savings benefits and service agility capabilities attributed to virtualization and NFV.”

Cam Cullen
VP of Marketing, Procera

Infrastructure Management (VIM), as well as advances capabilities for service assurance. vCloud NFV supports the broadest range of validated and certified Virtual Network Functions (VNFs), including traditional and cloud-native scale out applications, and runs on the broadest set of x86-based platforms. It is backed by carrier-grade managed support services to meet the most demanding commercial scale deployments.

THE PARTNERSHIP

Procera, with the help of virtualization technology from VMware, provides our customers with the opportunity to deploy PacketLogic solutions regardless of where they are in their migration journey- as hardware, software or as a VNF. VMware and Procera work synergistically, delivering all of the benefits related to NFV and supported by best-of-breed technology. The proven interoperability between Procera and VMware’s vCloud product demonstrates the availability of robust virtualized solutions that are deployable today. This partnership enables operators to maximize server utilization, deploy numerous PacketLogic services on one server, and react quickly to their subscribers’ needs with new and differentiated services.

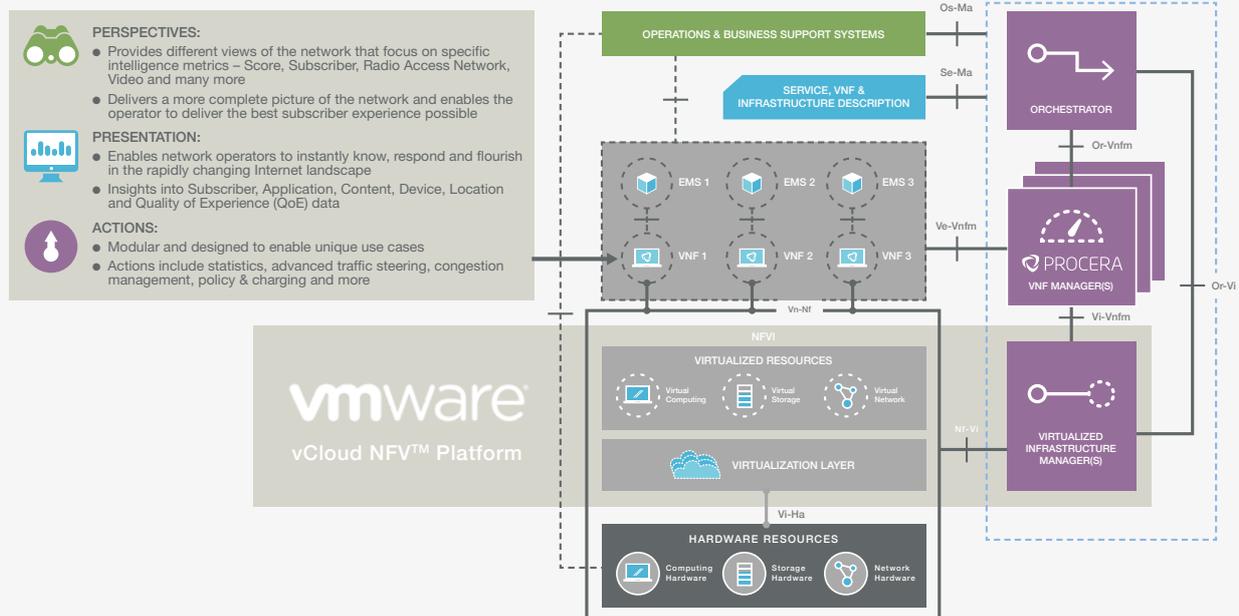
USE CASE - WIRELESS HOTSPOT VENDOR

One global wireless hotspot vendor deployed a virtual solution based around Procera Network’s PacketLogic/V and utilizing VMware’s virtualization technology. The specific implementation employed a series of virtualized PacketLogic Real-Time Enforcement Engines (vPREs), the backbone of Procera’s Packetlogic/V solution, deployed redundantly at each hotspot venue. The vPREs provided the wireless service provider with a level of visibility into subscriber activity that was previously unavailable.

Due to the strategic placement of Procera’s virtual solution, the hotspot provider can now look at how much bandwidth individual subscribers are using, as well as what applications are in use. This knowledge enables them to more closely shape user traffic based on each particular service plan. Should a subscriber sign up for a faster connection plan, the operator now has the ability to ensure subscribers get a premium Internet experience.

Figure 1

NFV ARCHITECTURAL FRAMEWORK DIAGRAM



ABOUT VMWARE

VMware is a leader in cloud infrastructure and business mobility. They deliver a comprehensive portfolio of software solutions and services that enable organizations to rapidly develop, automatically deliver, and safely consume enterprise applications and network functions, for both traditional and cloud-native applications.

VMware's pioneering solutions dramatically simplify the operation and management of IT and network services. VMware helps customers create new business models, deliver new applications to internal and external customers, and improve security from the data center to the cloud. Their solutions help companies innovate more quickly, successfully engage customers, empower employees, and protect brands and reputations.

Procera delivers granular analytics that provide the vendor with greater control and insights into how their customer QoE can be improved, and virtualization enables them to implement their solution with greater service agility and flexibility. Virtualizing their traffic management solution using VMware technology also brought reductions in both capital and operating costs for this hotspot provider.

RESULTS

PacketLogic/V, deployed as a virtualized solution using vCloud technology, allows service providers to insert Procera's traffic management, QoE and policy enforcement solutions in a greater number of locations throughout their networks. Providing enhanced visibility into subscriber experience and levels of service satisfaction by placing virtualized solutions at multiple strategic points throughout their networks, an action previously nearly impossible due to hardware-dependence and cost barriers, enables operators to respond in ways that maximize subscriber Quality of Experience (QoE) and ROI like never before. Furthermore, service providers gain service agility and the ability to create new and differentiated services for their subscribers, which correlates directly to subscriber experience and overall satisfaction.

Through virtualization, Procera and VMware help operators provide more efficient and agile networks that can be quickly transformed and/or differentiated based on their subscribers' needs to provide the highest level of service possible- networks can be designed more intelligently, cost savings are achieved, and even equipment idle time is reduced. Additionally, increased visibility into subscriber activity provided by PacketLogic/V allows providers to support traffic shaping and apply granular user profiles in ways that are not otherwise possible.

CONCLUSION

Service providers and network operators are looking for new ways to streamline their operations and gain competitive advantage. Procera and VMware's partnership provides a proven solution offering these benefits. By enabling virtualized and NFV deployments that are reliable, flexible, and high performance, network operators can take action to improve their networks and enhance the subscriber experience.



Contact your Procera sales representative to find out more about this solution and how it can help you transform your business.

ABOUT PROCERA NETWORKS

Procera Networks, the global Subscriber Experience company, is revolutionizing the way operators and vendors monitor, manage and monetize their network traffic. Elevate your business value and improve customer experience with Procera's sophisticated intelligence solutions.

For more information, visit proceranetworks.com or follow Procera on Twitter at @ProceraNetworks.



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