

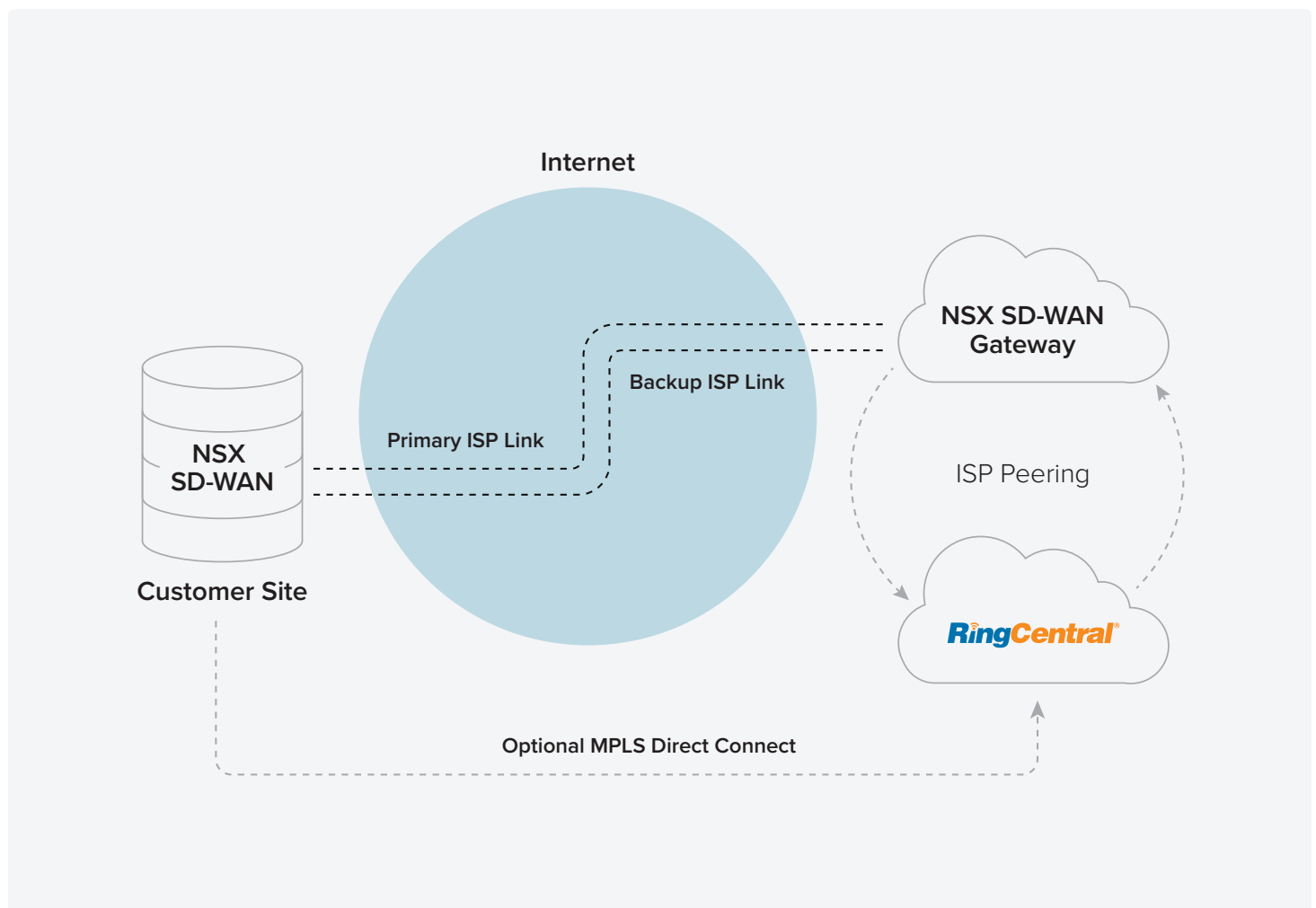
# RingCentral and VMware: Enhancing business communications together



RingCentral and VMware join forces to deliver enterprise-grade reliability and quality of service in voice and video communications.

To address changing business requirements and provide first-rate experience to their users and customers, enterprises are increasingly adopting cloud applications. Network topologies have been modernized by adopting SD-WAN solutions and traditional premises-based communication and collaboration tools have made way for unified, cloud solutions: unified communications as a service (UCaaS).

RingCentral and VMware are partners in this evolution and have combined forces to maximize the return on your RingCentral and NSX SD-WAN by VeloCloud investments by ensuring the best user experience with reliable voice and video applications performance.



RingCentral has certified VMware's NSX SD-WAN by VeloCloud to accelerate your transition to the cloud while supporting your business goals.

The NSX SD-WAN solution simplifies how traffic is routed and provides bandwidth expansion for the branch. It also provides direct access to cloud applications through a distributed network of NSX SD-WAN Gateways, a cloud-based NSX SD-WAN Orchestrator and a branch platform, NSX SD-WAN Edge. Using broadband along with MPLS as the transport mechanism, Dynamic Multi-Path Optimization steers traffic on a per packet basis to the optimal path as well as remediates transmission degradations. By defining

policies in the cloud via a single interface, organizations can easily deploy new applications and services, and manage policies across a large number of locations.

