

VIRTUAL ACCELERATOR



SIX REASONS TO SAY “YES” TO EXPAND

1. Comprehensive

Whether the WAN is used to connect file servers, email or business applications, Expand delivers a comprehensive approach to application and protocol acceleration.

2. Proven, Measurable Impact

Expand solutions consistently deliver bandwidth increases of 100% and 400% (with peaks over 1,000%).

3. Application-centric

Traditional optimization solutions are about the network — the Expand solution is about what really matters: the applications.

4. Transparent Operations

Expand’s solution optimizes traffic transparently without tunneling, simplifying integration into your networking infrastructure while also preserving investments in other systems.

5. All IP

Many WAN Optimization solutions narrowly focus on only a portion of TCP-based traffic. Expand optimizes non-TCP traffic (UDP, etc.), as well as difficult interactive applications such as Citrix and Terminal Services.

6. Microsoft Compliance

The Expand solution is part of the Microsoft Domain so it can strictly maintain all user and document security and controls while optimizing performance

Today’s virtualized IT environments present the largest and most complex challenges to WAN optimization and application acceleration today. While delivering required optimization, appliance based solutions require additional hardware, management, and support. Expand’s industry leading WAN Acceleration technology is now delivered on a fully virtualized offering enabling you to join in with Datacenter and Branch Office virtual infrastructure plans.

Expand Networks’ WAN Acceleration technology, recognized as the industry’s best at accelerating and ensuring wide-area network traffic performance, demonstrates a true understanding of the future IT environment by integrating their appliance software into the virtualized architectures of the future. Expand has risen to meet these new initiatives with future-focused technology that both integrates with and enables these environments.

Productivity and Performance

All Expand solutions are designed with productivity, cost reduction and simplicity in mind. For end users, productivity increases as application performance reliably improves.

By providing a simple and integrated solution, Expand enables IT to more efficiently manage the application infrastructure—reducing servers and other appliances while delivering a holistic network view.

Transparent Operations

Many WAN Optimization solutions tunnel between appliances, obfuscating information needed by monitoring solutions (e.g., NetFlow) or security implementations such as firewalls and ACLs. Expand optimizes traffic transparently without tunneling.

The Expand solution works with HSRP/ VRRP and WCCP and maintains original protocol headers (IP, TCP, UDP, etc.), preserving investments in other systems relying on the accuracy of these headers.

All IP traffic

Many WAN Optimization solutions are focused on a portion of TCP-based traffic. Expand’s IP optimization engine not only optimizes non-TCP (UDP, etc.) traffic, but will also optimize the difficult interactive applications based on TCP such as Citrix, Terminal Services or RDP and Telnet.

THE EXPAND VIRTUAL ACCELERATOR ACCELERATOR DELIVERS:

- Instant and easy global deployment of WAN optimization
- Fits virtual infrastructure plans
- Shared hardware paradigm
- Runs on any server hardware
- Leverage existing hardware vendors and SLA’s
- Thin-Provision hardware resources by necessity
- Contributes to greener IT, low carbon footprint, high density computing
- Delivers full-featured Expand suite
- Interoperable with all Expand devices
- Optimizes all IP traffic types
- Centralized monitoring and management
- Integrates into VMware management and provisioning
- Supports VMware toolsets
- Leverages shared storage

Microsoft Compliance

The Expand solution is part of the Microsoft Domain, maintaining all user and document security and controls while optimizing performance. Expand is fully compliant with Microsoft's SMB-signing protocol and also provides printing, DHCP and WAN-out services.

Holistic WAN Optimization

Through its comprehensive approach, Expand delivers a holistic platform of integrated services—WAN Optimization, Acceleration, Management & Visibility, and Security—addressing WAN performance issues while also aligning with your key business drivers.

EXPAND NETWORKS — COMPREHENSIVE SOLUTIONS FOR WAN OPTIMIZATION

QUALITY OF SERVICE (QOS): Control of network bandwidth, filtering, shaping and marking	
<ul style="list-style-type: none"> Automatic Layer-7 application discovery Both inbound and outbound traffic Packet fragmentation (assures VoIP/video latency budget) End-to-end application performance monitoring Transparent to existing QoS infrastructure 	<ul style="list-style-type: none"> Priority treatment for critical applications Guarantee bandwidth for business sensitive applications Restrict rogue and greedy applications Seamless integration with compression and byte level caching Integration with MPLS network
ACCELERATION: Powerful acceleration solutions for both protocols and applications	
<ul style="list-style-type: none"> TCP acceleration (based on SCPS Standard) Citrix / ICA acceleration RDP acceleration VDI acceleration 	<ul style="list-style-type: none"> HTTP acceleration FTP acceleration DNS acceleration Telnet/TN3270 acceleration
VISIBILITY & MANAGEMENT: Comprehensive monitoring and graphical reporting	
<ul style="list-style-type: none"> Centralized management through ExpandView Automatic traffic discovery Historical and real-time reports for applications and links (throughput, performance, acceleration) Secure management with HTTPS, SSH, SNMP 	<ul style="list-style-type: none"> Integrates with existing user authentication and administration systems (RADIUS and TACACS+) Full NetFlow compliance Out-of-band management HSRP/VRRP failover
WAFS: Full-scale acceleration for WAFS and CIFS-based applications	
<ul style="list-style-type: none"> CIFS optimization Faster file transfers SMB-signing (full Microsoft compliance) 	<ul style="list-style-type: none"> Virtual-Server (DNS, DHCP, and print services) Addresses 'WAN-outs' in case of network outage
COMPRESSION & CACHING: Compression algorithms that are dynamic and self learning; caching in memory / hard drive	
<ul style="list-style-type: none"> Byte-level caching Packet header reduction Dynamic bandwidth adjustment 	<ul style="list-style-type: none"> Adaptive packet compression Network transparent RTM (Router Transparency Mode) Dynamic routing (OSPF, RIP, RIP v2)
SECURITY: Robust security and data protection for enterprises	
<ul style="list-style-type: none"> IPSec (AES-128, AES-192, AES-256 or 3DES algorithms) 	<ul style="list-style-type: none"> Authentication, authorization, and accounting (AAA)
ENVIRONMENTS SUPPORTED:	HYPERVISOR FEATURES SUPPORTED:
<ul style="list-style-type: none"> VMware Server 2.x, ESX 3.x, ESXi, VMware Workstation 	<ul style="list-style-type: none"> VMware Vcenter, VMware High Availability, VMware Vmotion and VMware DRS
STORAGE SUPPORTED:	
<ul style="list-style-type: none"> Direct Attached Storage (DAS), Network Attached Storage (NAS), Storage Area Networks (SAN), iSCSI 	

HARDWARE SPECIFICATIONS: Contact Expand Networks for assistance sizing the Virtual WAN Accelerator environments based on your specific network requirements on +1 888 892 1250.