

BYTESCREEN

CONNECT • DETECT • PROTECT

SD-WAN BROCHURE

SECURE BY DESIGN

BYTESCREEN SDWAN is one of the most Secure SDWAN solution deployed in major banks, manufacturing, government PSU's and retail institutions worldwide. BYTESCREEN SDWAN is the only true WAN aggregation driven by patent pending PMTA technology and with several unique service features create a simplified but robust solution. It is a part of our Network-as-a-service stack together with BYTESCREEN LAN and BYTESCREEN Secure which together offers a unified solution for end to end networking and security needs of an organisation.



FLAWS OF TRADITIONAL BYTESCREEN SD-WAN

Session-based platforms assume that bandwidth is plentiful, that circuits in the tunnel are always available and that network conditions are predictable and consistent. Based on these assumptions, a session-based SD-WAN isn't designed to manage the tunnel for efficiency.

Require additional technology solutions (like FEC) to compensate for not focusing on network transmission using packets

Not good for shared or over-provisioned networks or bandwidth-constrained circuits

Reliance on FEC can increase congestion and require additional bandwidth

FALSE WAN Aggregation under the garb of "Load balancing" wherein at any given point in time only ONE WAN link is used for an application session

Key once established remains same throughout the session

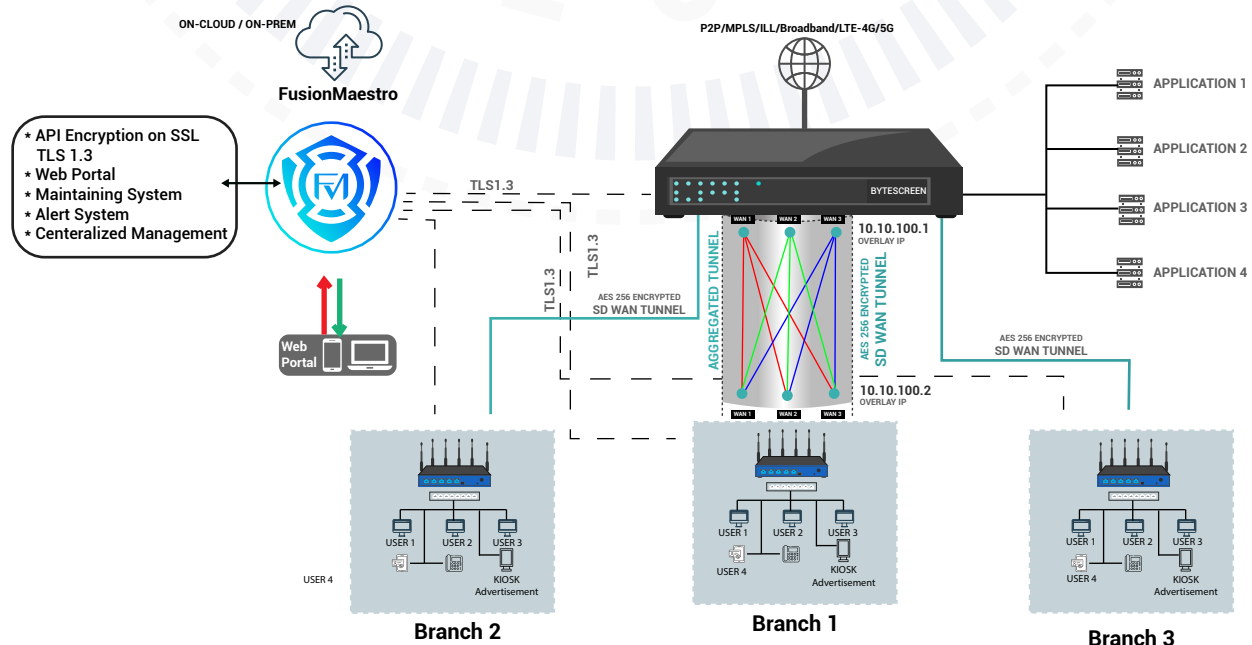
PACKET BASED MULTI-SESSION TUNNEL AGGREGATION (PMTA) OUR SECRET SAUCE

PMTA segments each packets into smaller bits, encrypts, and transports them through multiple sessions created using link aggregation to establish a single tunnel based on link help. PMTA is designed with the view that networks and network conditions are variable, dynamic routing protocols are vulnerable. Hence, PMTA dynamically adapts to network conditions while eliminating the management and routing complexity of dynamic routing protocols.

