# Achieve the perfect network with SD-WAN

Expect more bandwidth, greater reliability, improved quality, and lower costs

## Understanding your networking challenge

Traditional network delivery is no longer adequate to power your business. Today's organizations move to Cloud-based business applications to maximize resources and increase productivity. This results in your connection becoming a critical bottleneck that impacts your bottom-line.



## Achieve the perfect network with SD-WAN

A comprehensive network solution that offers exceptional resilience and performance. SD-WAN offers fully scalable networks that combines multiple connections into a single connection. With SD-WAN, deliver optimum user experience across your Wide Area Network (WAN).
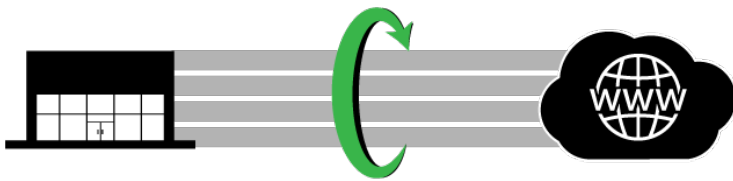


## SD-WAN Benefits

**COMBINE MULTIPLE CONNECTIONS**
Create a single connection out of many lines to give you more bandwidth.

**100% UPTIME**
Manages the failover of your bond to a supplemental connection (DSL,CABLE, Fiber, 3G/4G/LTE) for ultra-resilient networks.

**TURBO DATA ACCELERATION**
Apply data acceleration to compressible data travelling over your SD-WAN.

**VOICE & VIDEO CLARITY**
Quality of Service (QoS), lets you assign unlimited priority layers inside your SD-WAN network. Ensure consistent delivery of important data from VoIP and other real-time applications.

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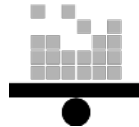**Sales:** (833) 809-1662
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# SUNCO
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# SD-WAN networking software designed to deliver advanced features and functionality to your business

## SD-WAN networking software runs on three principals
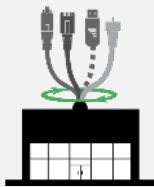
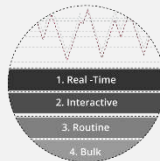**Point To Point VPN**   +   **Packet Level Link Balancing**   +   **Network Connection Monitoring**

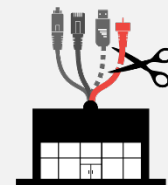## All three combined allows us to provide:

**Bandwidth Aggregation**
Combine the bandwidth of multiple Internet connections to increase network speeds.

**QoS Elasticity**
Conveniently apply policies on performance and usage to make VoIP calls, video and data transmissions reliable and clean.

1. Real -Time
2. Interactive
3. Routine
4. Bulk

**Seamless Failover**
If a disruption occurs on a network connection, traffic will automatically adapt to ensure reliable service.

**Transmission Security**
Easily encrypt traffic between sites, overlay a centralized firewall, and transmit packets across multiple connections to add extra layers of security.

128
256

**Monitoring & Management**
Brings the capability to see the entire network - remotely. Built-in secure portal with real-time traffic analytics tracks and predicts actual usage and performance to troubleshoot and relieve IT challenges

## How much Bandwidth does my Business need?

It's becoming increasingly difficult to plan for bandwidth needs in today's markets. Bandwidth requirements are based on rapid pace Cloud migration, number of users, data base information, and non-linear complexities. What you need today could easily be too little tomorrow.

## SD-WAN: Scale Bandwidth as needed
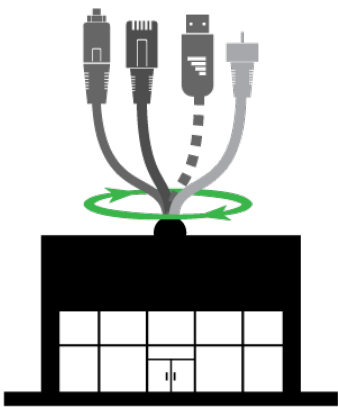


With SD-WAN, combine your redundancy connections or any available connections to create a single line that delivers faster download and upload speeds. Our technology allows you to aggregate the bandwidth of all your connections regardless of type or provider to give you the speed and scalability.

**Combine connections for more bandwidth:**

|  | DOWNLOAD | UPLOAD |
|---|---|---|
| Primary Connection | 20 Mbps | 820 Kbps |
| Back-up Connection | 8 Mbps | 384 Kbps |
| **Bonded Internet** | **~28 Mbps** | **~1,204 Kbps** |

## SD-WAN Benefits

**INCREASE BANDWIDTH**
Enough for all your Cloud and business critical applications.
**WORKS WITH ANY CONNECTION TYPE**
Get the aggregate bandwidth of all connections – no matter which type or providers you use: DSLs, Cable, Fiber, Fixed-Wireless, 4G, LTE, T1, etc.
**TURBO DATA ACCELERATION**
Additional on-demand performance enhancements can be achieved by applying data acceleration to compressible data travelling over the bond.
**SCALABILITY**
Adaptively increase network bandwidth by layering on additional lines, so the network scales to meet your business needs when necessary, at a price you can afford.

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# RELIABILITY Feature Brief
# SMALL & MEDIUM BUSINESS

## Keep Productivity Flowing with NO Downtime

When your connection goes down, it means dropped VoIP calls, cancelled transactions, and widespread inconvenience and frustration. Businesses should be able to rely on a system that can respond quickly and gracefully to those inevitable failures.

