Collaboration solutions for the modern workforce

Distributed workers, close workgroups

The combination of economic pressure and escalating travel costs has led to a significant drop in business travel over the last few years. In its place, conferencing and collaboration tools electronically bring together workers who are otherwise separated by time or distance.

These tools go beyond email to include fax, voicemail, instant messaging, presence awareness, telephony, web audio and video conferencing, shared file repositories and governance, enterprise document management, and portal and team web sites.

Given the benefits of a rich tool set that uncouples employees from their desks, it's no surprise that companies are embracing collaboration technology. A February 2011 WorldatWork survey[1] found that:

- 83 percent of companies offer telework in case of emergency
- More than half offer it as a monthly or weekly option
- More than one-third offer it as a full-time option

Collaboration can increase business agility and help attract talented workers who prefer flexible commuting options Using collaboration tools, companies can:

- Leverage worker productivity across time zones
- Embrace eco-friendly principles
- Set up a seamless disaster backup plan
- Save on physical office space and associated costs

In March 2011, Forrester Research reported that businesses from large to small are investing in collaboration tools, primarily to reduce expenses and improve corporate communications. Products such as team workspaces, social tools like blogs and wikis, desktop video conferencing and unified communications solutions are among the most popular.[2]

Infonetics Research also reported in March 2011 that 2010 revenue in the video conferencing and telepresence market grew 18 percent, to $2.2 billion, and predicted that revenue will hit the $5 billion mark by 2015.[3] The trend is driven by enterprises looking for better ways to communicate to their employees, particularly as workforces become increasingly mobile and distributed.

Infonetics analyst Matthias Machowinski told *eWEEK*, "The biggest winners in the enterprise communications market will be those who offer solutions that are multi-modal, visual (e.g., video-based) and support the collaboration requirements of globally distributed organizations."[4]

Collaboration environments require powerful servers, robust storage and high-speed networks to unite distributed workforces without introducing frustrating latency problems and process delays. Legacy systems may not be up to the challenge.

In a quantitative market research study conducted on behalf of Dell, we learned more about the state of the collaboration market and what businesses need to speed successful adoption of collaboration tools. These results, along with input from our alliance partners, helped drive the design of Dell's end-to-end collaboration solutions.

Key findings: State of the market

Of 400 IT decision-makers surveyed, 83 percent said they are running collaboration workloads on x86 servers in their environments. 71 percent are running, or plan to run, their collaboration workloads on virtualized servers.

More than half of the respondents are planning a new server purchase, and another 35 percent are planning a workload upgrade to support collaboration tools over the next two years (see Figure 1).

Make new purchase	Upgrade current workload	No plans
56%	35%	10%

Figure 1: Around 90 percent of respondents are planning to purchase new servers or upgrade their collaboration workloads within the next two years.

The majority of respondents use Microsoft® SharePoint® server and Microsoft Exchange 2010 as the primary platform for their collaboration activities. Other platforms cited include cloud-based collaboration tools, Microsoft Office Communication Server, Cisco® Unified Communications, IBM®, Lotus® Notes® and Domino®, and Novell® GroupWise®.

About one-third of the respondents already use cloud-based solutions, with another 45 percent considering public, private or hybrid deployments (see Figure 2). The benefits of cloud deployments include on-demand scalability and power, along with seamless support for end users.

Figure 2: Cloud-based deployments are growing in popularity.

When asked what metrics they monitor for collaboration workloads, respondents cited application performance and availability, total cost of ownership and security as the top factors. Regarding suggestions for help to improve their collaboration solutions, respondents named security, availability, data integrity and ease of use as the most desired enhancements. These responses indicate that companies are concerned about compliance with applicable regulations and industry standards, 24/7 availability of the environment and the data, losing valuable information in the event of an outage or disaster and the end-user experience.

What companies want

Survey participants were asked to list the criteria they feel are most important when considering server purchases to support collaboration workloads (see Figure 3).