Ease of access to broadband internet such as cable, DSL, or 4G provides options to enterprises to consider using broadband internet to augment limited WAN bandwidth for access to RingCentral. However, broadband internet may, at times, experience congestion, which results in increased latency, packet loss, and jitter. These conditions can cause interruption to time sensitive applications and degrade the Quality of Experience (QoE) demanded by end users.

## NSX SD-WAN greatly improves UCaaS performance by employing a variety of technologies through NSX SD-WAN Dynamic Multipath Optimization (DMPO).

### Application recognition and smart business policies

Built-in deep-packet inspection (DPI) identifies business voice and video media traffic and signaling using application signatures. In addition, business policy with smart defaults provides necessary bandwidth management, traffic steering, and link conditioning without any complex configuration.

### Dynamic application steering

By constantly monitoring all available link conditions and bandwidth, the solution can steer latency and loss sensitive voice and video media traffic during sessions on a packet by packet basis around links having high latency and/or packet loss.

### On-demand link conditioning

When necessary, NSX SD-WAN applies link conditioning techniques that include enabling Forward Error Correction (FEC) to provide up to full packet replication to mitigate loss and jitter buffer to reduce jitter introduced by broadband and hybrid networks.

### Deploy in minutes

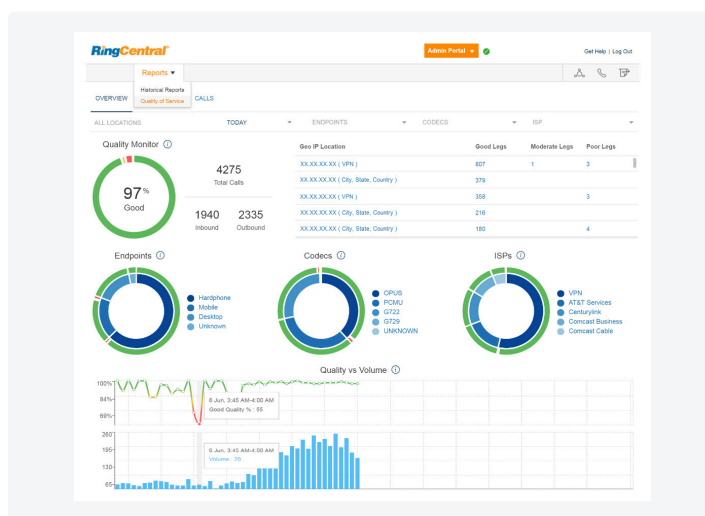
Using NSX SD-WAN's zero-touch deployment capability, NSX SD-WAN can be quickly installed. The NSX SD-WAN Edge is shipped to the branch office where even a non-IT personnel can simply plug in power and a few cables for connectivity and complete the installation. Activation, configuration, and ongoing management are all handled in the cloud. This is of great value, particularly to customers with distributed global branches.

This partnership further strengthens RingCentral's fundamental networking and architectural investments to ensure the best end-user experience.

RingCentral was born in the cloud, purpose-built to perform as a highly redundant, reliable, and secure global communications network. We've established our own backbone and developed our own peering relationships to provide enterprise-grade reliability and quality of service.

In addition, our NOC teams and dedicated engineering resources focus relentlessly on delivering quality of service with smart call routing and 24/7/365 quality metrics monitoring across all modes of communications.

Advanced Opus Interactive codec, as well as the wideband G.722 codec is employed to deliver the highest HD quality possible. HD voice with Opus codec is enabled by default on RingCentral apps, providing a better user experience with more clarity in HD voice, especially in limited bandwidth environments.



RingCentral also equips customers with the necessary data and tools to be able to monitor their systems themselves. With quality of service analytics, administrators have access to key operational QoS metrics in near real time to monitor the global voice quality and to diagnose call-quality issues impacting their users. Our powerful reporting dashboard provides the ability to monitor voice quality and call volume at an aggregate organizational level. Administrators can also drill down into specific calls to identify specific call-quality information, including packet delay, jitter, and packet loss. This provides end-to-end visibility into network conditions, from one caller to RingCentral to the other caller and back. With this

information, administrators can isolate potential problems affecting call quality for accurate resolution. Quality of service analytics can help administrators understand:

- Overall quality of voice calls
- Trends across regions, offices, and network providers
- User experience for a particular group of users
- Patterns in call quality over the course of a day due to overall call volume
- How codecs perform against varying network issues

With RingCentral and VMware's NSX SD-WAN by VeloCloud, businesses will experience consistent productivity and high-quality collaboration among locations, employees, and with customers, helping to ensure smooth business operations. Building on our strengths and bringing together the best of the SD-WAN and UCaaS world, RingCentral and VMware offer:

- Superior quality and uptime, even in remote locations
- Easy setup; no technical expertise required for interoperability
- Fast and cost-effective deployment with broadband connections
- Support for rapid network expansion

For more information, please contact a sales representative. Visit [ringcentral.com](https://ringcentral.com) or call 855-774-2510.

RingCentral, Inc. (NYSE:RNG) is a leading provider of global enterprise cloud communications and collaboration solutions. More flexible and cost-effective than legacy on-premises systems, RingCentral empowers today's mobile and distributed workforce to communicate, collaborate, and connect from anywhere, on any device. RingCentral unifies voice, video, team messaging and collaboration, conferencing, online meetings, and integrated contact center solutions. RingCentral's open platform integrates with leading business apps and enables customers to easily customize business workflows. RingCentral is headquartered in Belmont, California, and has offices around the world.



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