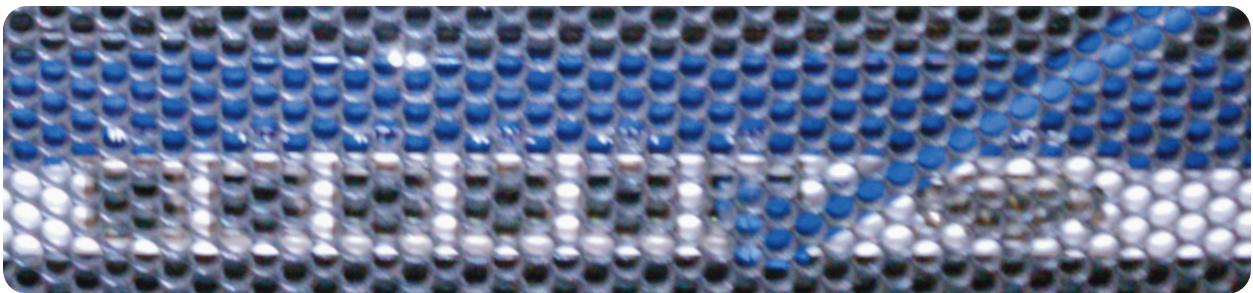


# **XRoads Networks**

**PRODUCT BROCHURE**



# XRoads Networks

XRoads Networks is the developer of Unified Bandwidth Management appliances which accelerate and ensure reliable application delivery. UBM solutions are designed to improve network control and provide the ability to manage bandwidth so that critical applications take precedence over other applications. As “cloud” computing has grown UBM naturally fits at the edge of customers’ networks to ensure that critical applications get the bandwidth and reliability that they need.

Founded in 2001, XRoads Networks is a private company located in Irvine, California. Our products are integrated into large Fortune 500 companies, as well as thousands of small to mid-sized organizations, educational facilities and government organizations around the world.

## Our Value

- ✖ Improved Productivity through Optimized Application Delivery
- ✖ Reduced Effective Costs of WAN Connectivity through MultiWAN Capabilities
- ✖ Improved ROI by Ensuring Five Nines (99.999%) Uptime Guarantee for Applications

## Our Channel

XRoads Networks has deployed thousands of bandwidth management appliances in over 50 countries with hundreds of value added resellers representing our products and services. XRoads Networks has a global distribution channel covering the Americas, Asia, Europe, Africa and the Middle East.

## Our Verticals

- ✖ MultiTenant - The MultiWAN aspects of the EdgeXOS platform are perfectly suited for growing networks.
- ✖ Services / Retail Sector - The reliability capabilities of the EdgeXOS ensure connectivity.
- ✖ Institutional / Government-The dynamic bandwidth control provided by the EdgeXOS ensures lower mgmt costs.
- ✖ Ecommerce - Improving server access speeds through parallel link bonding and acceleration.
- ✖ Healthcare / Financial - Ensuring zero session loss through our ZeroOutages services.

**The XOS (XRoads Operating System)** is a modular network operating system that provides a highly stable and secure base from which our development team has created the UBM platform. Our unique technologies include MSA (Multi-Session Acceleration), DBM (Dynamic Bandwidth Management), and S2S (VPN Virtualization via Site2Site Tunneling). XRoads Networks has several applied patents in this area and continues to invest in development.

### UBM

The UBM product line appliances are full featured enterprise class solutions. They include all of the XOS modules and functionality, including MultiWAN application balancing, shaping, and optimization.

### aXcel

Designed for small to mid-sized organizations the aXcel product line is highly scalable and simple to deploy. Each aXcel appliance is specifically designed for the customers required functionality.

## Awards and Events

The following is a listing of various awards that we have obtained over the years, including an eight out of ten star rating by CRN magazine and four out of five stars from Network World magazine. XRoads Networks has been a proud event vendor to both the NFL and Augusta National, home of The Masters golf tournament.



*Eight out of Ten Stars  
"Recommended" status*



*4 out of 5 for performance,  
scalability, and ease of installation*



*XRoads has been deployed at  
top venues around the world.*



*Companies reduce website ROI*



*XRoads Delivers for the BIG GAME*



*XRoads Provides Secure  
Bandwidth Management Solutions*

## Customers

XRoads Networks has sold thousands of appliances to customers throughout the world, including a number of Fortune 500 companies serving many different verticals. We are proud to have companies like Microsoft, Marriott, Four Seasons, Cox Communications, and many others as our customers and continuing partners.



NFL



E Trade

Kaseya

Hilton

Four Seasons



Westin

PaciFiCare

reckner



**PaciFiCare\***

Meyn

Contessa

Starmark

Ameriprise Financial

Sooper Credit Union



King Street

Covad

Redwire Broadband

iPass



Schlumberger

Bentek Energy

Fluent Energy



USP

Iowa Wesleyan College

Spartsburg

**WESTERN PLACER  
UNIFIED SCHOOL DISTRICT**

Department of Justice (FBI)



Tamarc

Charles County Sheriff's Office

## XRoads Networks EdgeXOS Components

The EdgeXOS has a modular architecture which allows network administrators to determine which features of the XRoads Networks Operating System (XOS) they wish to employ. The UBM enterprise products offered by XRoads Networks are unique in that they are all-in-one unified bandwidth management solutions.



### **Web Bonding w/Acceleration**

A unique technology developed by XRoads Networks which actually bonds multiple links for use with a single session and optimizes the session to accelerate web downloads.



### **Dynamic Bandwidth Management**

Another unique technology which monitors network traffic in real-time and then shapes the traffic in order to prevent abusive users from slowing down critical applications.



### **VPN Virtualization**

Optimize applications between two or more sites across the Internet or private WAN links. Improve performance and reliability between sites with our unique VPN technology.



