



SD-WAN Solutions Overview

v 1.5

What Is SD-WAN?



Software-Defined WAN

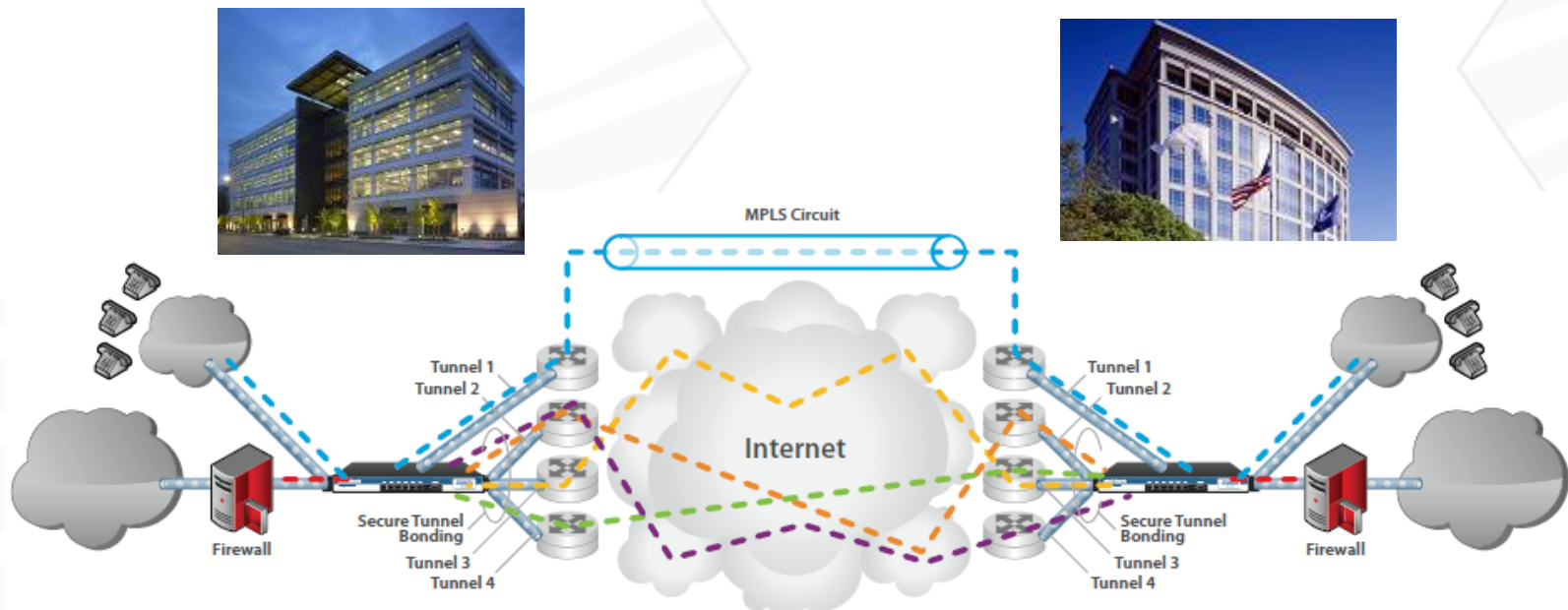
A method for enabling flexibility, cost reduction, and redundancy by virtualizing WAN connections.

- Flexibility: Virtualized WAN connections enable scalable and dynamic routing, which optimizes performance.
- Cost Reduction: Optimization enables businesses to leverage inexpensive broadband connections.
- Redundancy: When multiple WAN connections are available customers have built-in redundancy for mission critical cloud-based applications.

Typical SD-WAN Deployment

SD-WAN Deployment: While most businesses with multiple sites have connectivity (historically MPLS), few have automated network redundancy.

The advantages of SD-WAN are its ability to offload bandwidth from existing MPLS and private lines while enabling optimization and automated failover in the event of a connection failure.



