

THE INTERNET REDUNDANCY SPECIALISTS  
**ACTIVE/FAILOVER**



»»» Patented Link Bonding



ZEROOUTAGES' PROVIDES FASTER AND MORE RESPONSIVE INTERNET ACCESS ALONG WITH BUILT-IN AND AUTOMATED NETWORK FAILOVER IN THE EVENT OF AN ISP OUTAGE. BEST OF ALL, WHEN AN ISSUE DOES HAPPEN, WE CONTACT THE ISP FOR YOU.

**ZeroOutages Link Bonding**

The following is an overview of how the ZeroOutages session-based link bonding functionality works.

**Faster Cloud Connectivity:**

1. Combines the speed of each ISP connection
2. Faster downloads and more responsive cloud applications.
3. Automated failover, session persistence
4. No data loss due to link outage
5. Acceleration of http/https access

**Bonding vs Best Path Routing:**

- Bonding splits sessions across each WAN link and adjusts performance based on response times.
- Bonding of large software downloads and cloud-based applications that utilize http or https protocols.
- Bonding of Microsoft 365, Box, Salesforce, NetSuite, Google Apps and much more.
- Best Path Routing dynamically selects the optimal route for each session.
- Best Path Routing for VoIP, VPN, and other non-web services.

**Data Center Components:**

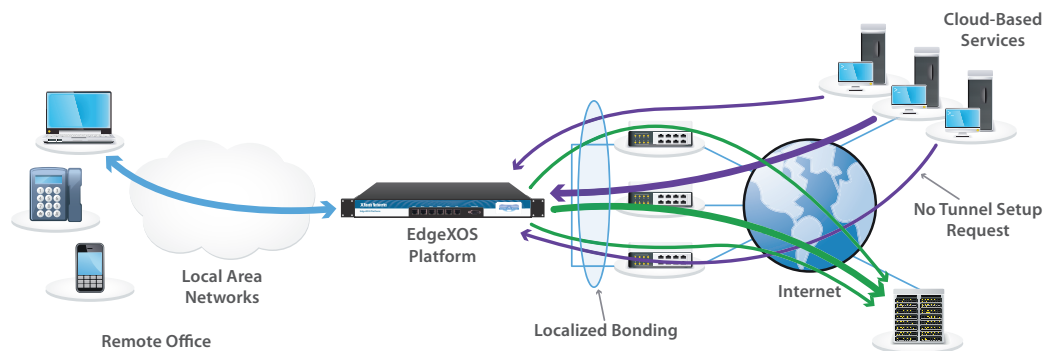
- SSL bonding relies on coordination with ZOOM acceleration service.
- No tunnel overhead required.
- No added bi-directional latency.

**FASTER, MORE RELIABLE INTERNET CONNECTIVITY**

During normal operating conditions ZeroOutages improves Internet performance for customers that would like to optimize their network connectivity. Performance is improved through session-based bonding which fully utilizes the bandwidth of each active link. Best Path Routing ensures that VoIP and non-http/https traffic always takes the most preferred route. The preferred route is determined based on metric testing to each remote application server.

In the event of a network failure ZeroOutages will instantly and automatically re-route traffic so that end-users are unaware of the outage event. The ZeroOutages solution constantly monitors each WAN connection through a variety of deep path inspection ping tests. When an outage is detected each authorized contact is alerted via email and a ticket is automatically opened via our support portal.

Mission critical applications like VoIP, Citrix, RDP and others are assigned QoS priority and our dynamic shaping functionality will automatically assign guaranteed bandwidth for these applications during periods of high network utilization.



**Simple Installation & Deployment**

ZeroOutages makes it easy to deploy new sites. Our customers simply login to our ZOOM portal, enter the IP address information for their network and ZeroOutages ships the pre-configured appliance to the site. The on-site personnel simply connect the appliance to the existing firewall device and the secondary Internet link. ZeroOutages support staff provides full step-by-step instructions for plugging the appliance in to the network. Deployments typically take less than 15 minutes.