### **ActiveDNS Inbound Load Balancing**

A dynamic DNS service which is built-in to the EdgeXOS platform. Designed to provide both balancing and redundancy for server traffic across multiple links / DataCenters.



### **Active Network Redundancy**

Our deep path inspection (DPI) ensures accurate and immediate failover in the event of a network outage. Multiple testing options allow for flexible network testing and reporting.



### **Server Load Balancing**

Balance application traffic across multiple servers in order to increase performance and reliability for end-users. Includes session persistence and support for SSL applications.



### **MultiWAN Link Load Balancing**

Combine multiple ISP connections, including T1, cable, DSL , wireless and satellite in order to spread application traffic across the links in order to improve throughput and redundancy.



### **Real-Time Network Reporting**

Our XFlow reporting engine (XRE) incorporates real-time traffic capturing in order to show administrators exactly what is happening within their networks, in real-time.



### **Application QoS/Throttling**

Allows administrators to prioritize traffic based on application, protocol, URL, source address, destination address, subnet, or any combination thereof; twelve shaping levels available.



### **Stateful Cloud Firewall w/Cloud5ecure**

Built-in application layer firewall with comprehensive NAT control and an easy to use web-based rules database for creating simple or complex security policies.



### **MultiWAN Web Content Filtering**

A unique URL filtering solution which works across multiple ISP connections, thus providing both increased performance and (20) category-based web site blocking.



### **Comprehensive LAN Router**

The EdgeXOS appliance is a bridging/router which means that it can operate in a transparent mode while at the same time providing full routing and VLAN capabilities.

# XRoads Networks UBM Enterprise Platforms

**UNIFIED BANDWIDTH MANAGEMENT for the ENTERPRISE**



"With UBM appliances our customers achieve a significant increase in performance and reliability for their Internet connectivity."

*David Montierth, Vice President, Cox Business Services*

## Unified Bandwidth Management = Lower Costs / Increased Performance

### Key benefits

- ✗ Accelerated Internet connectivity
- ✗ Gain complete control over application traffic in order to handle today's changing business environment.
- ✗ Improve network redundancy and uptime
- ✗ Shape your applications and user data
- ✗ Throttle non-critical network usage, and make more efficient use of bandwidth.

Many large organizations have leveraged the power of the Internet to improve their processes and efficiency. The Internet provides a highly cost effective means for delivering information across vast distances and between numerous individuals within a fraction of a second. The downside of the Internet is that it is not always as reliable or as quick as end-users have come to expect in today's business world. In order to effectively compete, organizations must have an optimized network infrastructure with built-in and automated network redundancy.

The UBM product line by XRoads Networks includes all of the functionality necessary to deliver end-to-end network optimization and reliability. The very definition of UBM is that which combines various bandwidth management functions in to a single powerful network optimization platform.

The EdgeXOS (XRoads Operating System) combines unique capabilities into a single platform which is capable of being installed at various locations within the network to provide application shaping, application load balancing & redundancy, and application acceleration.

# XRoads Networks aXcel Appliances

## ACCELERATION, AVAILABILITY, REPORTING, SCALABILITY, SECURITY

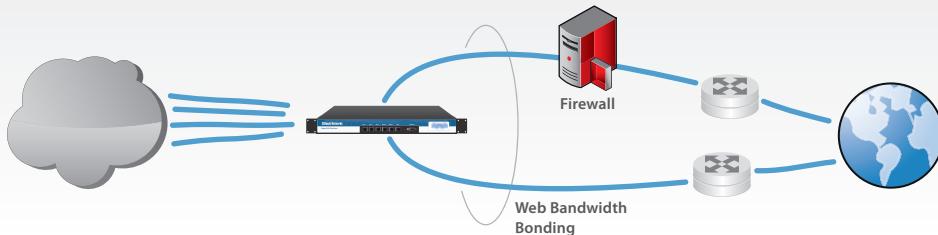
The “network” is playing an increasingly critical role in most organizations. XRoads Networks’ optimization appliances are designed to accelerate and ensure reliable connectivity in order to deliver the most efficient use of bandwidth resources.



### The ULTIMATE ISP Manager



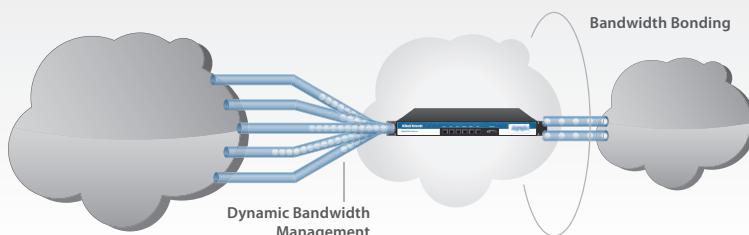
Improve network uptime and availability with the next generation in ISP bandwidth management. The LINKaXcel actually bonds, not balances web traffic across multiple WAN links utilizing our Broadbond technology. No additional equipment or services are required. The LINKaXcel includes our applied patent technology, ActiveDNS. ActiveDNS dynamically fails over email and other critical services to ensure uptime in the event of a network outage.



### The ULTIMATE Bandwidth Manager



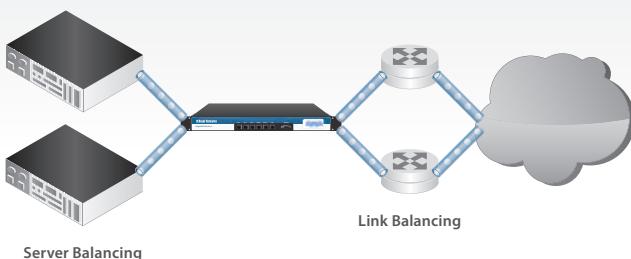
Dramatically improve web download speeds for end-users. Combine two or more broadband links to produce faster Internet connectivity with built-in scalability. No more network “slowness” complaints. Automatically guarantee throughput for critical applications and significantly reduce P2P traffic. Administrators can also create specific policies and bandwidth groups based on IP address, subnet, port, or protocol.



