

Unifying the best security with optimized connectivity

A software blade in Quantum Gateways, Quantum SD-WAN lets you extend market-leading security to optimized internet and network connectivity.



SD-WAN Supports Digital Transformation and Cloud

According to Gartner®, by 2025, 65% of enterprises will have implemented SD-WAN¹ with adoption growing at a CAGR of 26%².

Why the shift from MPLS networking to software defined wide area networks (SD-WAN)? Because SD-WAN enables organizations to accelerate cloud migration, with higher performance and lower costs. Unlike centralized WAN infrastructures that become congested with internet and cloud-bound traffic, SD-WAN offers dynamic decentralized networking. By connecting offices to the internet and cloud with a combination of MPLS, broadband and wireless, SD-WAN lets organizations stay connected at optimal speed and uptime.

As offices use SD-WAN to connect directly to local internet service providers, their networks are no longer secured by the datacenter and become vulnerable to cyber attacks, with little to no visibility of threats and challenges in enforcing consistent security policies. Instead of patchy integrations that stitch together disparate solutions, combining SD-WAN and security into a single device lets you get the most out of your SD-WAN infrastructure without sacrificing on security, while greatly enhancing the user experience and reducing operational overheads.

Quantum SD-WAN —SD-WAN Built into the Best Threat Prevention

Quantum SD-WAN is a software blade in Quantum Gateways that unifies the best security with optimized internet and network connectivity. By deploying Quantum SD-WAN right from your Quantum Security Gateways, network and security teams realize immediate benefits.

Quantum SD-WAN Immediate Benefits

- Protects your branches against zero-days, phishing and ransomware
- No more Zoom™ interruptions thanks to sub-second failover
- Complete SASE solution managed from the cloud
- Single appliance for security & connectivity
- Installs with your current Quantum Gateways

¹ Gartner, Inc. "IT Key Metrics Data 2022: Infrastructure Measure – Executive Summary." December 2021.

<https://www.gartner.com/en/documents/4009014>

² Gartner, Inc. Forecast Analysis: Secure Access Service Edge, Worldwide, October 2022

<https://www.gartner.com/en/documents/4004092>

Quantum SD-WAN Lets You:

- Optimize branch connectivity to the internet and cloud over MPLS, broadband, or wireless
- Connect your offices, on-prem, and cloud data centers with a secure and resilient overlay (VPN) network
- Failproof your connectivity with sub-second failover for unstable connections, and continuous link health monitoring against predefined thresholds.
- Secure your branch offices with a full enterprise-grade security stack embedded into your wide area branch network, to deliver the highest malware catch rate
- Gain end-to-end monitoring and visibility into network health, including application performance and SLA metrics

Quantum SD-WAN Core Capabilities

Quantum SD-WAN offers rich SD-WAN capabilities that are critical to a successful SD-WAN deployment.³ These include:

Multiple WAN Link Support

Quantum SD-WAN supports multiple types of WAN links, including MPLS, Internet and wireless (LTE/4G/5G* in supported models) with simplified link detection. Thanks to advanced link mapping, you can easily define to which links your traffic is steered, and apply steering policies to hundreds of branches.

Sub-Second Failover for Unstable Connections

Quantum SD-WAN continuously monitors the overlay and breakout networks to detect burnouts and failures, and adapts path selection in real time.

This ensures connectivity remains intact and reliable with sub-second failover to support latency sensitive connections such as web conferencing (Zoom™, Teams™), VoIP and remote support. To interconnect branches distributed over different regions or continents, Quantum SD-WAN enables easy setup of site-to-site VPN networks with multiple IPSec tunnels, link redundancy, and dynamic path selection, ensuring each branch has a reliable and secure connection to any of the data centers, hubs, or campuses.

Optimized Routing for Users and 10,000+ Apps

Thanks to its advanced first-packet application detection engine, pre-configured with 10,000+ apps, Quantum SD-WAN detects applications from the first packet, and features a flexible out-of-the-box steering policy that delivers enhanced connectivity from day 1.

³ 5G support is on roadmap for Quantum Spark appliances.