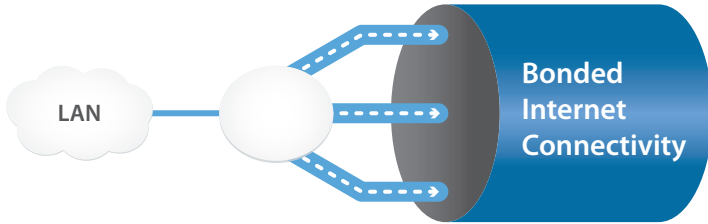
**Continuous Monitoring & Management**

Each ZeroOutages deployment is constantly monitored via our ZOOM support system. Customers are given their own login to the ZOOM portal and can check the status of their various deployments any time day or night. ZeroOutages 24-hour staff monitors ZOOM via our network operations center. If a network outage occurs the ZOOM system will automatically send out WAN alerts and opens a ticket with the affected Internet service provider.

**Fast Reaction to Network Issues**

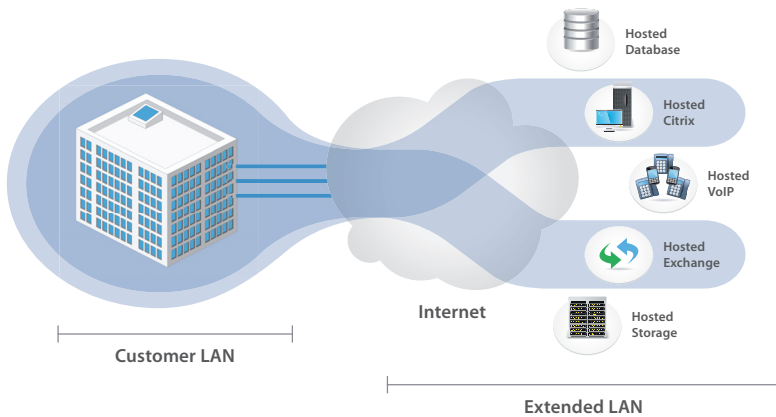
The ZeroOutages service will instantly and automatically notify the service provider in the event of a network outage. Our customers never need to call their ISP unless they wish to escalate the issue. With regards to any hardware failure ZeroOutages provides overnight service replacement with a quick hardware swap. Customers also have the option of adding a complete HA configuration for built-in hardware failover. No other network redundancy solution provides this level of service with all of these features.

ZEROOUTAGES PROVIDES THE FOLLOWING ADD-ON SERVICES TO ENHANCE OUR CUSTOMERS EXPERIENCE. CUSTOMERS CAN CHOOSE TO ACCELERATE THEIR CLOUD-SERVICES, ENSURE AUTOMATED FAILOVER FOR HOSTED VOIP, AND IMPROVE CONNECTIVITY TO INTERNAL SERVER RESOURCES.



**ACTIVE/FAILOVER SSL BONDING (optional)**

ZeroOutages SSL acceleration speeds up both web and cloud-enabled services like YouTube, Microsoft 365, Box, Salesforce, NetSuite, Google Apps, and much more. If your organization is looking to implement cloud-based services or has deployed Amazon AWS or Microsoft Azure solutions then our SSL acceleration add-on service is highly recommended.