### The ULTIMATE Load Balancer



Increase server performance and reliability. Perfect for balancing Exchange and Outlook traffic for faster connectivity and automated failover. Works with Terminal Services and all web site servers and SSL applications. The EdgeOS platform is designed to provide seamless and automated Internet network redundancy in the event of an ISP outage without the need for complicated routing protocols like BGP (works with any type of broadband connection).



## XRoads Networks aXcel Appliances cont.

### aXcel Series Technical Specifications

#### SYSTEM FEATURES

- MultiCore Route Processor
- Industrial Grade Appliance
- Solid State Platform  
(no critical moving parts)
- LAN Bypass Architecture

#### USER INTERFACE

- Simple Web Management
- SSH Console Access
- SNMP / Syslog Monitoring
- Text-Based Configuration
- Custom XML API

#### SPECIFICATIONS

- Up to 300Mbps Sustained
- Up to 5 WAN Connections
- Up to 3 Year Warranty
- 99.999% Reliability w/HA

#### MULTI-WAN

- Link Bonding
- Web Download Acceleration
- Automated Redundancy
- DNS Balancing
- Best Path Routing

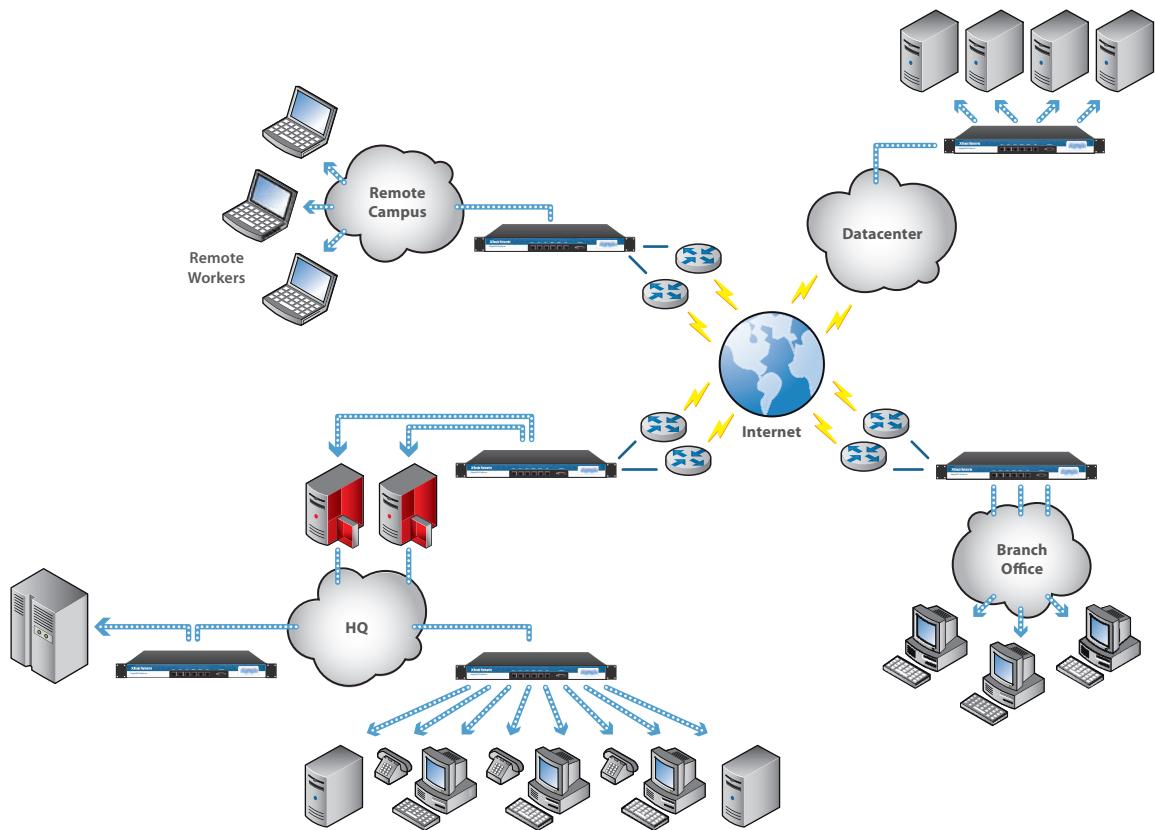
#### HARDWARE FEATURES

- 10/100/1000 Ethernet
- Size 17.45" x 11.5" x 1.73"
- 12lbs Shipping Weight
- Three Internal Fans
- ECC Memory

#### POWER REQUIREMENTS

- Single Full Range Power Supply
- 110W / 220W ATX
- Frequency 50 / 60 Hz
- AC Input Amps Max 2.0
- CE / FCC / UL / RoHS

### Deployment Options



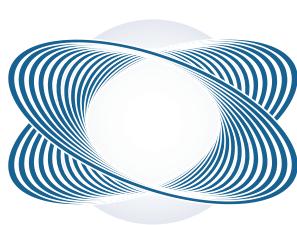
## XRoads Networks Core Technology

XRoads Networks is the inventor of Unified Bandwidth Management™. UBM was developed to optimize application delivery, manage network resources (in order to improve the end-user experience) and ensure network redundancy. The following are some of the key functions built-in to the EdgeXOS platforms:

