

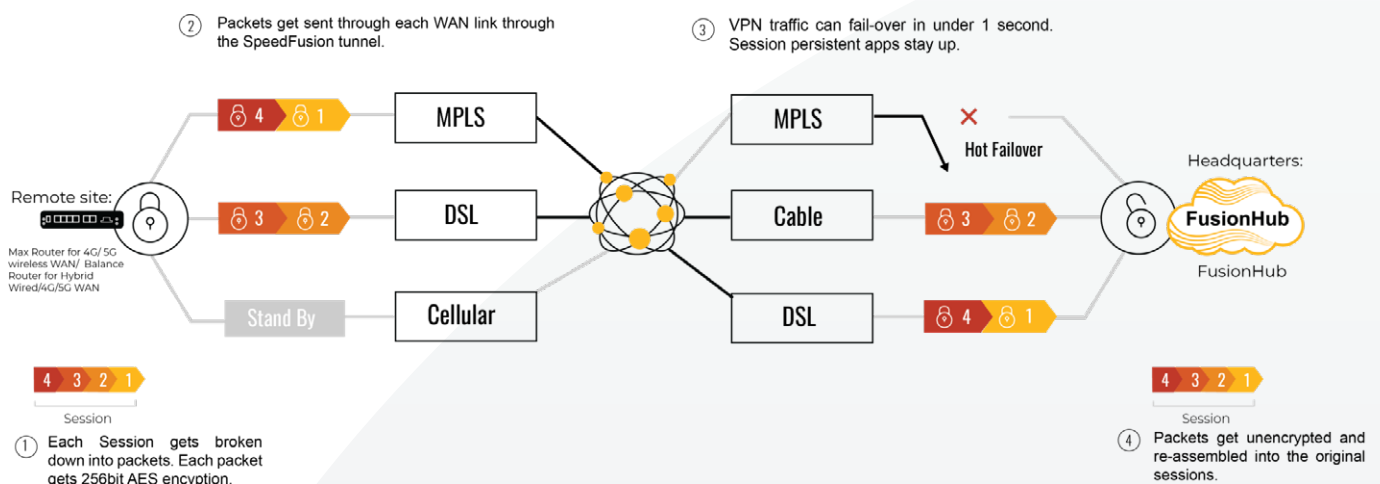
SpeedFusion

Speed & Reliability



Peplink's patented SpeedFusion technology powers enterprise VPNs that tap into the bandwidth of up to 13 low-cost cable, DSL, 3G/4G/LTE, and other links connected anywhere on your corporate or institutional WAN. Whether you're transferring a few documents or driving real-time POS data, video feeds, and VoIP conversations, SpeedFusion pumps all your data down a single bonded data-pipe that's budget-friendly, ultra-fast, and easily configurable to suit any networking environment.

How it Works?



Once the bandwidth bonded SpeedFusion tunnel is formed, sessions are broken down and the resulting packets are sent separately across as available WAN-to-WAN connections. Because each WAN-to-WAN connection is encrypted separately, potential hackers would need to obtain the key to every WAN-to-WAN connection before they stand a chance of accessing the data contained within. This makes SpeedFusion SD-WAN technology virtually impervious to man-in-the-middle attacks.

SpeedFusion Technologies

We have developed multiple technologies with SpeedFusion designed to address specific networking problems.



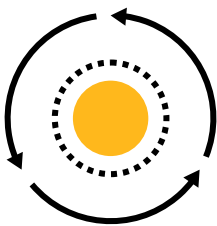
Hot Failover

Failover offered in existing technologies will transfer sessions to another connection, but will not prevent the session from breaking when one WAN connection fails. This results in some interruptions or down time.

In the event of a WAN disconnection, Hot Failover will transfer your traffic to another connection while maintaining session persistence. This seamless transition means that you won't experience interruptions in your activities.

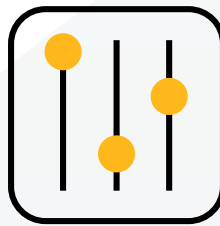
WAN Smoothing

WAN Smoothing utilizes intelligent algorithms to fill in connectivity gaps, trading bandwidth for greater connection resiliency. WAN Smoothing minimizes latency and reduces the impact of packet loss. For instance, when live broadcasts are jittery due to packet loss, WAN Smoothing sends redundant packets through multiple network channels simultaneously, instantly filling in the gaps in data and eliminating the effects of packet loss.



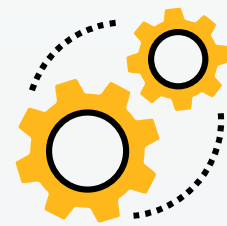
Consistency

WAN Smoothing consumes more bandwidth than Bandwidth Bonding, but increases connection consistency. Use it when you need consistent delivery of time-sensitive traffic.