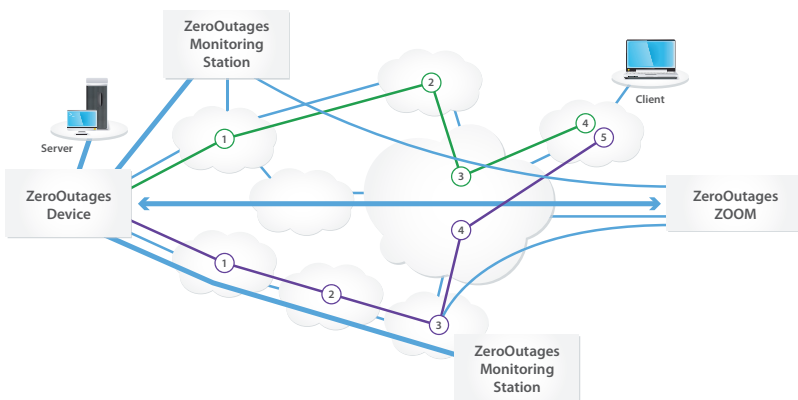


**VoIP FAILOVER (optional)**

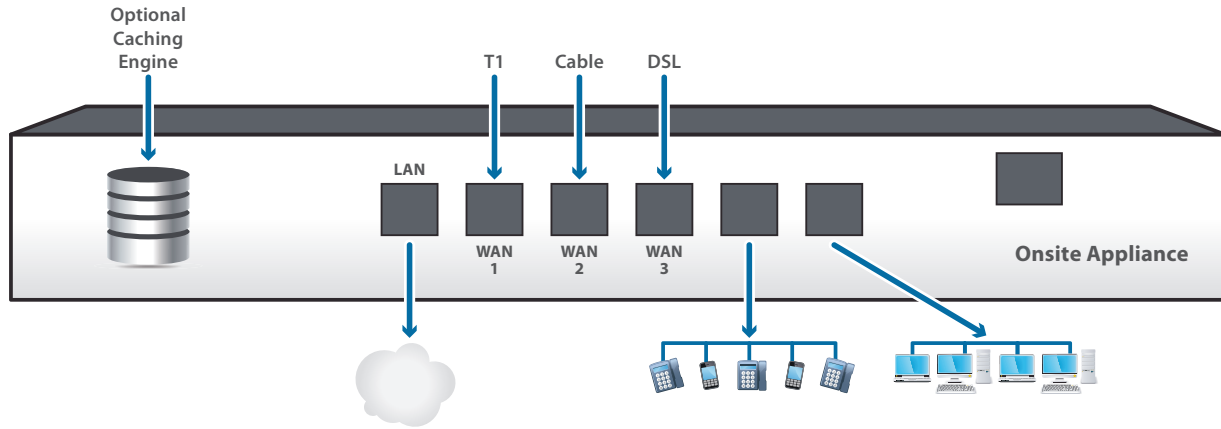
Voice over the Internet has quickly become the standard for business communications. Most of these deployments are hosted, i.e. a third party manages and maintains the VoIP server equipment while the phones reside at the customers location. In the event of a network outage, ZeroOutages ensures that VoIP traffic will automatically failover via the secondary Internet link and that the address from which the phones initiate the calls remains the same.

**INBOUND DNS LOAD BALANCING (optional)**

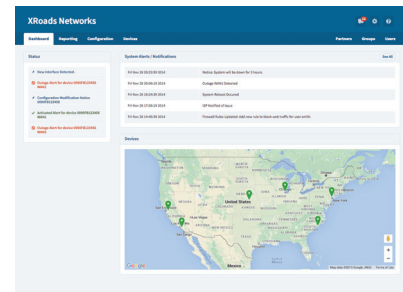
Some of our customers have internally hosted servers, or servers deployed at various geographic locations. Our server load balancing service allows traffic to be re-directed between two or more Internet connections to improve performance and/or to provide automated redundancy in the event of a network or site outage.



ZEROOUTAGES ELIMINATES THE NEED TO EVER WORRY ABOUT AN INTERNET OUTAGE AGAIN.  
WITH ZEROOUTAGES OUR SUPPORT TEAM MONITORS YOUR NETWORK 24/7  
AND AUTOMATICALLY NOTIFIES YOUR SERVICE PROVIDER IN THE EVENT OF AN OUTAGE.



ZeroOutages ZOOM portal enables our customers to monitor their own onsite devices, see how bandwidth is being used and view graphical reports on round-trip time, latency, and packet loss to defined critical URLs and popular Internet sites like Google, and Microsoft. The ZOOM portal also allows customers to submit change requests and open tickets with our support staff 24/7.



## SPECIFICATIONS

### ZeroOutages OnSite Device & Service Inclusions

#### SERVICE FEATURES

- ISP Monitoring System
- Localized HTTP/HTTPS Link Bonding
- Best Path Routing Functionality
- ZOOM Portal Integration
- Dynamic Shaping & QoS

#### ONSITE DEVICE SPECS

- 4 x 1Gb Ethernet Interfaces
- Multi-Core Route Processor
- CE / FCC / UL Certification
- 1U or Desktop Design
- RJ45 Console Port

#### ONSITE DEVICE SECURITY

- Packet Level Firewall
- Tested PCI Compliance
- SNMP/Syslog Monitoring
- Integrated IDS/IPS
- Built-In DoS Protection

#### OPTIONAL FEATURES

- SSL Cloud Acceleration
- Single Address VoIP Failover
- Inbound Load Balancing
- Integrated Network Caching
- Customizable XML API

#### BONDED APPLICATIONS

- Web (http) Connectivity
- Large File Downloads
- Video (https) Streaming
- Cloud Applications (SSL)
- Microsoft 365, Box, Google Apps

#### BEST PATH ROUTING APPS

- Hosted VoIP Applications
- IPSec VPN Connections
- Remote Desktop Protocol (RDP)
- Directed Database Access
- Non-(http/https) Protocols