Networking Policy Customization

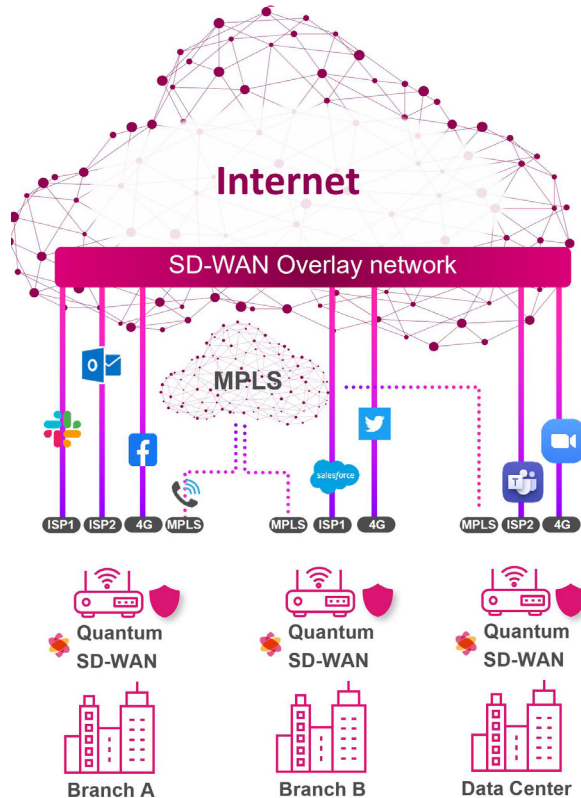
Offering intuitive, granular policy customization, Quantum SD-WAN lets you define the connection source (e.g. users, groups, devices or networks), the target service (10,000+ preconfigured apps) and the behavior that defines how the traffic will be steered, to achieve a configurable SLA for your connection.

Autonomous Dynamic Traffic Steering

To optimize each connection in real time, Quantum SD-WAN provides link health monitoring for jitter, latency, and packet loss with autonomous, dynamic path selection based on application, user or group identity and link health. Link aggregation enables utilizing more bandwidth for local breakout and overlay connectivity.

Intuitive Cloud-based Monitoring, Reporting and Management

Powered by the Infinity cloud-based management system, Quantum SD-WAN delivers advanced management, monitoring, and analytics. To enable a quick response to burnouts and failures, the solution provides real time visibility into network health, including an overall view, granular health visibility per branch, and network and SLA metrics.



**QUANTUM SD-WAN - SECURE AND RELIABLE
BREAKOUT AND OVERLAY NETWORK**

Why Check Point Quantum SD-WAN

With Check Point Quantum SD-WAN, you no longer need to choose between seamless connectivity and industry leading threat prevention.

Quantum SD-WAN optimizes your network performance from Day 1, interconnects your offices and data centers with a highly secure and resilient overlay network, and provides the fastest internet and cloud connection for branch offices, while automatically optimizing each connection in real time with dynamic path selection. Link aggregation also maximizes bandwidth utilization using local breakout and overlay connectivity.

Uncompromising Branch Security

Quantum SD-WAN is embedded into Check Point's standard-setting Quantum Security Gateways, to secure internet access connectivity and protect branch offices from cyber-attacks. Blocking 99.7% of new malware⁴, Quantum SD-WAN prevents all branch threats, including known and unknown threats, DNS attacks, ransomware and phishing. The solution features a full enterprise-grade security stack with next generation firewall, zero-day protection, anti-bot detection, intrusion prevention (IPS), anti-phishing protection, anti-virus, URL filtering, application control, SSL inspection and content disarm and reconstruction (CDR).

Supported by a broad range of Quantum Security Gateways, Quantum SD-WAN boasts a high combined throughput of up to 30Gbps for SD-WAN and Threat Prevention.

No More Zoom™ Interruptions:

Effective security doesn't need to get in the way of digital transformation. With sub-second failover for unstable connections, the solutions ensures uninterrupted web conferencing, with optimized routing based on user identity, business use case and over 10,000 applications, while monitoring connectivity for latency, jitter, and packet loss.

With Quantum SD-WAN, you can leverage your existing Quantum infrastructure to slash deployment time from months to minutes and save costs. There's no need to deploy any new hardware. Simply install a software upgrade and activate SD-WAN with a few clicks. Onboarding and activation are easy.

A Complete SASE Solution

With the latest addition to its portfolio, Check Point provides consistent security and connectivity across users and branch offices. Combining Quantum SD-WAN and [Harmony Connect](#) (SSE) delivers a complete security and internet access solution (SASE) managed from the Check Point Infinity cloud platform.

To learn more, visit: <https://www.checkpoint.com/quantum/sd-wan/>

Part of Check Point Infinity

Quantum SD-WAN is part of [Check Point Infinity](#), the only fully consolidated cyber security architecture that protects your business and IT infrastructure against Gen V multi-vector cyber-attacks across networks, IoT devices, endpoint, cloud and mobile. Check Point Infinity delivers unprecedented protection against current and potential attacks — today and in the future.