### SD-WAN: Reliability with Failover
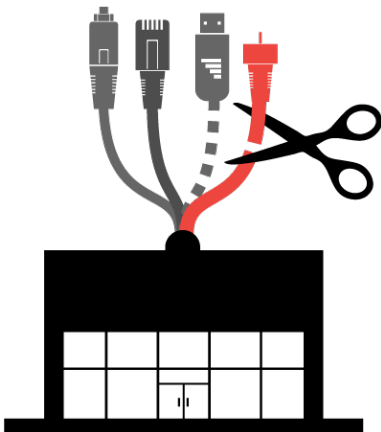


SD-WAN allows any business to combine multiple Internet connections (regardless of provider or type) to create reliable Internet connectivity. If one connection suddenly degrades or goes offline, your data will continue to flow to its destination uninterrupted. When the problem connection is fixed, the system will automatically add it back to its pipeline. No special configurations or specialists are required. It's that simple.

## SD-WAN Benefits

**NETWORK REDUNDANCY**
Providing a fail safe for when an internet connection suddenly degrades or drops. Your data continues to flow through the remaining healthy links.

**SIMPLE NO-TOUCH**
No need to reconfigure network settings. You could be on a VoIP or Video call when a link degrades or dies and you won't even notice.

**SAME –IP FAILOVER**
Each appliance maintains its own IP address in the event of a failover. No more DNS round-robin time delays.

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# QUALITY OF SERVICE Feature Brief
# SMALL & MEDIUM BUSINESS

## Poor VoIP Call Quality?

Choppy and dropped calls happen unpredictability. Mixing voice packets with data traffic in a network that was originally set-up to handle only data will lead to voice quality issues. You need a network solution that can eliminate call quality issues.

## SD-WAN: Quality of Service (QoS)

Deliver crystal-clear voice over Internet connections with SD-WAN QoS. Not only is SD-WAN QoS feature completely customizable to fit your business, it's also dynamic to accommodate real-time fluctuations in application usage.

First, fully customizable QoS profiles ensure that your most important applications are prioritized over less sensitive traffic. SD-WAN QoS eliminates latency, jitter, and packet-loss problems by prioritizing applications by class and other criteria your business requires.

Second, our dynamic QoS system adapts to how your network is used. In particular, varying application load requirements and fluctuations in network load are considered. SD-WAN QoS anticipates these factors and smooths out any disturbances so that you always get crystal-clear voice and crisp video.
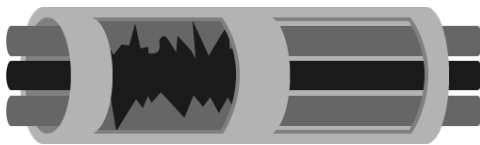


without QoS     QoS

## SD-WAN Benefits

**CUSTOMIZATION**
Assign unlimited priority layers inside the connection to ensure consistent delivery of important VoIP and other real-time application data.

**EXPANDABLE CLASS PRIORITY**
Allows for bursts in use of prioritized applications to manage the flow of traffic between sites.

**QoS ELASTICITY**
As your business's dependence on IP or hosted voice and video applications increases, so does the need for those calls to be crisp and clean. Get the peace of mind that packets will make the trip free of any disturbances.

## Safety In The Digital Age?

Organizations are challenged with putting safeguards in place to protect their valuable digital information. However, the reliance on connectivity in today's business environment means an ever-increasing pace of data creation and dissemination. As data zaps around the globe in milliseconds, do you really know if your transmission is safe?

## SD-WAN: Encryption Protects Your Data

Encryption is the most important privacy-preserving technology available. It protects your data when it's sitting on your computers and when it's being delivered around the Internet. Implementing encryption is essential and we offer DTLS in three cipher strengths - AES128, AES256, and Salsa20 to guard the packets that pass over your various network connections.

## You Take Network Security Seriously, and So Do We

In addition to standard encryption, by its nature SD-WAN technology spreads traffic across multiple Internet connections. Even if an attacker manages to capture one of your individual Internet connections, he will only see a small fragment of your entire traffic. Combined traffic is authenticated by the receiving server with a hash-based message authentication code (HMAC, from RFC2104). This ensures an attacker can't intercept, modify, or forge messages sent between your sites.

## SD-WAN Benefits

**FIREWALL**
Monitor and control the incoming and outgoing network traffic to identify overall network capacity and enforce entry/exit rules associated with applications.

**TRAFFIC DISTRIBUTION**
Breaks up sessions into its smallest possible component and distributes the information down multiple connections to add extra layer of security.

**ENCRYPTION LEVELS**
Provides comprehensive and affordable protection to secure all communications:
AES 128
AES 256
Salsa20

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## Life in the Fast Lane with No time to stop

Your day can go from zero to sixty at the drop of a hat. You want to fix your firewall issue, but that email server is acting up. Then, the network goes down. How do you prioritize your day when network outages can't be dealt with until it's too late?

## SD-WAN: See the Big Picture

SD-WAN network monitoring and management service gives you visibility into what really matters to enhance your network experience. We will proactively monitor and alert you of real-time network issues. We will troubleshoot and put out the network-related fire and we help you strategize to make the right network choices with confidence – for now and the future.



## Be Productive in the Fast Lane

Let us expertly pinpoint issues in real-time. We take care of your network so you can focus on what matters – keeping your business productive.

## SD-WAN Benefits

**PROACTIVE REPORTING OF REAL-TIME NETWORK ISSUES:**
Jitter
Latency
Packet-loss
Bandwidth fluctuation
Connection state changes
Throughput/usage

**PRODUCTIVITY**
Solve network headaches that impede your business to get the most out of your network. Real-time traffic and WAN health configured to align with your business policies.

**RETURN ON INVESTMENT**
Cost-effective solutions designed to optimize IT investments.

**PEACE OF MIND**
Get alerted to issues before they become a problem.

**VISIBILITY**
Secure portal for viewing and managing your entire Wide Area Network (WAN).

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