SD-WAN Advantages

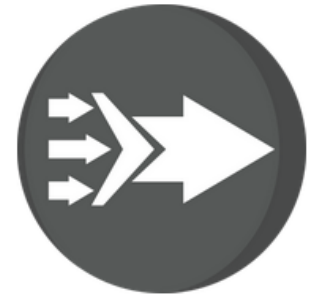
Key benefits of SD-WAN Solutions:



Fully Meshed Office to Office Connectivity:

ZeroOutages SD-WAN ensures 24/7 uptime between offices with our Site2Site technology.

Optimized SD-WAN Performance: ZeroOutages dynamic routing functionality will always pick the best path for mission critical applications.



Improved Security: MPLS and other private line connections incorporate ZERO security. SD-WAN solutions can leverage AES / 3DES encryption to secure customer data.

The Problem with MPLS

While MPLS is well known for its performance and quality of service, what is often misunderstood is that MPLS does not incorporate end-to-end network redundancy. In the event of a outage the customers entire network could fail, which could cost tens of thousands of dollars.



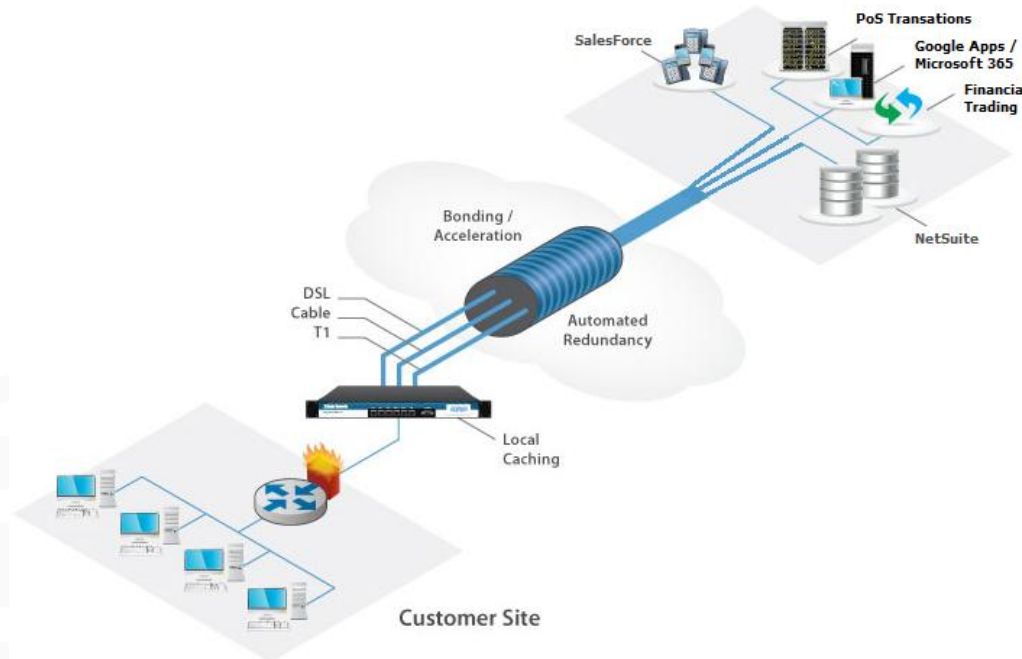
Why ZeroOutages?

ZeroOutages was the first company to utilize the term SD-WAN at the 2009 Channel Partners show. ZeroOutages is the only SD-WAN company which has had its patents tested and validated in Federal court. Only ZeroOutages supports Hybrid SD-WAN.

- Patented Hybrid SD-WAN: ZeroOutages is enable to maximize bandwidth efficiency through Best Path Routing.
- Backhauling: Unlike other solutions ZeroOutages does not backhaul all network traffic to some remote data center.
- Data Duplication: ZeroOutages does not have to duplicate packets across every connection, which reduces bandwidth.