Adjust Smoothing Strength

Adjust the amount of extra bandwidth to use for improving your connection consistency, striking your perfect balance between fast uploads and smooth streaming.



Configure WAN Priority

Determine the priority of each WAN connection in the SpeedFusion Tunnel. This enables you to dedicate specific links (such as cellular) for backup.

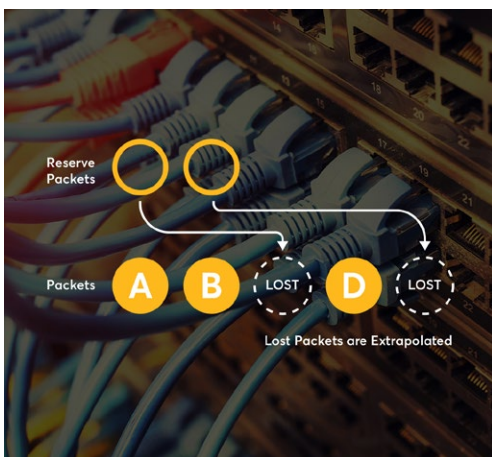
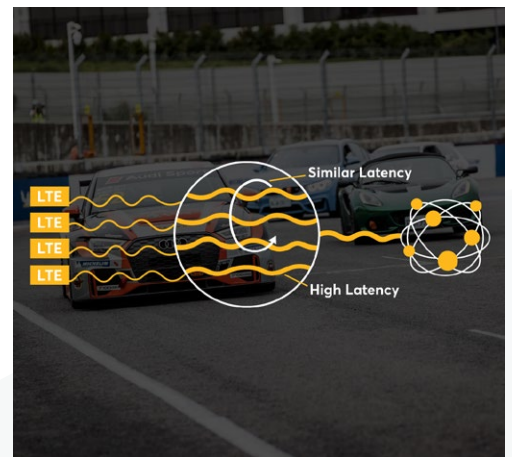


Bandwidth Bonding

Bandwidth bonding combines data at the packet level, enabling you to combine the speed of up to 13 connections. This is useful for situations where bandwidth is scarce, such as at a remote site, or in a moving vehicle. This technology also enables branch offices to connect to the head office at greater connection speeds.

Dynamic Weighted Bonding

Similar to Bandwidth Bonding, this technology aggregates different links, but is also able to identify connections and their latency. Dynamic Weighted Bonding limits or even prevents sending packets through a link once it detects increasing latency or poor performance. This algorithm maintains the benefits of a bonded link without being affected by weak connections.



Forward Error Correction

This technology has been developed to provide packet loss protection while minimising bandwidth consumption. While WAN Smoothing duplicates actual packets, Forward Error Correction (FEC) sends additional reserve packets which could be used to mitigate the effects of packet loss via interpolation.

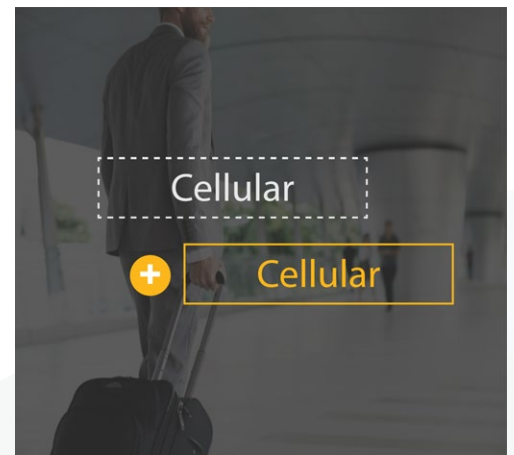


SpeedFusion Traffic Steering

Modern networks carry a variety of traffic such as video streams, ERP sessions, HTTP sessions, and more. Depending on your deployment, you may need to give priority to certain kinds of traffic while throttling or even blocking others. SpeedFusion gives you granular control of how different kinds of traffic travels within your network.

Bandwidth on Demand

Bandwidth on Demand allows you to use improvised cellular WAN connections whenever, wherever. No longer will there be a need to predict your next location and be tied down to huge data costs or lengthy contract periods. SpeedFusion will provide you with the ultimate solution, a perfect match for you.



