

## TRUFFLE V

## **WAN Orchestration Software**

The Truffle V, is WAN Orchestration software that runs on a virtual machine installed on standard hardware in a data-center to function as a Truffle Master unit. Truffle V is peered with other Truffle appliances in the branch offices to create an overlay bonded IP tunnel between the end-points, VLL (Virtual Leased Line). This bonded tunnel is used for IP traffic between the branch offices and the data-center as well as between any of the branch offices. Truffle V can be configured to act as a broadband bonding proxy to enable fully bonded connectivity for the branch offices with Truffle appliances, for all the Internet traffic to and from the branch offices. The standard hub-and-spoke (star) topology overlays IP connectivity between end points over the bonded WAN links at the branch offices. The capability for bonding WAN connections at the branch offices provides performance and reliability enhancement for the Internet connectivity for the branch offices. WAN orchestration features Broadband Bonding<sup>™</sup>, Application Armor<sup>™</sup> and advanced traffic management and Quality of Service functionalities.

**FEATURES** 

**Downlink/uplink** bonding in peered mode When Truffle field units are peered with Truffle V in the data-center, any WAN links at the branch office can be bonded for any type of traffic (including encrypted traffic such as VPN) for aggregated downlink and uplink speed.

Application Armor<sup>™</sup> with Session Keep Alive Truffle V monitors and intelligently reacts in realtime to mitigate any performance degradation caused by the WAN links at the branch office. 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 at the branch office, the VLL tunnel between Truffle and Truffle V maintains the ongoing IP sessions without loss of performance by shielding the effects of dropped WAN link, lost packets, high latency on any of the links. 2G/3G/4G cellular cards can be added as standby WAN access links for additional reliability.

**Traffic Monitoring & Shaping** - Traffic can be monitored over seconds/minutes/hours/days/months. Various realtime and non-realtime traffic types can be filtered and shaped.

**VPN Passthrough** - Existing VPN solutions can be used transparently over the bonded VLL tunnel between Truffle and Truffle V. Optionally, tunnel encryption is available within the bonded tunnel. **Advanced QoS algorithms** - All traffic routed

Advanced QoS algorithms – All traffic routed through the VLL tunnel between Truffle and Truffle V is intelligently managed to prioritize real-time traffic. Additionally unique proprietary algorithms are implemented to improve latency metrics for real-time applications such as VoIP.

**Stateful Firewall & Router** – Truffle V includes award winning stateful firewall and enterprise grade routing functions.



Bridging to the Future