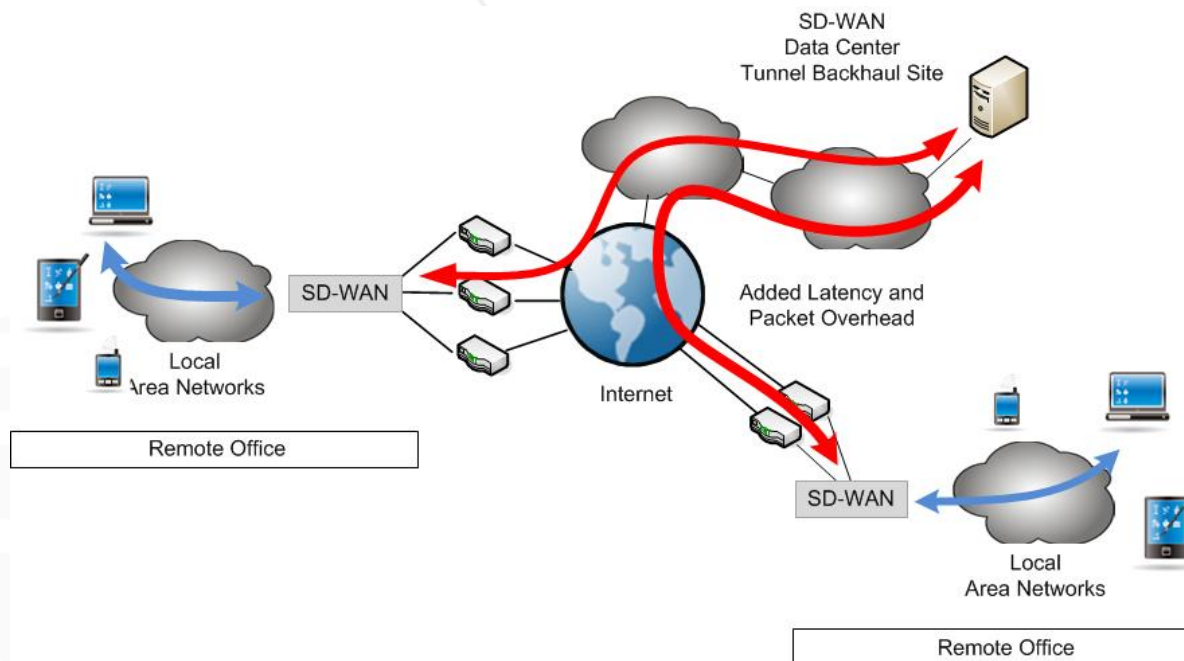
Patented Hybrid SD-WAN

ZeroOutages incorporates **OnSite Intelligence™** within its solutions which allows BRP decisions to be made locally. This method reduces bandwidth usage and improves performance.