<b>Web Bonding w/Acceleration</b> Bond multiple ISP connections	<b>Active Network Redundancy</b> Route failover and network monitoring	<b>Application QoS/Throttling</b> Policy-based application & user shaping
<b>Dynamic Bandwidth Management</b> Equalize bandwidth distribution	<b>Server Load Balancing</b> Application distribution and failover	<b>Stateful Cloud Firewall w/CloudSecure</b> Network security services
<b>VPN Virtualization</b> Enhanced VPN optimization	<b>MultiWAN Link Load Balancing</b> Advanced application routing	<b>MultiWAN Web Content Filtering</b> URL filtering and web management
<b>Active Inbound Load Balancing</b> Server link balancing w/redundancy	<b>Real-Time Network Reporting</b> Detailed application reporting	<b>Comprehensive LAN Router</b> VLANs, Bridging, SNAT/PAT, Bypass

### How we do it

XRoads Networks developed its XRoads Operating System (XOS) based on open standards and an open architecture. This architecture has been thoroughly tested against the PCI security model to ensure bulletproof reliability. The XOS includes both a web-based interface (no Java or external programs required), and an SSH CLI for network troubleshooting. The XOS also incorporates a unique SNMP engine which provides secure access to all reporting and configuration parameters which enables custom management applications.

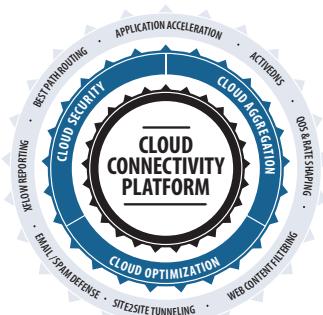


### Core Technology

At the core of the EdgeXOS platform is its ability to combine multiple ISP connections, MultiWAN. This capability means that application delivery can now occur in a scalable and fully redundant environment. Each XOS feature was developed with this core capability in mind, which is what makes the EdgeXOS platform far superior to any standard firewall or other network appliance which provides dual-WAN functionality as an add-on option.

### Reliable Platforms

The EdgeXOS platform utilizes hardware which has a MTBF (Mean Time Between Failure) of over five years. This means that the average EdgeXOS appliance can be installed and allowed to run continuously for over five years without a hiccup. Each hardware platform comes with built-in transparent bypass capabilities and our high-end units even come with dual-power supplies. The EdgeXOS platform is truly an enterprise class solution.



### What sets us apart

The EdgeXOS platform was built from the ground up by XRoads Networks development team. Each of the modules within the solution are unique to XRoads Networks and were purposely built to solve various application delivery problems. The EdgeXOS includes several unique applied patent technologies which are core to the appliance, including Vector Routing, Best Path Routing, ActiveDNS, Multi-Session Acceleration, Dynamic Bandwidth Management, and MultiWAN Optimization via our Site2Site technology. XRoads continues to develop new features and capabilities which all EdgeXOS customers can upgrade to in the future.

## XRoads Networks Customer Solutions

The EdgeXOS has a modular architecture which allows network administrators to determine which features of the XRoads Networks Operating System (XOS) they wish to employ. The UBM enterprise products offered by XRoads Networks are unique in that they are all-in-one unified bandwidth management solutions.

- ✗ Reliable Cloud Computing
- ✗ Web Bandwidth Bonding
- ✗ Network / Link Redundancy
- ✗ Server Load Balancing
- ✗ Traffic (P2P) Shaping
- ✗ Remote Access Server
- ✗ Multi-WAN Optimization

### STANDARD DEPLOYMENTS

#### **Reliable Cloud Computing - (Netsuite, SalesForce, Microsoft and other CRM/ERP Deployments)**

XRoads Networks' EdgeXOS platform has a unique AutoQoS function which prioritizes cloud-based applications for better performance and ensures automated failover in the event of a network outage.

#### **Web Bandwidth Bonding - (Multitenant and Hospitality Deployments)**

The EdgeXOS platform's bandwidth bonding combines multiple broadband links to significantly increase web-download speeds. Example: Combine a 3Mbps link with a 5Mbps to get 8Mbps.

#### **Network / Link Redundancy - (Financial and Health Care Deployments)**

Ensure automated network redundancy without the expense and difficulty in setting up BGP routing protocols. Automatically detect network outages to failover traffic to the remaining active link(s).

#### **Server Load Balancing - (E-Commerce and Data Center Deployments)**

Spread traffic across multiple servers and ensure automated failover using the EdgeXOS platform. Designed to work with Exchange/Outlook, Terminal Services, and other web and SSL based applications.

#### **Traffic (P2P) Shaping - (Educational and Retail Deployments)**

The EdgeXOS platform has unique dynamic bandwidth management technology which minimizes P2P traffic while prioritizing critical SSL and VoIP applications. Don't allow a few users slow down the network.

#### **Remote Access Server - (Teleworker Deployments)**

Enables IT departments to provide faster access and automated failover for remote workers by distributing VPN's across two or more broadband links using our simple to install Windows-based S2s client.

#### **VPN Virtualization - (Branch Office: Citrix, RDP, Microsoft File Server Deployments)**

Improve connectivity speeds and reliability between remote offices using VPN optimization. Improve the performance of Citrix, RDP, and Microsoft file transfers by up to 2100%, with built-in redundancy.

### PARTNER SOLUTIONS

#### **Accelerated Anti-Virus/Malware/Spyware Protection**

Delivering accelerated cloud-based security services, the EdgeXOS platform, in combination with our CloudSecure clients, provide the fastest available real-time intrusion protection services.

#### **Point-to-Point / MPLS Bonding and Failover**

As companies utilize MPLS and private WAN links for remote office connectivity a critical missing component in these deployments is network redundancy. The EdgeXOS ensures automated failover.

