

Visibility for Virtualized Branch Offices

cPacket Network Visibility for Cisco ISRV Virtual Router on Cisco ENCS and NFVIS Platform

Business Benefits

- Operational Efficiency**
 Virtualization across branch offices brings same economy and efficiency advantages that it did for the data centers for the last decade
- Increased Profitability**
 Consistent solution across branch offices reduces risk and down-time while increases revenue contribution
- Scalable Business**
 Rapid and easy to deploy network services across branch offices makes business easy to scale with the demand

Technology Benefits

- Complete Visibility**
 cPacket enables single-pane-of-glass visibility across the branch traffic from anywhere, anytime making IT's job much easier and effective
- Ease of Deployment**
 cPacket and Cisco virtual solution enables branch services to be deployed and managed without truck rolls
- Network Optimization**
 cPacket's visibility into traffic and applications enables IT teams to plan capacity and enhancements across branch offices based on performance

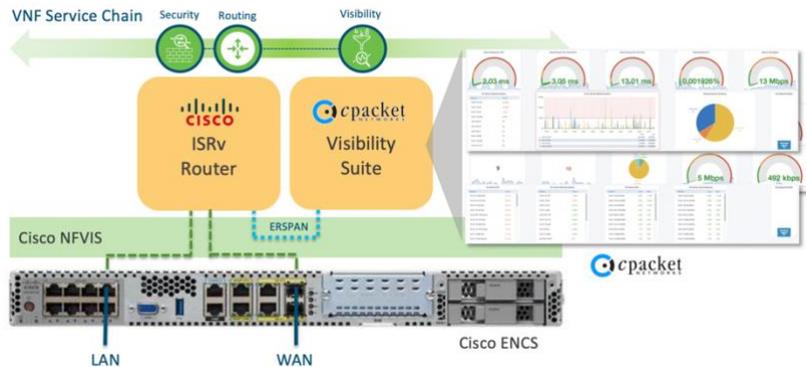
The Challenge

Businesses with highly distributed environments such as financial, insurance, retail, and healthcare are struggling to scale their business model under ever increasing competitive pressure. While the CIOs in those enterprises know that digital transformation is the future, they are trying to figure out the best implementation strategies and solutions to address their pain points. Most of those enterprises have hundreds or even thousands of branch offices or remote sites that need to be connected to the regional head offices, data centers, and multi-cloud to run the business and to serve their client needs. Choosing the right networking solution and technology for branch offices is an important decision since that is where most of the business gets done and down time of any branch means direct revenue loss. Therefore, branch connectivity and access to mission critical business applications and data is incredibly important. Moreover, the networking solution must be repeatable across the branch offices and needs to be easy to deploy, scalable, and be managed remotely.

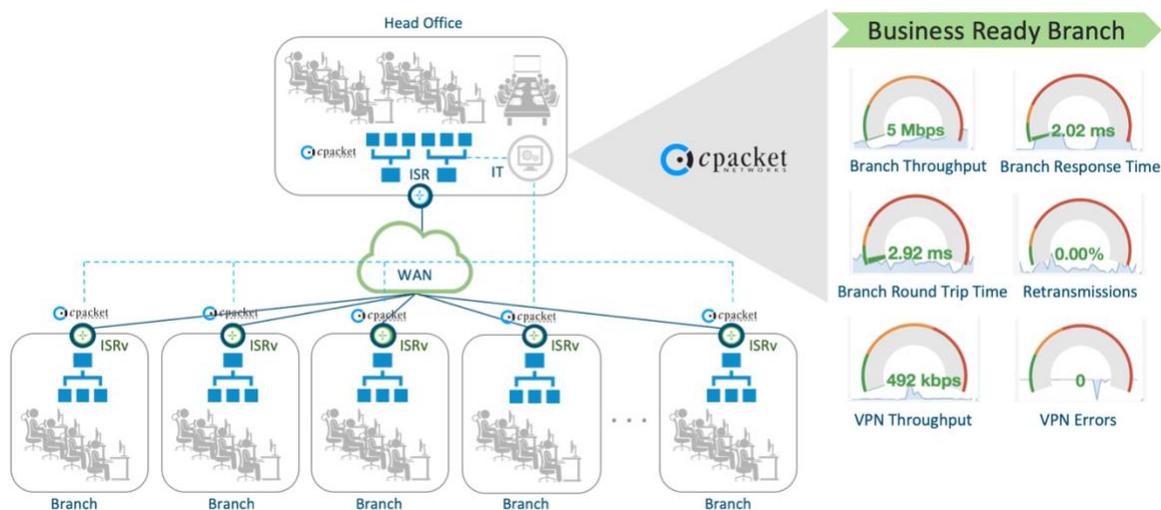
Today's branch office networks are cluttered with different types of "boxes" from multiple vendors including firewalls, wireless controllers, and edge routers. The boxes demand different power, mounting and cabling requirements, run different operating systems, and have different manageability tools. It is extremely difficult for IT teams to deploy and manage all those boxes across a geographically dispersed enterprise and it takes the time away from other tactical and strategic priorities.