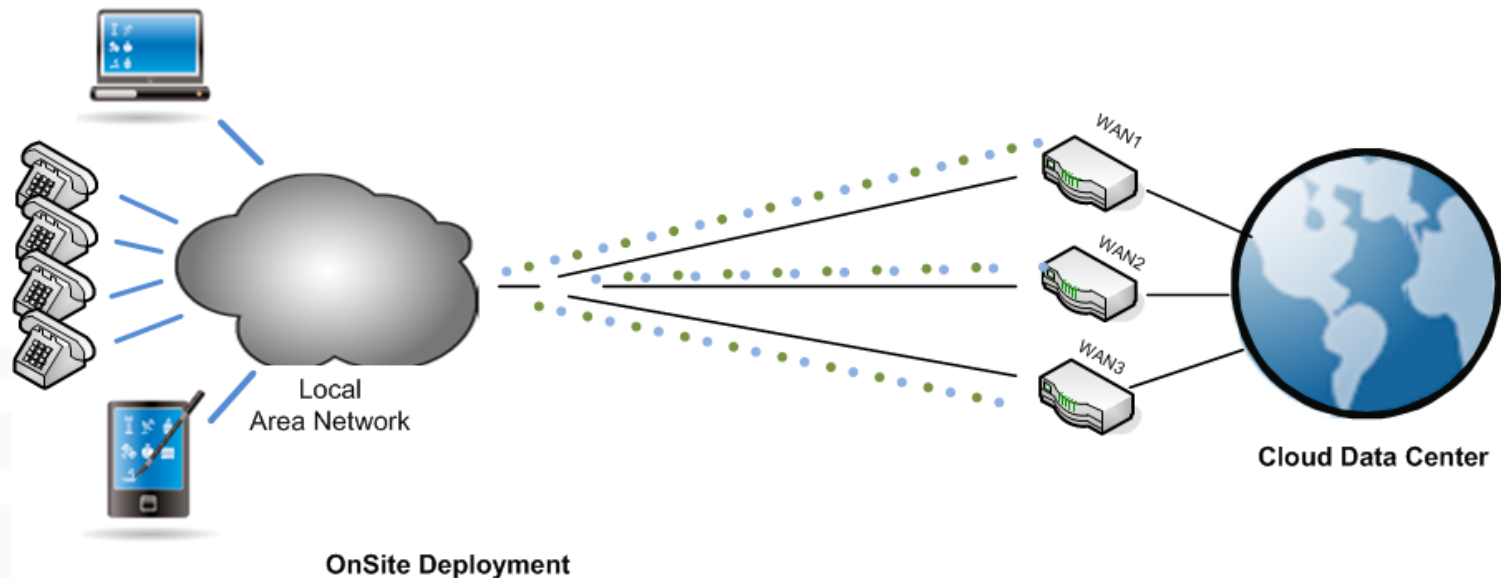
Backhauling

ZeroOutages makes intelligent routing decisions via the onsite appliance, and thus does not have to backhaul all of the customers data to a remote third party data center. Other solutions have to backhaul all of the customers data, which increases latency and slows down performance.