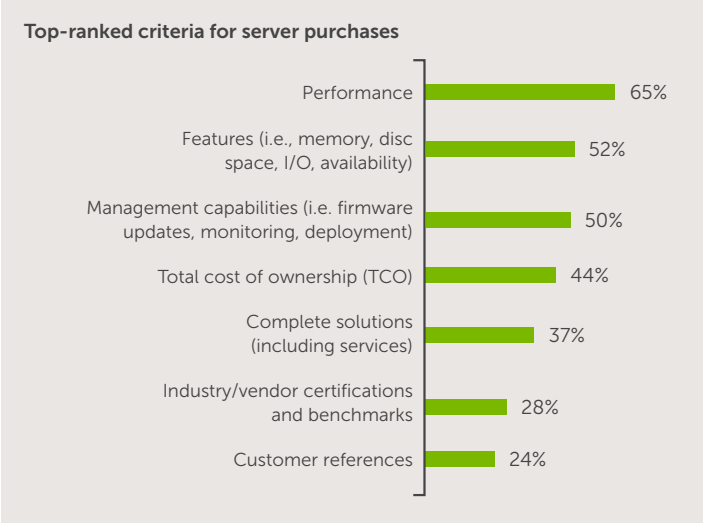


Figure 3: While performance and features top the list, management, TCO and complete solutions help drive purchase decisions.

Highest on the list was performance, followed by features such as memory capacity and availability and management capabilities. It's clear that companies are concerned about deploying collaboration environments that are robust and dynamic enough to handle complex and mission-critical projects. To that end, most of the respondents enlist the help of a service partner for installation and deployment of their collaboration workload solutions. Only 37 percent indicated that they handled these projects in-house or did not know how their company handled it.

Partnering with an expert service provider brings numerous advantages, including the assurance that components are installed correctly from the start, as well as training for in-house staff. When asked their preferences among purchasing an all-inclusive, turnkey solution versus buying individual components and integrating them with the help of a service provider, respondents were split. If purchasing now, nearly 40 percent would prefer a turnkey solution delivered by a hardware vendor and 21 percent by a software vendor. Another 23 percent would prefer components integrated by a third party and 17 percent would integrate the components themselves. Looking out to 24 months, we see a continuing strong preference for services assistance, as shown in Figure 4.

Figure 4: Respondents indicate a strong preference for integration services.

On an anecdotal level, respondents indicated that a turnkey solution from a hardware vendor would bring benefits of a single point of contact for support, smoother integration and cost efficiency. Those who prefer component purchases cited improved ROI, a higher degree of control and a higher level of customization afforded by internal IT staff. For companies that have large enough IT departments, this may be a viable option.

The results show that companies want to enrich their collaboration environments and they're ready to invest in comprehensive, easily deployed and managed solutions. Dell, with the PowerEdge™ 12th generation of servers and innovative storage, networking, client, service and support offerings, is the right choice to meet enterprise collaboration needs.

Dell PowerEdge servers: The collaboration platform for the 21st century

Companies planning collaboration server purchases want high performance, large storage capacities, simplified management, low total cost of ownership and a one-stop solution. Dell delivers on all of these customer-cited criteria.

Performance: PowerEdge 12th generation servers from Dell provide new efficiencies in their RAID controllers and I/O technologies, enabling support for more Exchange mailboxes and SharePoint shared file repositories. These servers, based on Intel® Xeon® processors, deliver added horsepower to support all-in-one mailbox/hub/client access server configurations, plus energy efficiency for physical and virtual environments.

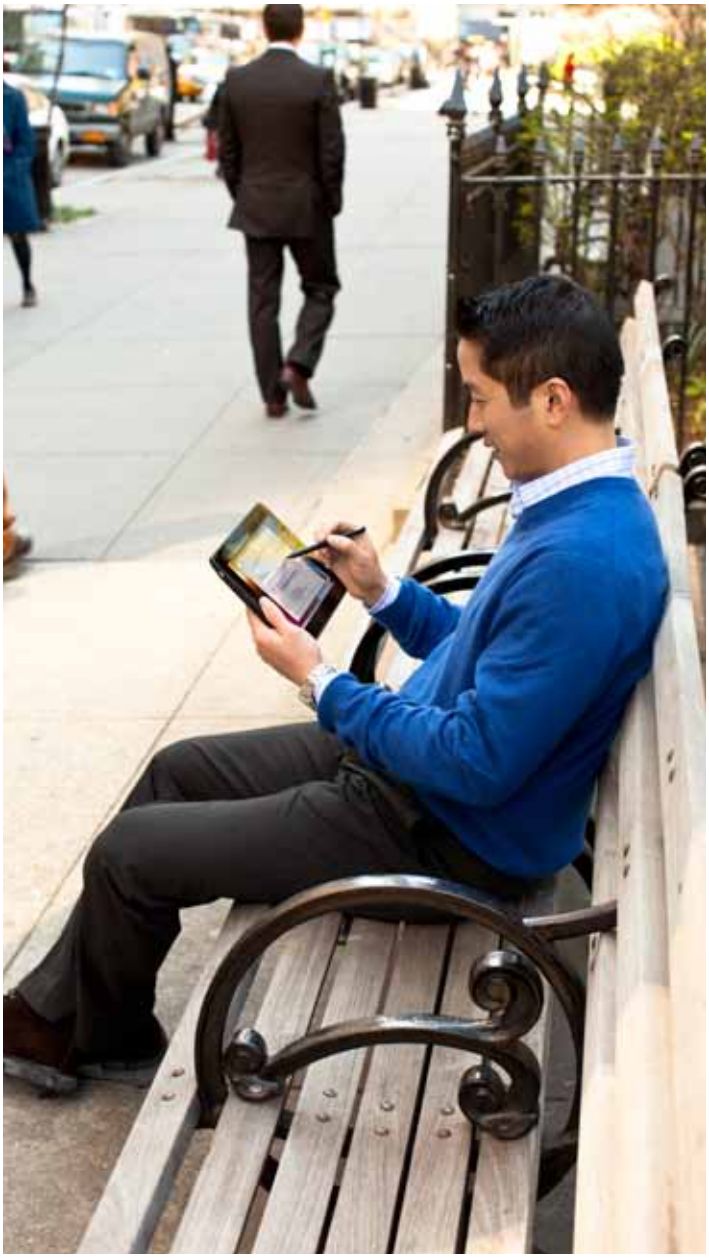
Storage: Dell PowerEdge servers include up to 24 hard drives for data storage, plus two more internal HDDs for operating system and management needs. When leveraged fully, this array of disks is large enough to replace external storage for some collaboration applications, while accelerating performance and maximizing productivity.