⁴ [2023 Miercom NGFW Benchmark Report](#)

Technical Specifications

Core Networking Capabilities

SD-WAN Capabilities	<ul style="list-style-type: none"> • Advanced multi-path orchestration • Sub-second failover for overlay and supported applications • Link aggregation • Link prioritization - according to Latency, Jitter, and Packet loss • SLA monitoring - ICMP, HTTP • Autonomous link swapping • IPSec VPN AES 128/256, IKEv2
Network services	IPV4, DNS, DHCP, NAT
Routing	OSPF, BGP, Per-packet steering (Overlay), Per-session steering (Local Breakout)

Security Gateway Models and Software Supported in Initial Release

Software Components	Release version
Quantum Security Gateway	R81.10
Quantum Security Management (SMS)	R81.10 + JHF and above (Forthcoming)
Quantum SD-WAN Management & Monitoring	Infinity Portal SaaS platform

Appliance⁴	Size	Combined Throughput for Threat Prevention and SD-WAN
Quantum 3000	Medium Branch Office	Up to 1.5 Gbps
Quantum 6000	Medium Enterprise	Up to 7.4 Gbps
Quantum 7000	Medium Enterprise	Up to 7.4 Gbps
Quantum 16200	Large Enterprise	Up to 15 Gbps
Quantum 28000	Data Center	Up to 30 Gbps

Roadmap for Additional Gateway Support

Appliance⁵	Size	Combined Throughput for Threat Prevention and SD-WAN
Quantum Spark 1500	Small Branch Office	Up to 1 Gbps
Quantum Spark 1600	Small Branch Office	Up to 1 Gbps
Quantum Spark 1800	Small Branch Office	Up to 2 Gbps

⁴ This is a preliminary list of appliances planned to be supported.

⁵ Roadmap priorities are subject to change.

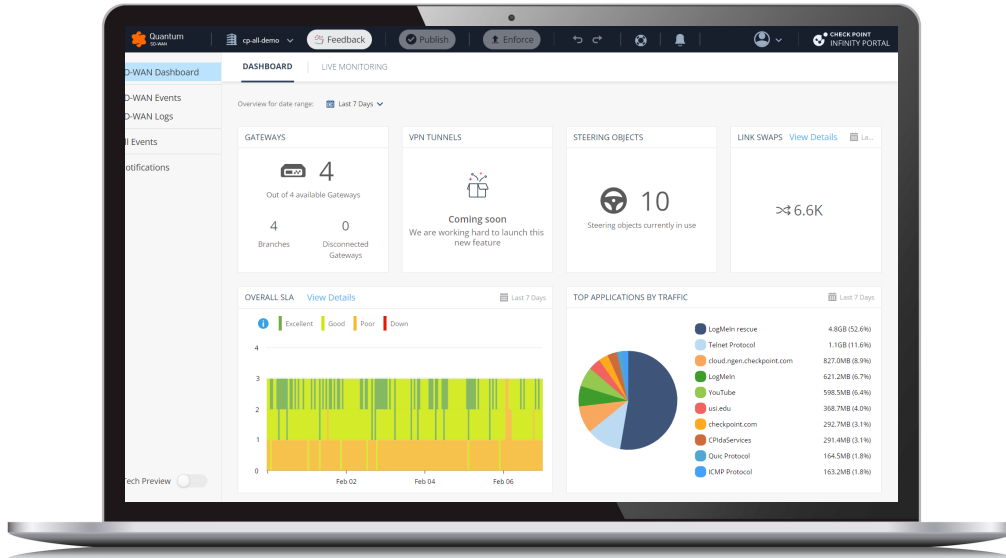


Figure 1 Quantum SD-WAN Dashboard

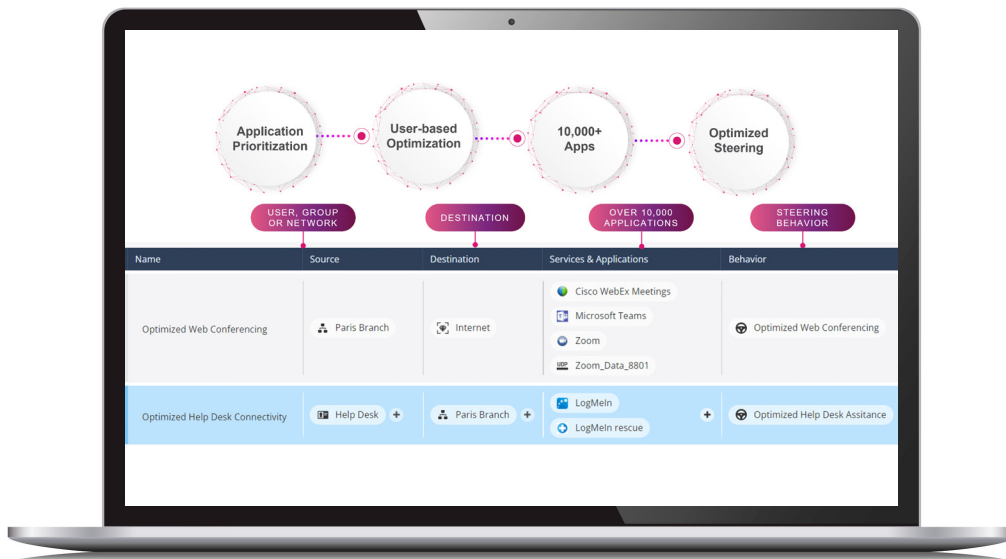


Figure 2 Quantum SD-WAN Policy Configuration

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