



WAN Aggregation

The Synergy of Speed, Quality, Capacity and Affordability

As organizations grow more geographically dispersed and more bandwidth-dependent, providing remote offices with robust Wide Area Network (WAN) connectivity becomes essential.

Remote sites need WAN connectivity with the performance and reliability to support IP telephony, desktop virtualization, cloud computing and other mission-critical applications. However, provisioning dedicated high-speed lines through a telco carrier can be slow and expensive, and the costs tend to increase as locations get farther away from metro hubs.

Moving beyond standard broadband Internet services, business applications such as Voice-over IP also require the Quality of Service (QoS) support that Multiprotocol Label Switching (MPLS) provides. (QoS gives latency-sensitive traffic such as voice and video preference over less-sensitive traffic such as email.) However, MPLS or multiple dedicated T1 circuits can be many times more expensive than broadband Internet services.

The Win/Win of WAN Aggregation

SageNet WAN Aggregation solutions help organizations strike the right balance between cost, performance and reliability. Combining broadband Internet services (DSL, cable, etc.) from potentially multiple providers and service types, SageNet WAN Aggregation solutions empower remote sites with increased bandwidth and higher reliability, all at lower costs.

WAN Aggregation can be particularly beneficial for remote sites where cable, or other high-speed/low-cost telco services are unavailable.

With SageNet WAN Aggregation, all the connections at a given site appear as one link with greater capacity and reliability than each individual link. It doesn't simply provide failover, but rather uses all the available bandwidth from all the connections at the same time. The best WAN aggregators have enterprise-class QoS capabilities, enabling network administrators to prioritize traffic.



Benefits

- Aggregate bandwidth from any combination of IP links to satisfy upload and download requirements
- Deliver increased speeds by truly aggregating multiple links
- Increase network uptime; never lose another session
- Patented Bi-Directional IPQoS that even works on public broadband
- Seamless failover to diverse carrier links with the same virtual IP address

SageNet WAN Aggregation solutions incorporate TeloIP's innovative Ai series of CPE devices delivering the most cost-effective and reliable WAN Aggregation technology available today.

Ai-100 Low Cost Embedded CPE Device

The TeloIP Ai-100 CPE device provides the most efficient means of combining multiple connections for both small and large multi-site solutions for WAN, Internet, & voice convergence.

The Ai-100 features TeloIP's patented ANA™ System (Autonomous Network Aggregation) technology. ANA combines the speeds of multiple network connections controlled through software, combining diverse carrier circuits into a unified networking connection with bi-directional IPQoS, and provides no dropped VoIP calls on Link Failover. ANA cost-effectively increases speed, reach, quality, and reliability on the last mile.

ANA is typically deployed on the edge of a carrier's network using any combination of customer side IP connections. This versatility for any type of links on the local network accelerates multi-site deals.

Ai-400 High Performance CPE Device

A complete WAN & Internet solution delivered through a single cloud managed device, TeloIP's high performance Ai-400 CPE includes everything you need to create a secure high-speed business network. Software Controlled Networking (SCN) technology is bundled with the Ai-400 to improve application visibility and performance for customers while increasing operational efficiency and reach for Voice & Data Service Providers.



Ai-100 Low Cost Embedded CPE Device

FEATURES	TeloIP Ai-100	TeloIP Ai-400
Performance		
ANA Aggregated Bandwidth	up to 50Mbps	up to 200Mbps
VPN	up to 11Mbps	up to 40Mbps
Product Architecture		
Onboard LAN Ports	1	1
WAN Ports	4	4
Additional Functionality		
Virtual Private Networking	IPSec	IPSec, PPTP, SSL
Routing & VLAN	Yes	Yes
Corporate Firewall	Yes	Yes
Power Requirements		
AC Input Voltage	120-240V	120-240V
AC Input Frequency	50-60Hz	50-60Hz
AC Input Current	0.65A	1.6A
DC Output Voltage	12V	12V
DC Output Current	2A	5A
Environment		
Operating Temp °C	0-40	0-40
Operating Humidity %RH	20-85 % (non-condensing)	5 - 90
Dimensions (W x D x H)	165 x 158 x 35	215 x 43 x 188
Form Factor	Desktop	Desktop. Opt. Rack Mount Kit
Regulatory Compliance		
Safety	FCC Part 15 Class B, RoHS	CE, FCC Class A, RoHS

To learn more about SageNet's WAN Aggregation solutions, visit www.sagenet.com or call 1-866-480-2263.

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