

EXECUTIVE SUMMARY



SERVER VIRTUALIZATION BLOOMING IN PRODUCTION ENVIRONMENTS

Research Reveals That Virtualization Technology
Has Quickly Moved Into The Mainstream,
As Survey Respondents Report Cascading Benefits

Research conducted by

CXO MEDIA



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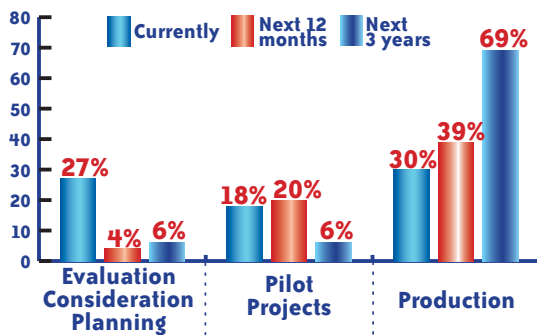


A recent study conducted by IDG Research Services shows that customers have aggressive plans for server virtualization, which is quickly maturing into extensive production deployments. Driven by transformative cost savings and benefits such as increased flexibility and availability, server virtualization is becoming an essential element of IT environments.

The IDG study revealed that server virtualization technology has matured dramatically for x86 servers to the point where 89 percent of survey respondents either use or plan to use virtualization technology in the next 12 months. On one hand, products for server partitioning, virtual machine management and capacity planning have been available for years. On the other, recent advances in third-generation virtual infrastructures are re-defining the boundaries of IT by virtualizing entire farms of industry-standard servers, storage and networks.

The IDG study results reflect the positive impact this enhanced virtualization is having, as approximately 10 percent of respondents report that they are investing in virtualizing their entire IT infrastructures. Third-generation server virtualization products they are using aggregate IT infrastructures into dynamic pools of resources that can be centrally managed, continuously optimized and made available to any application or operating system.

THE PERCENT OF COMPANIES IN THE PRODUCTION PHASE OF IT INFRASTRUCTURE VIRTUALIZATION IS EXPECTED TO DOUBLE IN 3 YEARS



Q: Please indicate what stage/phase your company is in with respect to IT infrastructure virtualization: currently, in the next 12 months and in the next 3 years. Base: 101 respondents

PRIMARY BENEFITS

The study points out that server consolidation and disaster recovery/business continuity are the two top drivers and major applications behind IT virtualization initiatives. Other drivers include improving systems reliability/availability, more flexible development and testing environments and lower data center operating costs. Additional high-value capabilities include remote access, hosted desktops and strong security.

Server consolidation is a key component in cutting-edge IT infrastructures. It enables users to overcome server sprawl and over-provisioning by packaging complete x86 servers in portable and hardware-independent virtual machines. Each of these virtual machines represents a complete system—including processors, memory, network ports, hard disk storage, BIOS, and networking and storage.

When it comes to disaster recovery/business continuity, virtualization is superior to costly and complex traditional solutions that fail to meet recovery objectives even after doubling hardware (and costs) for protected applications. Virtualized servers are encapsulated in a small set of files, allowing users to perform single-step recoveries to dissimilar hardware.

HIGH AVAILABILITY, CASCADING BENEFITS

High availability is a hallmark of virtual infrastructures, but many high availability solutions are complex, expensive, and typically reserved for mission-critical applications. High availability is achieved through dynamic workload balancing, which works across server farms to restart virtual machines from failed machines to their operational counterparts without causing end-user downtime. In fact, VMware VMotion can migrate running virtual machines across physical hosts with zero downtime. In addition, the auto-maintenance mode of dynamic workload balancing eliminates downtime previously allocated for planned maintenance windows.

The increased efficiency, flexibility and responsiveness of virtual infrastructure create cascading financial benefits and productivity improvements for IT organizations. For example, virtualization users are finding that the time it takes to respond to change requests is now measured in minutes as opposed to days. Similarly, they can typically provision new applications in minutes, rather than days or weeks.