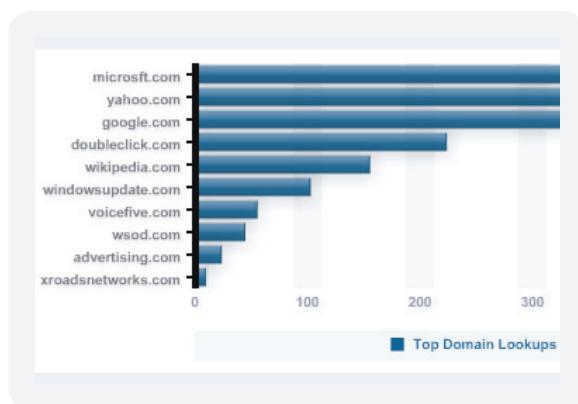
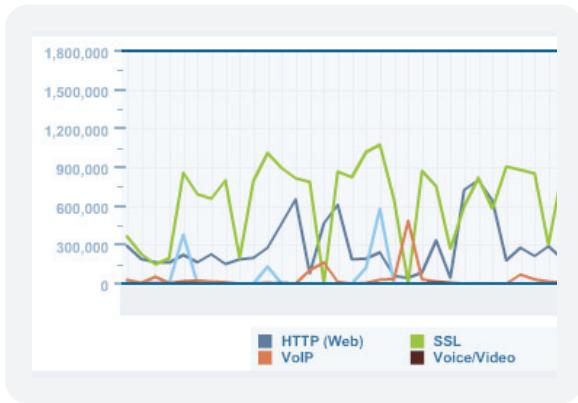


## XRoads Networks Real-Time Reporting

When looking to manage network resources it is critical to understand how the network is being utilized in order to optimize it. XRoads Networks' XFlow Reporting Engine was designed to do just that, with its built-in real-time packet analyzer and backend database, the reporting engine can collect, summarize, and display detailed network information.

### XFlow Reporting Engine (XRE)

- ✖ Collects and records traffic flows in real-time
- ✖ Analyzes and summarizes collected packet data
- ✖ Produces easy to read tables and 3D graphics



### How Real-Time Reporting Works

The XRE module actually captures the packet data which comes in to each of the active interfaces of the EdgeXOS platform. This packet data is then summarized and recorded to a backend database which is built-in to the EdgeXOS platform. Additional analysis of the data is then performed by various components of the XRE module. This analysis creates additional data which is used to generate various graphical displays of the data. Finally, the data is displayed to the network administrator via tabular and 3D graphical format.

### EdgeXOS Reporting Capabilities

The EdgeXOS platform includes a number of reporting capabilities. Some of these include the ability to report on the service level (packet loss, latency) for each connected ISP link, the ability to see how much traffic a specific user/server or application is using as compared with the rest of the network, the ability to see total bandwidth utilization and per application bandwidth utilization in real-time (updated every five seconds). When enabled, the XFlow packet collector can also determine which users and applications are using the most network bandwidth (and automatically throttle when combined with DBM).



## Dynamic Bandwidth Management (DBM)

XRoads Networks is the inventor of Dynamic Bandwidth Management™. DBM is the ability to automatically and dynamically throttle end-user application traffic in order to ensure fair distribution of bandwidth and guarantee bandwidth for mission critical applications like VoIP, Citrix, RDP, and other real-time applications.

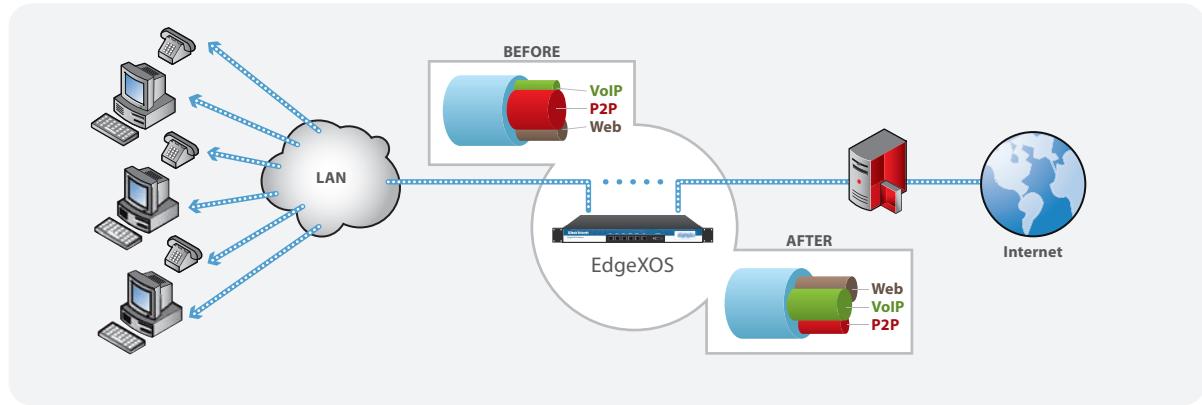


### Guarantee Bandwidth for Critical Applications

DBM allows network administrators to set pre-defined bandwidth levels to guarantee network resources for critical applications. This means that applications like VoIP will always have the bandwidth they need to complete calls without interruption or dropped packets. Additional prioritization can be assigned to these critical applications to ensure that they receive the fastest queuing even when the network is fully utilized.

### Automatically Throttle Abusive Traffic

DBM will automatically throttle end-user traffic which exceeds pre-defined levels and ensure that mission critical applications always get the bandwidth they need. While other "traffic shaping" solutions must identify every possible application in order to shape it, DBM instead identifies traffic based on session flows. This means that unlike other "traffic shaping" solutions, the EdgeXOS platform can automatically throttle ANY application as soon as it comes out.