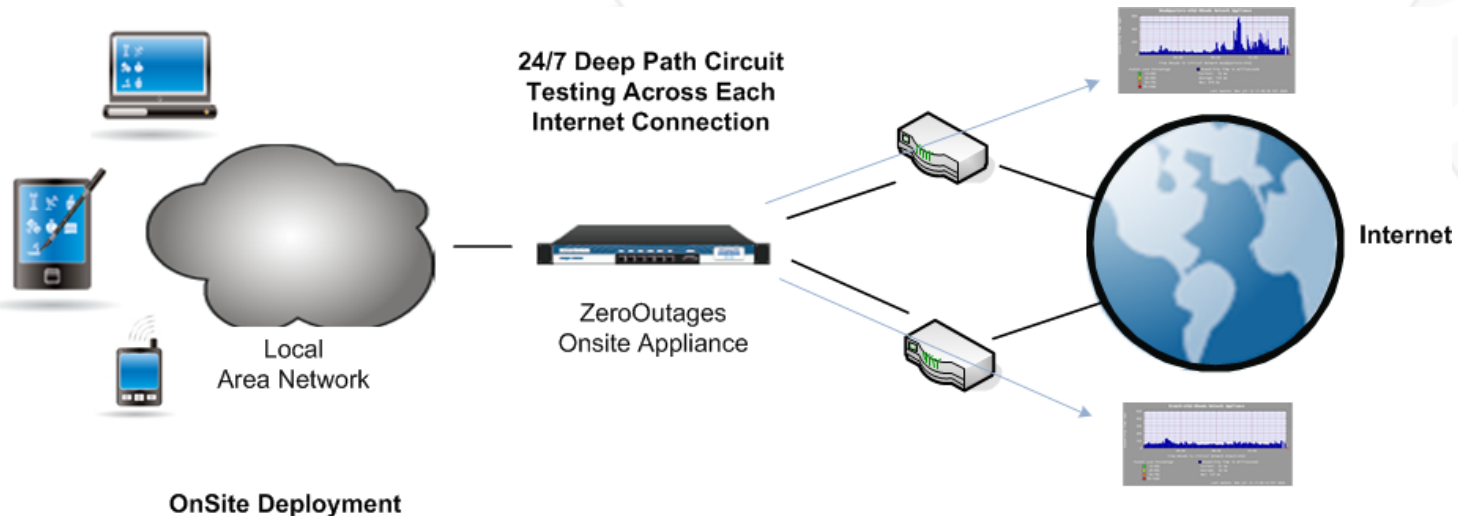
Data Duplication

Other SD-WAN solutions incorporate something called “data duplication” as their method for our patented Best Path Routing functionality. The problem with this process is that it fills up all of the connections with the same data and thus wastes bandwidth on duplicated packets.



Best Path Routing

Instead of duplicating data, ZeroOutages utilizes the intelligence built in to our onsite appliance to perform continuous Best Path Routing. What this means that we monitor session flows and network quality in real-time and dynamically route traffic based on the performance of each network connection.



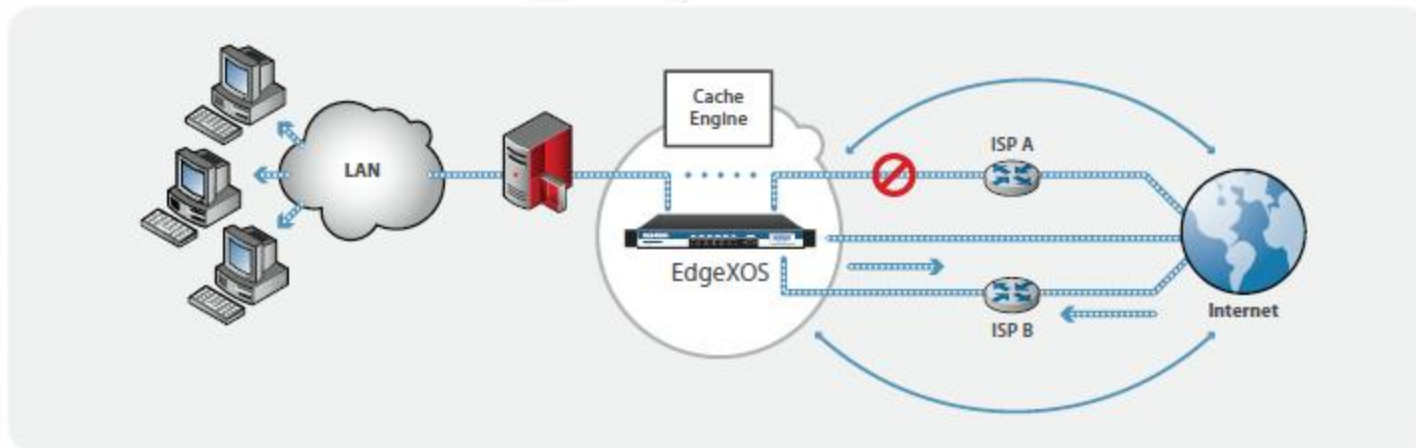
Trusted by Fortune 500 Companies

ZeroOutages has been deployed across a wide array of business and network environments, for both Fortune 500 as well as small to medium sized organizations with over 3000 deployments.



OnSite Intelligence™

ZeroOutages incorporates intelligent WAN routing in to its onsite appliances, which means that our solutions can aggregate network connectivity directly through each Internet link as well as within tunnels between offices or to remote data centers.