Users are also realizing 60 to 80 percent utilization rates—up from 5 to 15 percent—on typical x86 servers. This reduces their total cost of ownership (TCO) by enabling them to use fewer servers, which reduces space requirements and saves money by reducing expensive power and cooling costs in data centers.

THE BREAKING VIRTUALIZATION WAVE

Overall, the survey findings clearly indicate a solid shift toward virtualized infrastructures with 61 percent of respondents saying they currently have a server virtualization strategy in place. Drilling down deeper, the study found that 49 percent of all virtualization investments over the next 12 months will be allocated to servers, which substantiates the server consolidation trend.

The research further reveals that strategic initiatives to consolidate servers and reduce data center costs are the most common triggers for initial server virtualization investigations. The strongest advocates of virtualization projects are operations/data center management, senior IT executives and the server management team.

The desire for reliability and stability is also clearly evident, as 80 percent of survey respondents rate these two areas as extremely important when considering IT infrastructure virtualization. This is reflected by the fact that the majority of virtualization customers are using VMware, which has been on the market for eight years and is deployed by over 20,000 customers.

OVERCOMING ACQUISITION CHALLENGES

Virtualization technology has evolved, and performance and scalability have improved significantly. Recent advances such as four-way virtual machines and increased memory limits allow for more advanced workloads such as databases, application servers and Exchange messaging servers [or mail and collaboration servers]. Today, hardware and software vendors are working together to implement changes that benefit the end user. These powerful machines will become even more potent as they reap the benefits of hardware assistance, which enables the robust virtualization of CPU, chipset, and network interface functionality while enabling virtual infrastructures to run much more efficiently. Current third-generation virtualization products can maintain the highest levels of production performance. Cost is no longer an acquisition challenge, due to relatively inexpensive server virtualization options and a fast return on investment. Furthermore, institutional resistance has decreased as users realize, for example, that they can get similar performance from a virtual machine and that servers can be quickly provisioned.

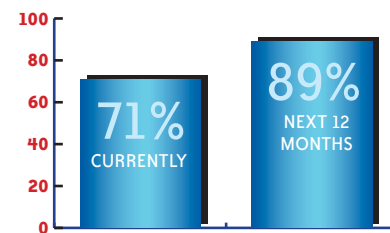
CONCLUSION

The IDG survey results assert that virtualization is now a mainstream technology. This is supported by the fact that nearly 89 percent of respondents have either currently deployed virtualization in production environments, or plan to do so in the next year. This reflects unshakeable confidence and an overwhelming commitment to virtualization technology.

Virtual infrastructure empowers large enterprises and small businesses alike with the ability to transform, manage and optimize their IT infrastructure. As a result, they have become essential IT elements and powerful competitive weapons for businesses that are driven to succeed in the global marketplace.

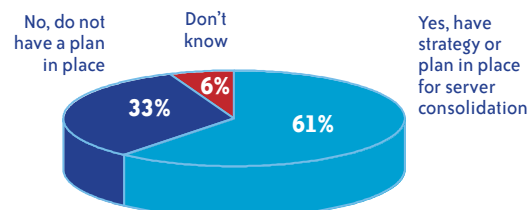
The signs of pervasive adoption and acceptance of virtualization are all on display. They range from mainstream usage models such as server consolidation and disaster recovery, to the burgeoning number of production environments, to the elimination of former acquisition challenges. The wait-and-see attitudes of the past have been replaced by an atmosphere of confidence and optimism. Virtualization is here to stay.

89% EITHER USE OR PLAN TO USE VIRTUALIZATION TECHNOLOGY IN NEXT 12 MONTHS



Q: Does your company use any virtualization technology today? Does your company plan to use any virtualization technology over the next 12 months? Base: 101 respondents

61 PERCENT HAVE A STRATEGY IN PLACE FOR SERVER CONSOLIDATION



Q: Does your company have a strategy or plan in place for server consolidation? Base: 101 respondents

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