VOIP ARMOR^{TM}

VOIP/SIP Orchestration Network Appliance

with 3G/4G/LTE Cellular Failover

The VOIP Armor orchestrates VOIP/SIP traffic intelligently over 2 or more WAN lines to ensure VOIP quality and boost VOIP/SIP reliability. VOIP Armor is available as a network appliance, or as an add-on module to the Truffle Broadband Bonding routers. VOIP Armor installs transparently in the office network and connects to the existing ISP lines at the office, in order to orchestrate VOIP/SIP traffic around network problems such as cross-traffic, core network congestion, packet loss, jitter, latency, ISP disconnects and many other potential network problems. VOIP Armor accomplishes this by peering to a VOIP Armor Relay in the cloud and therefore creating a bonded tunnel that can instantly react and route around network problems. By doing so, even on-going VOIP calls will be shielded from the network problems. This translates into higher VOIP quality and unbreakable VOIP reliability, even during harsh network conditions.

VOIP ARMOR FEATURES

Cloud Based Latency & Jitter Mitigation - VOIP Armor through the VOIP Armor Cloud Relay is capable of keeping track of various network path metrics including latency and jitter. VOIP Armor is programmed to adapt to changing latency and jitter condition to optimize the VOIP traffic performance in real time. In case one of the WAN lines carrying VOIP traffic experiences latency or jitter problems, VOIP Armor will route around that problem in real-time avoiding any negative impact on the VOIP application.

Self Healing WAN – In case of Internet access line failures, the VOIP Armor keeps the ongoing VOIP/SIP sessions alive by making real-time per-packet routing decisions, even for the sessions in progress.

SIP/VOIP Session Keep-alive - VOIP Armor unit monitors and intelligently reacts in realtime to mitigate any VOIP / SIP performance degradation caused by the WAN links. Managed parameters and network problems include packet loss, latency, jitter, cross-traffic, buffer management, MTU problems, black holes as well as others. In case of packet loss, spike in latency or any other degradation on any of the WAN links VOIP Armor tunnel maintains the ongoing VOIP sessions without loss of performance by shielding the effects of dropped WAN link, lost packets, high latency on any of the links.

Elastic Static IP - A static IP in the cloud is provided as part of VOIP Armor tunnel and is mapped onto the VOIP Armor. This means that static IP is available for your SIP and VOIP services even during WAN outages, as long as at least one of the WAN links is up.

Broadband Bonding for Increased VOIP Capacity – VOIP Armor combines 2 or more WAN links and therefore can support higher number of simultaneous VOIP calls with higher codec quality.

Traffic Shaping, Monitoring & Alerts - Traffic can be monitored via performance graphs over seconds/minutes/hours/days/months. Various realtime and non-realtime traffic types can be filtered and shaped. SNMP or non-SNMP alerts provide in depth network visibility and intelligence.

Pass-through Installation – For installing VOIP Armor unit into your existing network, no changes are required at your firewall or network. Simply slide in the VOIP Armor unit between your existing network/firewall and your existing modem and add the additional WAN links as you need. All the installation and configuration can be done through the web-based management interface locally or remotely.

2G/3G/4G/LTE cellular cards – VOIP Armor unit supports 2 USB ports for cellular 3G/4G data cards. The cellular data card dongle can be configured as a fail-over-only or always-on WAN connection. In fail-over mode, in case of all the wired Internet access lines fail, the cellular data card will take over in a matter of seconds.

NO Coordination with Service Providers – With the VOIP Armor, no new equipment or software is necessary from your Internet Service or VOIP Service Provider(s) and all ISPs are supported. A user-friendly web-based management interface is provided for quick and easy configuration and system monitoring, either locally or remotely over the Internet.

Bridging to the Future

VOIP termination or Remote PBX

Internet

T1/DSL/Cable/Fiber/ 3G/4G/MPLS
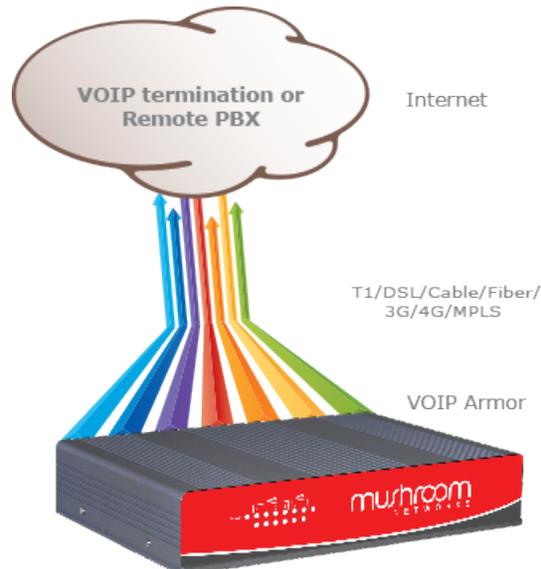
VOIP Armor

VOIP ARMOR HARDWARE SPECIFICATIONS

Mechanical Dimensions	9"(W) x 6.04" (D) x 1.73"(H), desktop form factor
Weight	5.51 lbs.
Input Power Requirement	external power supply 12V DC, 5 Amp
LAN ports (GbE, auto-sensed)	2 RJ-45 Ethernet connector
WAN ports (GbE, auto-sensed)	4 RJ-45 Ethernet connector. 2 WAN ports active. 3rd, 4th WAN ports can be optionally activated.
Certifications	FCC, CE, RoHS-5, ICES-03, UL, cUL
Operating Temperature Range	32 - 104 F, 0 - 40 °C
Operating Humidity Range	10-95% RH, non-condensing
Shock	50G, MIL-STD-810G Method 516.6, procedure 1, peak 20g 11ms
Storage Temperature Range	-4 - 158 F, -20 - 70 °C
Cooling	Active cooling