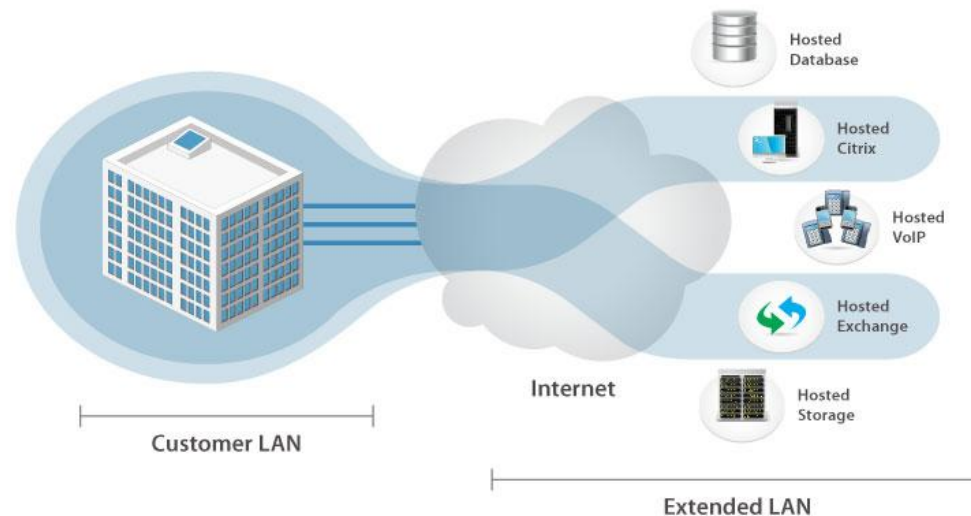


Combine tunnels across many links, DSL, Cable, Wireless, T1, Metro Ethernet, etc.

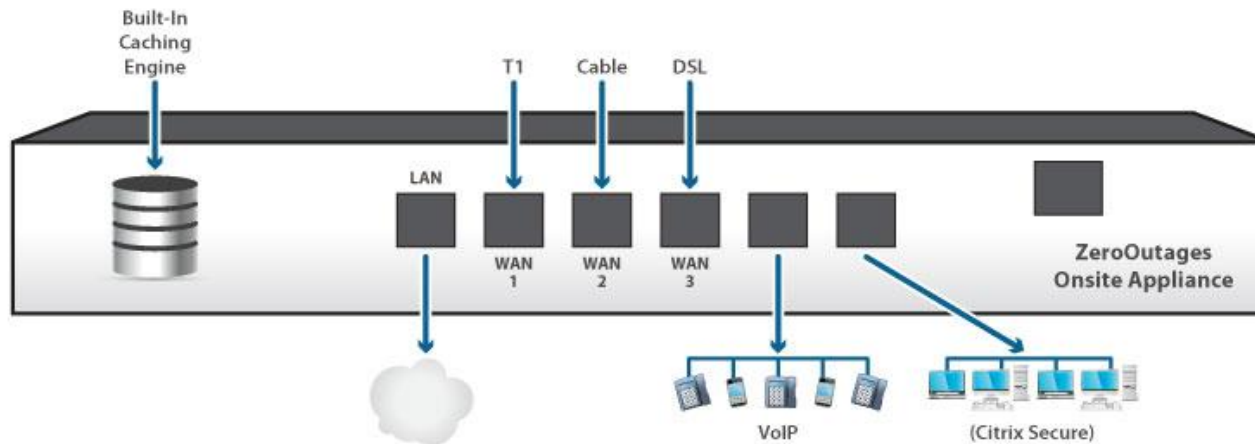
Office to Data Center (ODC)



ZeroOutages has partnered with Amazon AWS and Microsoft Azure, along with other providers, to install our SD-WAN technology within their data centers in order to provide an extended LAN, which is secure and reliable, for our customers hosted services.