*As demonstrated in this diagram, DBM works with our XRE (XFlow Reporting Engine) to collect packet data arriving on each of its interfaces and then determine whether each session flow traversing the EdgeXOS platform meets the pre-defined criteria, if it does not (like P2P in this example), it is throttled.*

### Optimized Application Delivery

The DBM module is able to effectively optimize the delivery of critical applications by ensuring that those applications receive the amount of bandwidth they need in order to provide end-users with real-time and responsive connectivity. Some of the applications DBM optimizes include:

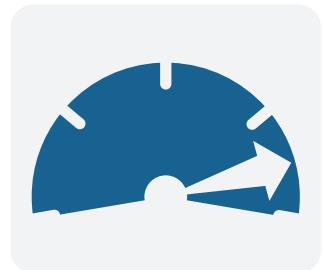


## Application Acceleration – Broadbond™

XRoads Networks is the inventor of Multi-Session Acceleration™. MSA is the ability to bond multiple ISP connections and cache response content in order to accelerate web-based connectivity. This ability to bond connectivity across multiple WAN links and remote servers and then cache responses is unique in the industry.

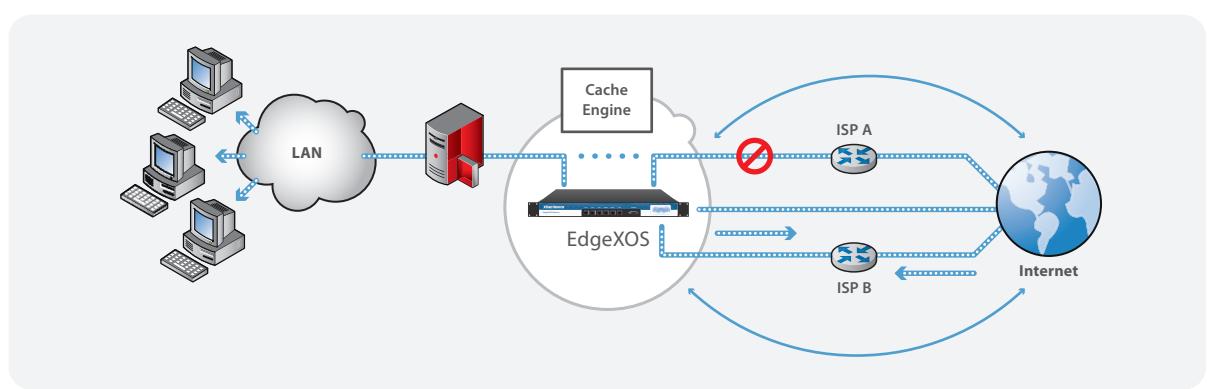
### Improving Application Performance

MSA is an application proxy which has built-in caching capabilities in order to increase network performance. These capabilities increase download speeds for commonly accessed websites or large data files. MSA's caching is built-in to the EdgeXOS platform (with larger systems having more caching memory). Optionally, customers can select solid state caching. What is unique about MSA is its ability to speed up first time access to files through link bonding.



### Increasing Available Bandwidth

MSA actually increases network download speeds for first time access to files by utilizing multiple ISP connections and remote servers at the same time. Unlike most other “link balancing” solutions which can only utilize one ISP link at a time for each session, the EdgeXOS platform can actually utilize multiple links at the same time for the same session. This effectively makes a 3Mbps and 5Mbps link in to an 8Mbps link.

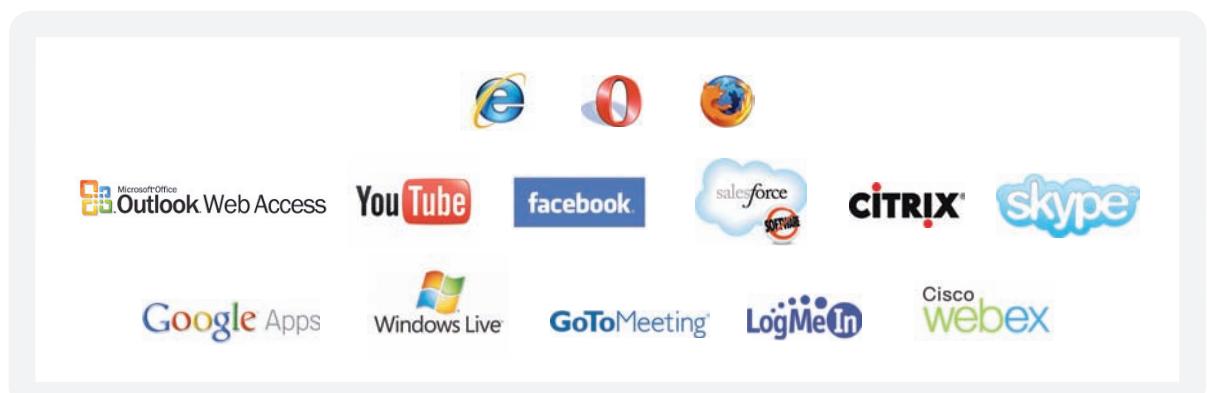


*The diagram above demonstrates how the combined features of the MSA module can accelerate network downloads while increasing available bandwidth through multiple ISP link bonding and acceleration.*

*Optionally, the MSA module can be combined with our CLOUDaXcel service to improve upload speeds.*