The Solution

The answer to those pain points is virtualizing the branch office connectivity with Network Function Virtualization (NFV). NFV replaces most, if not all, discrete boxes by consolidating critical network functions as Virtual Network Functions (VNF) on top of a single commodity or purpose-built hardware appliance. Cisco Enterprise Network Compute System (ENCS) brings Cisco compute and routing technologies together, purpose-built and optimized for the enterprise branch offices running NFV. With Cisco Enterprise NFV Infrastructure Software (NFVIS), branch services including routers, firewalls, wireless controllers, and SD-WAN can be completely virtualized. By virtualizing and abstracting the network services from the underlying hardware, VNF can be managed independently and provisioned dynamically. This provides flexibility, service agility, and operational consistency through software across various network elements while simplifying operations, saving time, and costs, turning into truly Software-Defined Enterprise.



cPacket offers a fully integrated visibility solution with Cisco Integrated Services Virtual Router (ISRV) running on Cisco ENCS/NFVIS for the virtualized enterprise branch offices. Running as VNF on top of Cisco ENCS/NFVIS, cPacket visibility tools including cClear-V provide a proactive “business-ready view” of each branch office for IT teams while at the same time, provide troubleshooting capabilities for reducing the mean-time-to-resolution, should issues arise. cPacket’s product architecture, augmented by integral analytics and machine-learning, makes it ideal for troubleshooting network issues, analyzing network performance to anticipate future problems, and planning capacity for expansion. Rapidly deployable throughout the distributed enterprise, cClear-V provides a single-pane-of-glass management, without the need for dedicated server hardware. cClear-V allows real-time acquisition of key performance indicators from cPacket monitoring probes running as VNF on Cisco ENCS/NFVIS. For analysis of suspicious traffic, the cPacket visibility suite is also integrated with the Cisco security stack (firewall, web filtering, IPS/IDS, and DNS) which is an integral part of the ISRV router.



TCP applications particularly suffer across the WAN. cPacket’s visibility tools provide proactive metrics such as application visibility, TCP response-time, round-trip time, and retransmits. With cClear-V, network operators can deploy the functionality they need at network locations, where it is needed, to monitor traffic and analyze issues remotely. This can be particularly effective for resolving SLA disputes with a service provider. cPacket’s advanced machine-learning algorithms can provide a predictive view for a week ahead. This provides a business-readiness view to the IT team or managed service provider from anywhere.

cPacket’s integrated visibility solution with Cisco ISRV allows IT NetOps and SecOps personnel to take advantage of a single, integrated workflow that allows for real-time monitoring or analysis of the branch traffic from a single vantage point to deploy, manage, and secure branch networks from anywhere, anytime, supporting the CIO/CISO’s digital transformation objectives.

To learn more, visit www.cpacket.com and www.cisco.com.

About cPacket Networks

cPacket Networks delivers visibility you can trust through network monitoring and packet brokering solutions to solve today’s biggest network challenges. Our cutting-edge technology enables network and security teams to proactively identify issues in real-time before negatively impacting end-users. Only cPacket inspects all the packets delivering the right data to the right tools at the right time and provides detailed network analytics dashboards. Whether you need greater network visibility for security tools or performance monitoring tools, our solutions are designed to overcome scalability issues and reduce troubleshooting time. The result: increased security, reduced complexity, with lower costs, and a faster ROI. Based in Silicon Valley, CA, cPacket enables organizations around the world to keep their business running. Leading enterprises, service providers, healthcare organizations, and governments rely on cPacket solutions for improved agility, higher performance, and greater efficiency. Learn more at www.cpacket.com, the cPacket [blog](#), or follow us on [Twitter](#), [LinkedIn](#), and [Facebook](#).

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