Onsite Appliance

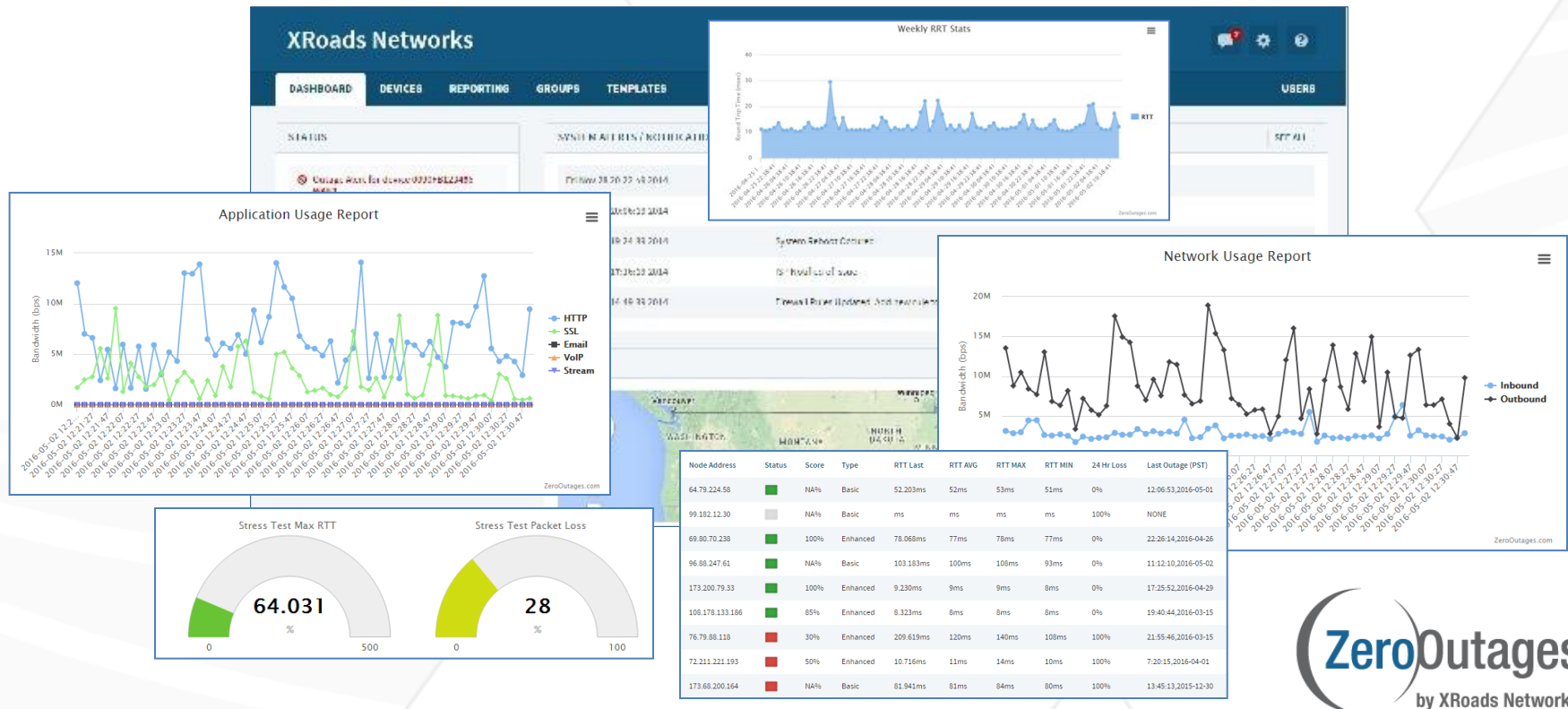


ZeroOutages onsite devices incorporate intelligent WAN routing functionality and is designed specifically for remote office redundancy.

The features offered via the ZeroOutages appliance include: Site2Site Tunneling, Dynamic QoS /Traffic Shaping, Deep Path Inspection, Instant Internet Failover, Internet Bonding, Internet Caching, Best Path Routing, Real-Time Network Reporting, and Secure WAN Firewall.

ZeroOutages Portal

ZeroOutages offers a web-based portal, accessible from anywhere in the world using desktop, mobile device and/or smart phone. Our portal includes more detailed network reporting than found in any other solution.





Contact your ZeroOutages representative or
visit our website
<http://www.zerooutages.com>
for more information or to begin an evaluation.