For smooth integration with archival storage devices, PowerEdge 12th generation servers include updated PowerEdge RAID Controller (PERC) cards, with third-generation PCI Express slots for maximum bandwidth, speed and expandability.

These improved interfaces and high-capacity memory capabilities enable a smooth scale-up path for even the most demanding collaborative environments. In fact, Microsoft Exchange 2010's memory cache takes advantage of the larger physical memory capacity in Dell PowerEdge 12th generation servers, such as the R720xd, to support dynamic and versatile messaging features.

In the survey, high availability was identified as an important benefit companies look for in a collaboration workloads platform. As an example, Dell PowerEdge servers are an ideal building block for Exchange 2010 Database Availability Groups (DAG), which provide highly reliable operations, improve operational resilience and deliver smooth failover in case of a malfunction.

Management: Cementing its role as a one-stop solution provider, Dell offers a comprehensive data center management platform. The Dell Advanced Infrastructure Manager (AIM) software solution is designed for building data center infrastructure. Dell AIM controls server workloads, plus each server's associated network (LAN/WAN) connectivity, storage (SAN/NAS) access and power state, enabling administrators to move workloads and repurpose servers in minutes. The result is a dynamic and flexible data center environment that can scale effortlessly to proactively meet business needs.



One-stop service: Most respondent companies in our survey partnered with an expert IT service provider to install and launch their collaboration workload solutions.

Dell is renowned for its services and support offerings, delivering complete solutions that comprise hardware and software, pre-integrating and pre-loading them with images, and managing installation, training and maintenance throughout the deployment. From gap analysis and needs assessments through design consultation, configuration, rollout, training and maintenance, Dell's experts are with our customers every step of the way.

End-to-end solutions: With a single point of contact for software, servers, clients, storage and networking, as well as expert service and support, companies enjoy smoother deployments.

Whether companies want to implement collaboration projects on their own or with Dell services, Dell provides online solution advisors based on validated reference architectures, and white papers showing example configurations and workloads test results.

Low TCO: Combining the cost benefits of low energy consumption, virtualization, centralized management and ongoing consultative relationships, Dell delivers a compelling return on data center hardware and software investments.

Dell provides the intelligent hardware infrastructure, networking capabilities, software platforms and expert service that today's companies need to upgrade their shared workspaces and provide productive and dynamic collaboration tools for their employees.

To learn more, please visit Dell.com/Microsoft

1 http://www.worldatwork.org/waw/adimComment?id=48318
2 http://www.eweek.com/c/a/Messaging-and-Collaboration/Businesses-Waiting-on-Collaboration-Benefits-Forrester-893820/
3 http://www.infonetics.com/pr/2011/4Q10-Enterprise-Telepresence-Video-Conferencing-Market-Highlights.asp
4 http://www.eweek.com/c/a/Messaging-and-Collaboration/Video-Conferencing-Spending-to-Hit-5-Billion-in-2015-Infonetics-828793/