

EXPAND VWAN VIRTUAL WAN ACCELERATION APPLIANCE

EXPAND VWAN

- Eliminates need for hardware appliance
- Delivers full Expand suite
- Integrates and accelerates VDI
- Lowers TCO and increases ROI
- Greener IT, ease of management, faster deployment

ENVIRONMENTS

- VMware Server 2.x
- ESX 3.x
- ESXi
- VMware Workstation

HYPERVISOR FEATURES

- VMware Virtual Center
- Vmotion
- VMware consolidated backup and snapshots

HARDWARE SPECIFICATIONS:

Contact Expand Networks for assistance sizing the Virtual WAN Accelerator environments based on your specific network requirements.

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www.expand.com/virtualization

Expand Networks is proud to announce the Virtual WAN Accelerator. Expand's industry leading WAN Acceleration technology is now delivered on a fully virtualized offering able to join in with Datacenter and Branch Office infrastructure plans.

Expand Networks' Wan Acceleration technology, recognized as the industry's best at accelerating and ensuring interactive and real-time traffic performance (Citrix, Terminal Services, VDI, VoIP), now demonstrates a true understanding of the future IT environment by integrating their appliance software into the virtualized architectures of the future.

Virtual and thin deployments over the WAN suffer incompleteness due to the non-virtualized traditional technologies they require to perform up to expectations. Until today customers requiring Wide Area Network Acceleration, which is any using thin computing over a WAN, would have to break their infrastructure plans to support external hardware appliances distributed across their enterprise. Today, Expand rises to meet these new initiatives with future-focused technology that both integrates with and enables these environments.

Expand solutions lower the costs involved in rolling out server-based computing or virtualization strategies. They reduce the bandwidth needed and also maximize the use of resources in the datacenter. The result is an effective and efficient environment that meets end-user performance requirements and

expectations. With Expand's technology, user capacity is reliably extended and optimized on the existing infrastructure, stretching network and hardware investments. This translates into up to a 50% reduction in IT costs and TCO per user. Users are more productive because of the improved application performance, and most importantly, businesses finally realize the return on their investment with truly functional environments. All enabled by the Expand VWAN Accelerator.

Now customers can not only achieve the performance and cost savings they require out of their limited infrastructure investments, their acceleration technology can fit inside and integrate directly into their hardware consolidation, deployment and management infrastructures. Expand now joins and contributes to the green computing, low carbon footprint, and density aware datacenters of the future. The Expand VWAN solution fully integrates with industry's approaches of hardware investment and resource utilization by necessity, and it delivers the full power of and cross-compatibility to Expand's proven appliance and client based acceleration. Each Expand Accelerator deployment options can be managed from the same easy to use centralized management solution.

The Expand VWAN offering supports many of the industry's standard hypervisor deployments that deliver high availability, resource virtualization, rapid deployment, and management features used today. Simply

partition virtual hardware resources out of your virtualized server pool and launch the Expand VWAN package. The industry's best WAN accelerator will be integrated directly into your server management, storage/hardware virtualization, and enhanced ROI infrastructure.

For the first time, you can accelerate the delivery of desktops,

the streaming of applications, the user-based traffic, and any legacy traffic on your Wide Area Networks while leveraging your infrastructure investments in virtualization in the branch and in the data center. Expand understands not only the acceleration challenges in IT's future environments, but the way to integrate directly into those environments.

EXPAND NETWORKS — COMPREHENSIVE SOLUTIONS FOR WAN OPTIMIZATION

QUALITY OF SERVICE (QOS): Control of network bandwidth, filtering, shaping and marking

- 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
- 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

- TCP acceleration (based on SCPS Standard)
- Citrix / ICA acceleration
- RDP acceleration
- VDI acceleration
- HTTP acceleration
- FTP acceleration
- DNS acceleration
- Telnet/TN3270 acceleration

VISIBILITY & MANAGEMENT: Comprehensive monitoring and graphical reporting

- 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
- 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

- CIFS optimization
- Faster file transfers
- SMB-signing (full Microsoft compliance)
- 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

- Byte-level caching
- Packet header reduction
- Dynamic bandwidth adjustment
- Adaptive packet compression
- Network transparent RTM (Router Transparency Mode)
- Dynamic routing (OSPF, RIP, RIP v2)

SECURITY: Robust security and data protection for enterprises

- IPSec (AES-128, AES-192, AES-256 or 3DES algorithms)
- Authentication, authorization, and accounting (AAA)

ENVIRONMENTS SUPPORTED:

- VMware Server 2.x, ESX 3.x, ESXi, VMware Workstation

HYPERVISOR FEATURES SUPPORTED:

- VMware Virtual Center, Vmotion, VMware consolidated backup and snapshots

STORAGE SUPPORTED:

- Direct Attached Storage (DAS), Network Attached Storage (NAS), Storage Area Networks (SAN), iSCSI