PMTA Advantages

- Enhances application performance and reduces latency
- High security driven by 256AES encryption of each packet segment
- True WAN aggregation in using all paths for each application
- Provides reliable network when multiple carriers and transport technologies are used
- Automatically compensates for network variability
- Maintains all configured QoS profiles amid failover

BYTESCREEN Typical Network Architecture



BYTESCREEN SD-WAN

KEY FEATURES

Multiple Sessions, Single Tunnel

PMTA establishes multiple sessions within a single tunnel and utilizes aggregated hybrid Wan links for improved performance

256AES Encryption with key rotation every 10 mins

Resilient to brute force encryption algorithms and quantum compute-based hacks
Packet Slicing to prevent Man-in-Middle attacks

True WAN aggregation across SIM/ MPLS/ BB

Only one to pump traffic across WAN links

Single IP Address

PMTA utilizes a single IP address for all sessions, simplifying network management and reducing configuration complexity

Inbuilt Stateful Firewall

ACL lists, whitelisting & blacklisting and many other useful features of firewall

Simplified Management

PMTA's single-path approach eliminates the complexity of dynamic routing algorithms, simplifying network management

Jitter Reduction

PMTA mitigates jitter by distributing traffic across multiple sessions and enhancing voice and video quality

Predictable Performance

PMTA offers consistent performance due to its fixed single-path approach, making it suitable for applications requiring stability and consistent latency

Artificial intelligence based Zero Radius Geo-Fencing (non-GPS)

Leverages Network ARP, LAN profile, traffic profile and 18 other parameters to create Geo Location

RestFUL API based management

No login to the device for routing and config management since CPE lacks any GUI/ CLI. All management is done via orchestrator which too has only an API based device access

Managed Via Our Simplified And Resourceful Orchestrator

Our GUI based orchestrator makes device management a breeze with its RESTful API based architecture ensuring security and utility at same time. API's provide near real time access to device within seconds. It has detailed reporting features enabling generation of:

Event based alerts

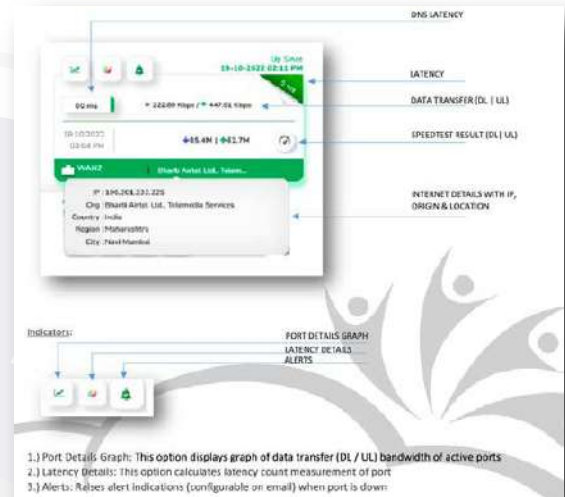
Periodic scheduled reports

Self Healing action reports

Configuration change reports with user names

Allows Access control based on user rights

WAN Port Description



Health Monitoring

Monitoring of the device is measured based on four parameters

- Memory
- Load Average
- CPU Utilization
- Hard Disk



Connected Devices

Displays the list of devices currently we're connected through the WFA box with details such as

- MAC Address
- Model & Make (if available)
- Type of connection (Wired or WiFi)
- Signal (Poor, Good, V.Good, Excellent)
- Device type (Official or Personal)

User Details											
Sr.No	MAC Address	Vendor Name	IP Address	User Name	Types	Status	Signal	Up-Time/Down-Time	Device Type	Send Alert	Operation
1	f0:d4:e2:fa:84:1d	Dell Inc.	100.64.100.131		Wired	UP	-	20-Oct-2022 12:50:05 PM	Official	☐	
2	f2:2a:e1:32:26:97		100.64.100.170		WiFi (5G)	UP	Poor	20-Oct-2022 10:25:07 AM	Personal	☐	
3	f6:b2:c9:16:92:25		100.64.100.238		WiFi (2G)	DOWN	Excellent	20-Oct-2022 12:54:07 PM	Personal	☐	
4	e8:6a:64:1f:39:d0	LCFC(Hefei) E...	100.64.100.246	Office System	--NA--	DOWN	-	19-Oct-2022 5:58:03	Official/Personal	☐	

EDIT DELETE USER SETTING

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BYTESCREEN Tech Pvt Ltd stands firm in our mission to redefine the landscape of networking solutions through innovation, reliability, and customer-centricity. We are committed to pushing the boundaries of technology to deliver products and services that not only meet but exceed the evolving needs of our clients. As we continue to evolve & grow, our dedication to excellence remains unwavering. We invite you to explore our comprehensive range of networking solutions, tailored to empower businesses of all sizes and industries to thrive in the digital era. Whether you're seeking robust security measures, seamless connectivity, or advanced management tools, BYTESCREEN Tech is here to support your journey towards success.

Contact Details:

For inquiries, collaboration opportunities, or to learn more about how BYTESCREEN Tech can elevate your network infrastructure, please don't hesitate to reach out to us.

www.bytescreentech.com