

## EXCERPT

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### Worldwide WAN Optimization Management 2005 - 2009 Forecast and Analysis

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Network Infrastructure

#### IN THIS EXCERPT

This excerpt is taken from Worldwide WAN Optimization Management 2005 – 2009 Forecast and Analysis (IDC # 33371, May 2005), by Vincent W. Lui, Senior Research Analyst, Network and Service Management, and includes an IDC Opinion, Situation Overview, Future Outlook, a Figure and a Table.

#### IDC OPINION

The WAN optimization management market continues to pick up momentum throughout enterprise IT organizations worldwide. CIOs, IT managers, and network managers have begun to realize the needs, the viability, and the ROI value of network optimization solutions — applications acceleration, data flow and packet compression, monitoring functions, network security, and quality of service (QoS) capabilities — in different parts of their WAN networks. WAN optimization revenue in 2004 was \$255 million, and it is projected to increase to \$611 million in 2009, a compound annual growth rate (CAGR) of 19.1%. IDC believes:

- ☒ There are still many untapped opportunities for WAN optimization vendors. Enterprise servers and applications continue to be consolidated and centralized, new interactive and rich contents are deployed across datacenters and branch offices, workforces become more distributed and mobile, and heavy information flow in the supply chain becomes more intertwined and IT dependent.
- ☒ As vendors position their offerings for different points and different layers of the enterprise networks, there are opportunities for competition to coexist in a customer network. They will face fierce pricing pressure from tight IT budgets, however. Vendors that can demonstrate an immediate improvement in application performance and the most future-proof support solution, rather than just cost savings, will have CIOs' closest attention.
- ☒ Packeteer continues to be the dominant vendor in this market, but innovative technologies from several start-ups are maturing and producing significant sales. A number of shakeouts will occur among these start-ups because large networking equipment vendors are looking to gain position in this market through a series of acquisitions that extend their portfolios. The WAN optimization market is therefore morphing into a wide-area performance market that includes much more than just optimization technologies and Layer 7 visibility.

## IN THIS STUDY

This IDC study analyzes the emerging and fast-growing WAN optimization management market and forecasts the market size for 2005–2009. It analyzes the opportunities and challenges of the WAN optimization management market. Future research will analyze user best practices and related issues concerning WAN optimization technologies.

IDC defines the WAN optimization market as hardware or software products that compress datastreams, monitor traffic flows, prioritize traffic via QoS policies, and/or manage applications from a protocol perspective. These tools analyze application traffic from an external WAN perspective that is generally delineated from the edge router out across the WAN to the user.

Note: All numbers in this document may not be exact due to rounding.

## SITUATION OVERVIEW

Enterprise IT networks are becoming much more complex. From a network access point of view, workforces are becoming more global, distributed, and mobile. Managing remote offices is therefore only a small part of an evolving problem. WAN optimization is no longer just about improving the bandwidth utilization and cutting IT cost; it is essential to improving the quality and performance of the multifaceted applications that are deployed across the network — with the overall end-user experience and productivity in mind.

In recent years, the enterprise networking market has experienced an increasing rate of uptake of WAN optimization technologies. Through a combination of compression and acceleration features in Layers 4–7, vendors are able to capitalize on a number of key trends as the IT infrastructures continually evolve:

- ☒ **Datacenter consolidation.** Trends continue for enterprises to consolidate their datacenters from branch offices to minimize IT management overhead. As a result, the stress on existing WAN links induces latency. This slows the response times of applications and causes potential application contention for bandwidth, thereby impeding performance and productivity.
- ☒ **Disaster recovery.** Intelligent datacenter replication and backup are becoming more critical as IT organizations need to comply with mandates such as the 2002 Sarbanes-Oxley Act. In this datacenter-to-datacenter environment, caching capabilities and protocol-specific optimization — such as network data management protocol (NDMP) — will be essential.
- ☒ **Application outsourcing.** Business users have to rely on these application service providers across the WAN not only from their branch offices but also while they are at their suppliers, customers, or partner locations. On one hand, visibility and reporting tools for the data flows will help service providers prioritize their traffic. WAN optimization vendors can also maximize the network performance by shifting the "chattiness" of the applications back to the datacenter or to the edge of the customer network.