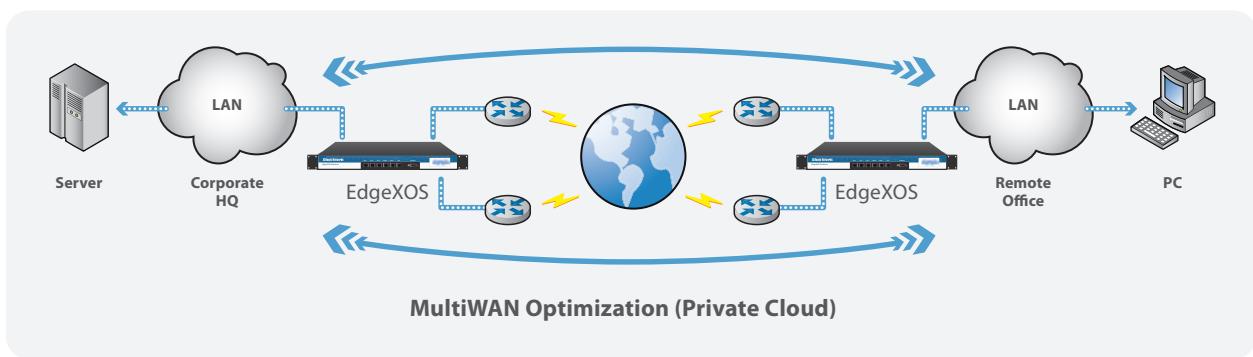
### Accelerated Applications

The MSA module is typically used to improve responsiveness for network administrators which are looking to speed up connectivity for their end-users and/or dramatically speed up web-based downloads and large data files. The following are typical applications that are accelerated by MSA:



## VPN Virtualization™ – Site2Site

XRoads Networks is the inventor of VPN Virtualization™. Utilizing our Site2Site technology, our ability to virtualize VPN connections through multi-WAN links is unique in that it can bond multiple secure VPN tunnels at the same time in order to increase total available bandwidth between sites in addition to providing built-in remote office redundancy.



### Virtualized VPN Tunnels

VPN Virtualization enables network administrators to combine multiple VPN tunnels across two or more WAN links in order to speed up communications between sites, reduce congestion, mitigate network delays, and improve redundancy and reliability of existing connectivity. VPN Virtualization includes integrated security features not found in other solutions on the market today. VPN Virtualization is designed to reduce cost through the use of inexpensive broadband connections, like DSL, cable, and wireless, for transferring data between sites. VPN Virtualization can also be used in conjunction with MPLS by offloading streaming applications like VoIP across a separate non-parallel and unbound network path. This functionality enables the best of both connection methods while reducing costs and improving performance which increases productivity.

### Optimize Branch Office / Remote Office Application Delivery

Organizations with branch offices are constantly looking for more effective methods for providing remote users with access to centralized applications and network resources. XRoads Networks' Site2Site tunnels can be used to improve performance between two or more sites by leveraging multiple WAN links in order to cost effectively increase the available bandwidth between sites. Site2Site also provides the ability for customers to achieve 99.999% reliability through automated link failover, something other optimization solutions don't offer.



### Improved Responsiveness (Caching & QoS)

The Site2Site tunnel module includes built-in application caching and works with our DBM module to provide end-to-end QoS for mission critical applications. The caching module speeds up file transfers and improves the performance of large downloads by compressing data in real-time as it is sent over the Site2Site tunnel, then the data is decompressed on the remote end. Additionally, our Site2Site tunnels automatically adjust TCP windowing in order to improve performance across slower and/or high latency links.

### Automated MPLS / Branch Office Redundancy

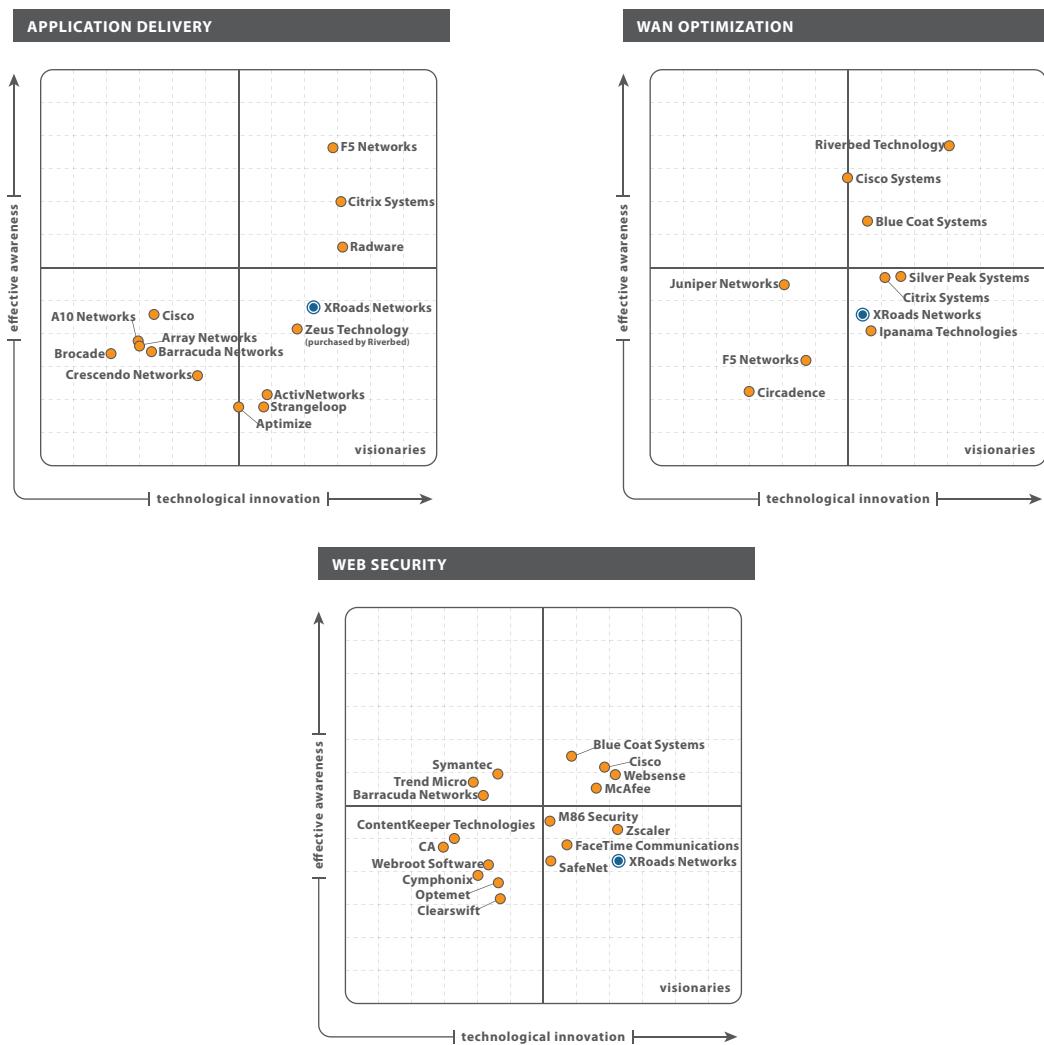
Many organizations have moved to an MPLS infrastructure for their wide-area network deployments. MPLS is expensive but provides exceptional network connectivity with built-in QoS, however it lacks redundancy at the edge. If an outage occurs at either end of the MPLS circuit, then potentially all of the remote sites could be down. XRoads Networks' Site2Site solutions enable our customers to setup a secure and inexpensive Internet-based redundancy solution to ensure automated failover in the event of an MPLS outage.