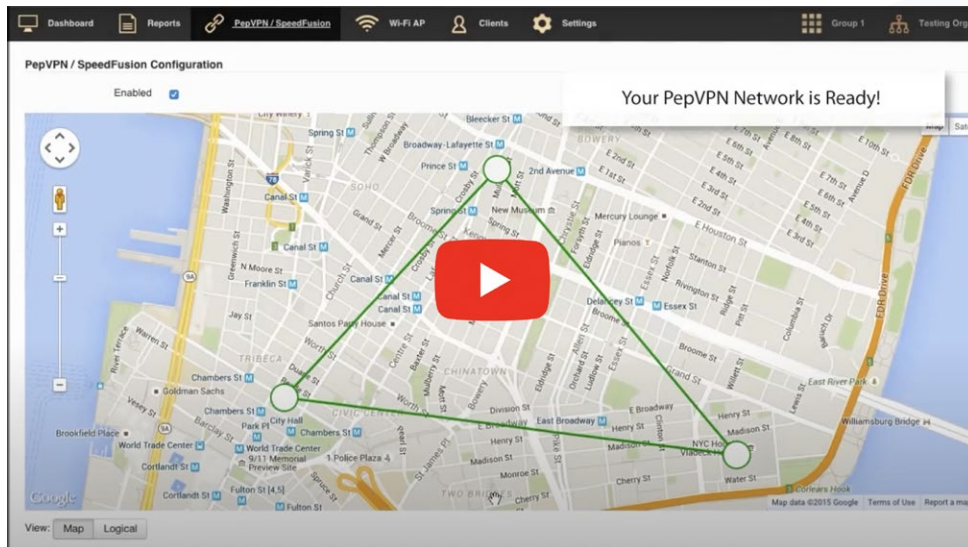
Bandwidth Overflow

Bandwidth Overflow monitors network bandwidth usage and switches to the most suitable connection as bandwidth usage changes. This allows network users to access high bandwidth connections when needed or switch to less costly connections when bandwidth usage is low. The result is a more optimised connection.



#PowerOfPeplink in Action

Check how with Peplink SpeedFusion Failover, your VoIP. Calls can run smoothly and uninterrupted, even when you lose. One of your internet connections



Probably the World's Easiest VPN

InControl 2 provides you with a graphical PepVPN configuration tool that enables you to build hundred-site SpeedFusion networks with ease. What would have taken hours can now only take minutes!



SpeedFusion Use Cases

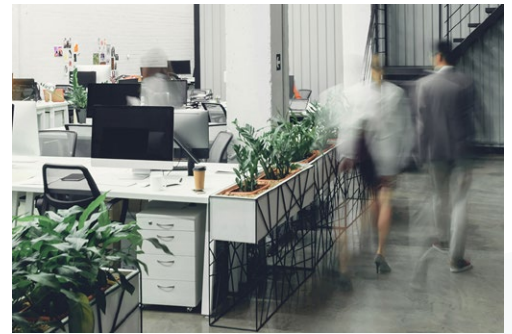


Data Centers

Connect up to 13 WAN links of any type. Mix T1, DSL, and fiber connections to get the most bandwidth for your money. Use a clustered pair of Balance routers for HA. Guarantee availability of customer-facing services with inbound load balancing.

Branch Offices

Bond multiple slow WAN links to aggregate bandwidth at sites with poor connectivity options. Failover to cellular when other links go down. Use quality of service to control bandwidth usage and centrally manage wireless access points with built-in wireless LAN management.



Home Office

Bond WAN links and failover between multiple DSL/cable links to improve bandwidth availability and increase productivity. Use CPE devices like the Surf On-The-Go with built-in SpeedFusion support for enterprise-grade connectivity at home and on the road.

Mobile Internet

Deploy ruggedised, harsh environment-certified MAX routers in any vehicle. Power the MAX directly from a 10V – 30V power supply. Bond up to four 3G/4G/LTE connections, two additional WAN links (satellite, etc.), and provide local Wi-Fi access, all with one cellular connectivity powerhouse.





Retail

Stay up and running round-the-clock with automatic failover to cellular. Aggregate bandwidth and failover between multiple WAN links with SpeedFusion. Use a DSL line as your primary link and failover seamlessly in the event of an outage. Or connect an entire installation on bonded cellular alone.

Live HD Video Streaming

Stream live HD video from practically anywhere with up to four bonded 3G/4G/LTE connections. Eliminate data cap overages with built-in bandwidth monitoring that switches connections before you exceed your allowance.



Why Rising Connection is using equipment designed and built by Peplink?

- Industry leader in both ISP & Data Bonding across multiple technology platforms
- Reliable hardware from entry level professional equipment through to advanced Enterprises solutions
- Worldwide supported and local support here in Australia by fully trained technicians
- Reliable and secure redundancy paths for mission critical sites
- Designed for maximum possible business uptime

This demonstrates to Rising Connection that you will have the Quality, Reliability and Product Support.
