



SHARED-BAND-WHAT OUR TECHNOLOGY DOES

Aggregates the network capacity (upstream / downstream) of multiple Internet connections (DSL, T1, cable, fiber, wireless)
 Many corporations, small businesses and home workers are outgrowing the capability their existing Broadband connections offer in terms of speed and / or reliability. Often they feel required to upgrade to a T1 or E1 which is expensive and typically does not make practical, financial sense. Sharedband provides an alternative approach whereby multiple low-cost lines are pooled, causing them to function as a single faster and more reliable Internet connection.

END USER BENEFITS

Reliable, flexible, fast, low-cost connectivity

Businesses currently relying on a single network provider also risk losing all connectivity if that provider has a network issue. By aggregating low-cost Broadband connections using different connection types and from different providers, Sharedband can quickly and easily provide faster bi-directional connectivity and increased up-time.

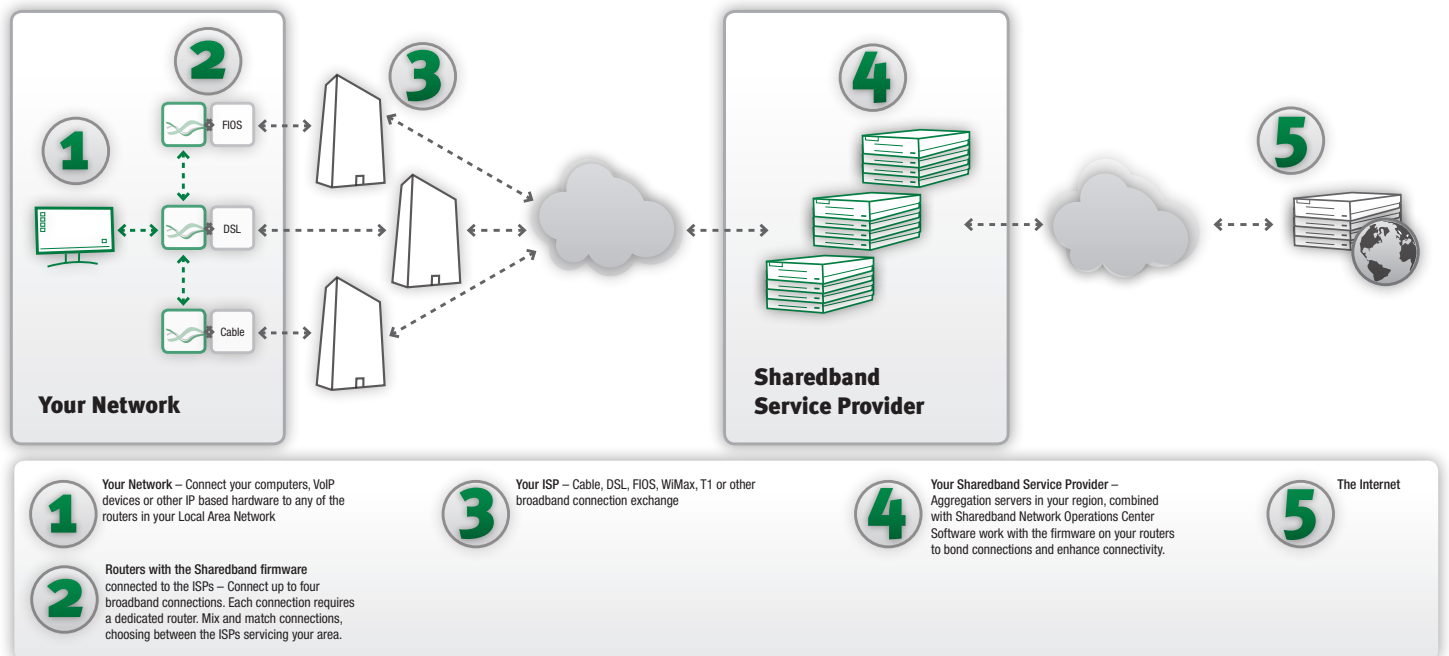
By utilizing lines from different network providers it is unlikely that all connections will be unavailable at the same time. Because Sharedband firmware can operate on a variety of routers, from consumer to commercial grade, additional capacity can be easily added by installing more lines and routers. Most network provider outages do not affect Sharedband customers and existing sessions remaining active.

A faster, more resilient connection enables you to deploy new applications such as real VoIP, off-site data backup, video conferencing and hosted applications.

HOW IT WORKS

Sharedband routers are installed (one per line) and collaborate to pool their capacity. All traffic is related to an aggregation server which re-combines the traffic and sends to the Internet

Sharedband routers at the customer's office are connected via Ethernet and divide traffic among the various lines. Devices on a customer's LAN use a Sharedband Virtual Router Address (VRA) as the default gateway and DNS. An available Sharedband router will take ownership of the VRA and should it fail, one of the other routers will quickly take over. Thus, existing sessions will remain unaffected, except for a period of 5 seconds while the service is recalibrated. Sharedband also includes a distributed DHCP server, which will automatically configure compatible host machines for network access. The DHCP server runs on the VRA router and replicates any changes to the other routers, which may be utilized to take over in the case of a VRA router failure.





The VRA router directs packets over lines to utilize total combined upstream capacity. All traffic is passed through Sharedband aggregation servers where it is assigned a virtual IP address. This allows all traffic to appear to originate from a single consistent IP address and port number. Any incoming packets return to the same IP and port number, where the aggregation servers balance traffic across the available lines to use the full downstream capacity. By altering IP addressing to refer to Sharedband servers rather than specific lines, the underlying networks can change without affecting the customer.

Sharedband periodically monitors line performance and will automatically adjust the amount of traffic sent over each line. This ensures optimal performance without customer intervention – especially important where multiple service providers are used with different peak usage / contention profiles.

To avoid introducing a single point of failure in the event of server fault, Sharedband Service is deployed over redundant aggregation servers. In addition, Sharedband uses BGP protocol in combination with our proprietary failover mechanisms to provide site-level redundancy.

WHERE TO GET SHAREDBAND

- » Sharedband is available through authorized Sharedband service providers.
- » www.sharedband.com

ISP SUPPORT

Sharedband works with almost any ISP and connection type. Performance depends upon the connectivity between the Sharedband servers and other ISPs

Each Sharedband service partner decides which ISPs' lines will be bonded together. Connectivity between the ISPs involved will be important as it will determine end-user performance. However, in general it is expected that any existing Broadband lines can be bonded with satisfactory results, eliminating the need to switch to another supplier.

LEARN MORE

To learn more about how Sharedband works, visit www.sharedband.com or contact us.

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