# XRoads Networks Competitive Overview

XRoads Networks' Unified Bandwidth Management platform includes three core components developed around our bandwidth management functionality. These core components include: Multi Session Acceleration (WAN bonding with Web-Acceleration), Dynamic Bandwidth Management (automated traffic prioritization), and VPN Virtualization (branch office application acceleration). When combined, these capabilities help our customers improve productivity, reliability and reduce their bandwidth costs.

**The following charts demonstrates XRoads Networks placement among its competitors.**



**Enterprise Solutions:** Enterprise customers are looking for reliable performance. XRoads Networks' UBM appliances were designed specifically to deliver high throughput rates and high availability. The UBM appliances provide a complete suite of tools which can be used by enterprise customers to optimize application connectivity and network redundancy. Our affordable pricing model ensures the best ROI in the industry.

**Small Business Solutions:** There are a number of solutions on the market for small businesses, including a number of firewall appliances which have included basic traffic shaping and dual-WAN features which provide some limited capabilities but often do not provide effective solutions. In response to customer feedback XRoads Networks developed its aXcel product line which are the leading price v. performance solutions on the market.

# XRoads Networks ROI Document

## RETURN ON INVESTMENT & COMPETITIVE ANALYSIS

XRoads Networks delivers tremendous value to its customers, this is demonstrated through our calculated return on investment. ROI is a ratio of financial return to investment. It is the fundamental basis for comparing the relative performance and attractiveness of corporate investments and determining whether or not a project meets the benchmark for financial performance.

When deploying an EdgeXOS appliance, customers on average generated an annualized after tax rates of return of 80% with paybacks occurring in significantly less than two years. XRoads Networks offers an application delivery optimization solution that reduces telecommunication expenses significantly while improving reliability and simplifying network management with minimum effort and capital.

### **Scenario #1 - Reducing P2P & Abusive Network Traffic**

- ✖ Obtain more bandwidth from existing resources by reducing unwanted network usage
- ✖ Option #1: Upgrade the existing WAN link for another \$400/mo. Option #2: Purchase EdgeXOS solution (estimated at \$3500) to perform dynamic bandwidth management in order to prioritize bandwidth.
- ✖ Option #1 costs an additional \$4800/yr and simply enables existing abusers of bandwidth to gain access to even more bandwidth, the problem remains. Option #2 is a one-time cost and ensures that abusive users are throttled down in order to guarantee bandwidth for critical applications, which saves over \$10,000 in just 3/years.

### **Scenario #2 - Improving Performance without the Forklift Upgrade**

- ✖ Additional bandwidth and redundancy to customers existing T1 connection (3/yr contract)
  - ✖ Option #1: Add a second bonded T1 link for another \$400/mo. Option #2: Purchase EdgeXOS solution (estimated at \$3500 plus two additional broadband links at \$100/mo. each).
  - ✖ Option #1 costs \$9600 and provides 3Mbps of throughput. Option #2 costs \$8800 and provides over 10Mbps of additional bandwidth and greater reliability as traffic has three unique paths in the event of a failure.
- The XRoads Networks option saves several thousand dollars and produces the fastest return on investment.

### **Scenario #3 - Ensuring 99.999% Uptime for Remote Offices**

- ✖ MPLS vs Site2Site VPN Virtualization Across 10 Sites (3/yr contract)
- ✖ Option #1: Adding 1.0Mbps MPLS would cost \$600 per month per site with routing equipment.  
Option #2: Adding dual-3.0Mbps broadband would cost \$300 per month per site, plus \$3500 for EdgeXOS.
- ✖ Option #1 costs \$216,000 and provides 1.0Mbps per site with no redundancy. Option #2 costs \$138,000 and provides 3.0Mbps per sit with built-in automated redundancy. At a savings of nearly \$75,000 the EdgeXOS delivers additional bandwidth and redundancy, MPLS simply cannot compete.

In both scenarios the EdgeXOS platform delivered a significant return on investment with the average return on investment occurring within 12 months (this does not account for productivity gains or potential outage costs).

**Productivity Gains & Outage Costs:** The ROI models above do not take into account the significant savings obtained through both productivity gains through faster application delivery, nor does it account for the large savings obtained from any potential network outage which can cost a business thousands of dollars per hour in lost sales and productivity costs.

**Return On Investment vs Competitive Products:** The XRoads Networks solution stands up well to competitors like **F5, Radware, and Riverbed**. These other solutions also look to optimize application delivery for customers however unlike these competitive solutions the EdgeXOS platform provides several unique capabilities which are specific to our focus on MultiWAN functionality. By advocating and leveraging multiple WAN connection options the EdgeXOS platform is better able to take advantage of scalability and redundancy inherent in such solutions thereby delivering a more cost effective alternative for customers.