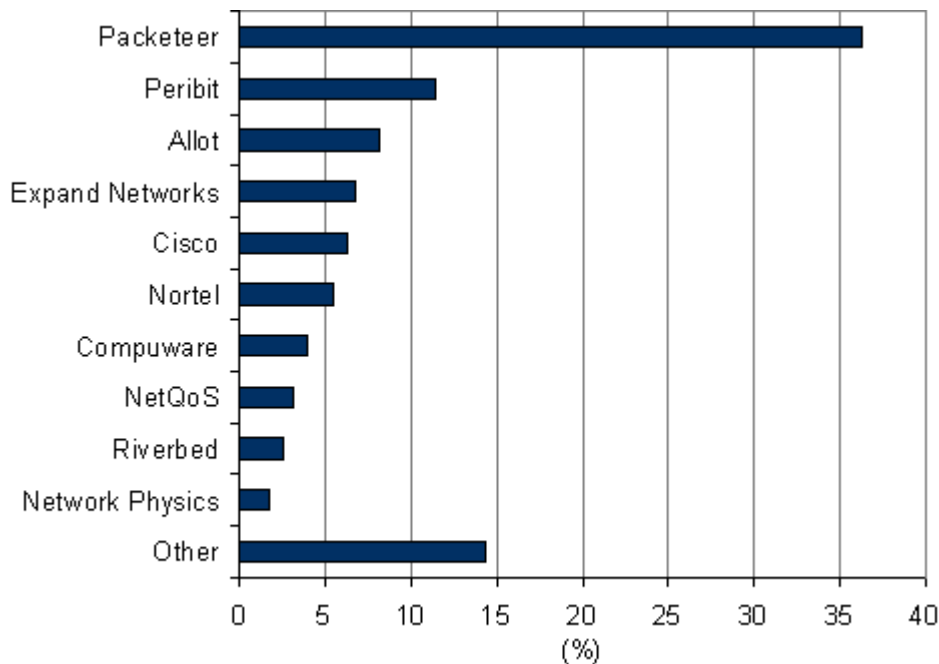
☒ **Network security.** As WAN optimization appliances are deployed across borders (continents, extranets, remote offices, etc.), these dedicated appliances are also becoming critical to detecting and preventing denial of service (DoS) attacks, worms, intrusions, and other traffic and access irregularities.

Primary enterprise users that have an interest in WAN optimization technologies can be found in a number of vertical industries: banking and finance, retail, healthcare, pharmaceuticals, automobile, and transportation. It is important to note that these vertical workforces continue to become more dispersed, in addition to having basic branch office performance issues over their WANs. A supply chain network today is much more connected and IT dependent than ever before. Employees may work on projects at the site of the supplier, customer, or partner, where the typical two-ended optimization appliances do not exist. As a result, vendors have to find additional ways to achieve application acceleration and file transfer across the extranet or across multiple WANs.

Figure 2 presents 2004 WAN optimization management revenue by vendor.

## FIGURE 2

Worldwide WAN Optimization Revenue Share by Vendor, 2004



Source: IDC, 2005

Notes:

Revenue totaled \$254.6 million.

The "other" category includes Exinda Networks, Swanlabs, FineGround, Corvil, Juniper, Orbital Data, Avaya/RouteScience, Packet Design, ActivNetworks, Alcatel, Bluewave, Ipsum Networks, Sitara Networks, Tarari, and Rocksteady.

## **FUTURE OUTLOOK**

In general, IDC sees enterprise users becoming more savvy and aware of their WAN optimization needs, translating into specific requirements for application-specific acceleration, efficient compression capabilities in application and network levels, better visibility and control of business user performance based on QoS parameters, and overall technology integration into existing network architecture.

Rather than having multiple job-specific appliances lined up between routers and switches for network optimization purposes (one for HTTP acceleration, one for network security, one for WAFS, one for network integrity, etc.), the trends inherently suggest the potential of the optimization functions consolidating. The effect is already steering IT organizations and vendors to view WAN optimization more broadly. The way in which IT budgets are allocated and itemized for WAN resource improvement will guide the market toward a more general view of wide-area performance management.

As the market suggests itself, WAN optimization technologies will improve the performance of network and applications across borders. This market is therefore very much a global one. There is a clear demand from the Fortune 1000 with global datacenters, branch offices, and workforces. IDC continues to see double-digit growth in this market for all regions, with, in particular, a higher growth opportunity in Asia/Pacific than in North America and Western Europe. Sales are and will be driven primarily by enterprises. Business transactions will continue to increase across the Pacific Ocean. Increasing intra-Asia/Pacific trading (e.g., China, Taiwan, Japan, Korea, Australia, and ASEAN), which requires communications across expensive and limited bandwidth over oceanic cable, will also drive sizable WAN optimization implementations in the later period of the forecast. Demand for WAN optimization within Europe is relatively small because the distances and bandwidth availability of the backbone networks within the same continent are generally shorter and richer, respectively. We expect that toward the latter part of the forecast period, service providers worldwide will contribute more to the overall market in their WAN optimization needs as their network traffic converges in the core IP networks with IPTV, VoD, VoIP, 3G/4G, VPN, and many other new and rich Web-based contents, all of which will be sensitive to jitter, latency, and availability issues.

The following table illustrates IDC's WAN optimization forecast.

**TABLE 2**

Worldwide WAN Optimization Revenue, 2004 - 2009

	2004	2005	2006	2007	2008	2009	2004-2009 CAGR (%)
Revenue (\$M)	254.6	314.0	380.2	459.7	532.0	610.6	19.1
Growth (%)	NA	23.3	21.1	20.9	15.7	14.8	

Source: IDC, 2005

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