



# 4G / 3G Bandwidth Bonding

## WAN Bonding Application Notes

### Quality Network Comes at a High Cost.

4G, 3G is getting faster, but still can't keep up with demanding mobile applications. Wireless links with high bandwidth are highly desired for applications such as sending live video streams and video conferencing, but performance of wireless connections fluctuate and speed highly depends on the environment. They can't be depended on for carrying out critical tasks.



PepLink Balance Multi-WAN Bonding Routers and Pepwave MAX Mobile Routers come with Bandwidth Bonding technology to eliminate challenges in using WiMAX, LTE, 3G or other wireless links.

### Faster Wireless Internet with Bonding.

Bandwidth Bonding aggregates all your 4G, 3G, and wired links, overcoming wireless link performance issues. Uploading pictures, streaming videos, or providing Internet for outdoor events has never been faster and easier. Simply add extra wireless links when you need further higher speed and accelerate to ultimate speed on the run!



### Reliable Internet Access with 4G, 3G Everywhere.

Enjoy reliable Internet access everywhere, even when using only wireless links. Just subscribe to multiple providers and have the 4G, 3G connections back each other up to add reliability. Bandwidth Bonding with failover mechanisms dynamically bonds the bandwidth of all healthy links and avoids session disconnects from failed links, providing a reliable, seamless, high-speed wireless connection.

### Increased Bandwidth Enable New Applications.

Stream HD video, transfer RAW photos, and access the Internet with seamless and fast data transfer anywhere you go. With Pepwave MAX bandwidth bonding, you're no longer chained to a desk or held back by slow, unreliable connections!

### Replace Traditional Wireless Delivery

Pepwave MAX bandwidth bonding can replace traditional wireless technologies, such as expensive and unreliable microwave or satellite connections, saving you money and increasing dependability. And as new data delivery technologies become available, Pepwave MAX bandwidth bonding makes it a snap to trade up to a better and faster solution.

## PEPWAVE MAX



The Pepwave MAX is a reliable, easy-to-use Internet load balancing and WAN bonding solution. Capable of connecting up to 7 Internet connections, the Pepwave MAX can load balance among multiple links, such as DSL, cable, WiMAX, LTE, and 3G, to increase Internet bandwidth and reliability. Links can be bonded using our site-to-site VPN bonding technology, which aggregates the bandwidth provided by multiple links and becomes one big pipe while providing seamless session failover. With their increased speed and reliability, these new lines can replace existing remote data delivery method such as Satellite, Microwave.

## Live Demo

Try out Peplink Balance's Web Admin Demo now!

<http://www.peplink.com/demo/>

## Case Study of Nokia Siemens Network, Germany



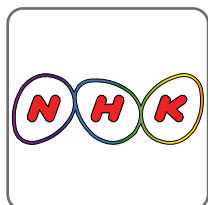
Nokia Siemens Networks is a leading provider of telecommunications and data networking equipment. While developing 3G data networking equipment for a recent project, the engineers at Nokia Siemens Network quickly realized that by bonding multiple wireless HSPA+ connections, service providers could establish a cost-effective and reliable high-speed wireless data connection without the expensive equipment and licenses required by 4G networks.

Seeking the hardware and software needed to implement this bonded solution, NSN engineers evaluated and tested the Peplink Balance and its bandwidth bonding technology, which achieved bonded wireless at speeds of up to 112Mbps using the latest HSPA+ technology. Featured in leading shows such as CTIA Wireless and Mobile World Congress, the Peplink Balance soon became the backbone of Nokia Siemens Network’s 3G networking project.

- Nokia Siemens Networks is one of the largest data networking and telecom equipment providers in the world
- Looked for a solution that could bond multiple wireless links
- Sought to increase bandwidth and transfer data at very high speeds
- Used a fleet of Peplink Balance 710s as standard equipment for their new radio technologies
  - Aggregated 4x HSPA connections
  - Achieved ~112 Mbps using Peplink’s VPN bonding
- Winning Factors:
  - Excellent bonding capability
  - Outstanding support service



## Customer Spotlight



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