IBM System x and VMware solutions

Enabling your cloud journey
As companies require higher levels of flexibility from their IT, the importance of cloud computing becomes more apparent. Building on the benefits of server virtualization, cloud computing can improve resource use to help make business processes more efficient.

For over a decade, IBM and VMware have collaborated to deliver integrated virtualization solutions to tens of thousands of customers around the globe. The relationship is multi-faceted and spans all areas from technology alignment and joint roadmaps, to engagements in the field, to world-class customer support. The IBM and VMware teams work hand-in-hand to ensure that our respective solutions are fully integrated, tested and optimized for the highest performance and quality. Together, IBM and VMware provide x86 cloud solutions that can help transform your data center into a highly responsive IT environment so you can quickly respond to changing business demands and accelerate your cloud journey.

**Data center consolidation**

What makes IBM and VMware joint solutions truly unique is their deep integration, which helps to make your data center “virtualization-aware” and highly automated. IBM offers workload-optimized systems, pre-integrated with VMware software, on IBM® System x®, IBM Flex System™, IBM PureFlex™ and IBM BladeCenter® systems that are optimized to deliver more partitions and larger workloads. Customers can achieve higher consolidation ratios with IBM’s exclusive MAX5 memory, built for virtualization, with memory expansion for larger and faster VMware virtual environments. The benefits of the deep integration of IBM and VMware infrastructure extends to management, with a range of capabilities and management tools from IBM that seamlessly integrate with the VMware® vCenter™ interface, enabling you to simplify management dramatically and make the best use of your existing investments.

Integrated solutions that include servers, storage, networking and a full complement of both IBM and VMware software are available across the range of IBM x86 platforms. These range from small-scale BladeCenter solutions designed for dozens of virtual machines (VMs) to highly scalable PureFlex deployments that can accommodate over 1000 VMs. These solutions are designed to provide the agility and flexibility that you need as your company grows.

**The power of partnership**

The broad portfolio of deeply integrated, end-to-end solutions offered by IBM and VMware meets your needs across your data center and infrastructure, improving operations management as well as desktop and user computing. And this portfolio continues to grow—IBM has substantially enhanced our portfolio over the last two years. IBM and VMware joint solutions help customers reduce IT complexity and cost while increasing agility and improving performance.
**Business-critical applications**
Customers who want to ensure high performance and availability for their critical applications can rest easy when they are running on an IBM and VMware infrastructure. In addition to the advanced features built into our joint solutions to mitigate the risk of failures and boost performance, IBM makes extensive use of reference architectures and application testing (for SAP as an example) on VMware software to validate best practices. Our pre-tested, pre-integrated virtualized infrastructure platforms are easy and fast to deploy with everything you need to get your business-critical workloads up and running in minutes, backed by IBM support and services.

**Virtual desktop and mobility**
IBM SmartCloud® Desktop Infrastructure, along with VMware virtual desktop infrastructure solutions, forms the ideal foundation for your private desktop cloud. With this foundation, you can confidently virtualize your desktop services on a platform that delivers security and performance with the scalability and centralized management needed to optimize your IT investment. Based on a reference architecture approach, IBM and VMware joint virtual desktop solutions are fully tested across applications, software, hardware and services. This helps streamline administration by turning siloed desktops, applications and data into mobile, centrally managed IT services that are consistent, always in compliance and securely delivered to any device. In addition, IBM and VMware offer unique virtual desktop solutions that provide end-to-end high availability for organizations that need continuous desktop availability or who have remote or branch offices. Together, IBM and VMware joint solutions help to transform desktops into highly available and agile services delivered through the cloud.

**Business continuity and disaster recovery**
VMware software on IBM servers, storage and networking set a high standard for quality, reliability and performance. The combination of products and services help fulfill the requirements of customers seeking the highest levels of availability for business uptime. The deep integration of predictive failure analysis from IBM, IBM management tools and VMware vSphere® vMotion®, delivers a zero downtime virtual environment with no manual intervention required in the event of a failure.

Deep IBM and VMware integration extends into storage as well. IBM XIV®, IBM System Storage® SAN Volume Controller (SVC) and IBM Storwize® v7000 offerings are well integrated with VMware APIs, including the vSphere API for array integration and the vStorage APIs for storage awareness—both of which improve performance and efficiency—as well as VMware vCenter Site Recovery Manager™ for improved availability and data protection.

**Private and public cloud offerings**
IBM has created several offerings based on VMware technology with services that help customers build their own private cloud environments to offer infrastructure-as-a-service to their users. IBM also has public cloud offerings based on VMware technology that can be federated with a private cloud.
IBM System x with VMware vSphere with Operations Management

IBM System x with VMware vSphere with Operations Management™ combines trusted hardware and software platforms with best-in-class management capabilities to help aggregate workload data, apply predictive analytics, and perform capacity planning. This increased visibility enables customers to meet improved service-level agreements (SLAs), achieve infrastructure and application availability, and gain higher resource use. When combined with the benefits of System x with IBM X-Architecture®, customers can improve performance for less than the cost of non-virtualized environments. The benefits of this approach include:

- Improved application performance and availability, and reduced cost and complexity of managing business-critical workloads.
- Simplified IT operations at a lower cost, with easy-to-deploy workload-optimized systems, and proactive and integrated management to help improve performance.
- Increased control with optimization that allows your IT staff to do more with less, improve capacity and use, and help you plan and scale for the future.

IBM offers all three editions of System x with vSphere with Operations Management through its standard distribution and reseller channels.

Business value benefits of IBM and VMware solutions

IBM and VMware offer a broad portfolio of end-to-end solutions for customers of all size and type. IBM Business Partners can work with you to deliver a customized solution that suits your organization’s needs and accommodates added capabilities as technologies and your corporate goals evolve. Using a System x server infrastructure along with VMware virtualization and cloud software drives significant consolidation and TCO advantages, including:

- Resource consolidation to help:
  - Lower overall IT costs.
  - Reduce or defer CAPEX costs.
  - Reduce OPEX costs.
  - Reduce power and cooling costs.
  - Reduce physical space needs.
  - Reduce maintenance costs.

- Productivity increases such as:
  - Maximized consolidation cost benefits (for example, Tier 1 applications).
  - Improved staff productivity and optimized people time.
  - Easier compliance.
  - Simplified implementation, use and systems management.

- Business agility enablement that helps:
  - Accelerate innovation.
  - Speed time-to-market.
  - Proactively manage and respond to performance trends.
Virtualization technology innovation

IBM and VMware continue to invest in building world-class solutions with real unique customer value. Together we offer best-in-class virtualization solutions that include the software, servers, networking, storage and services to help you succeed. The IBM and VMware teams work closely together to ensure that our joint solutions are seamlessly integrated to deliver the agility and flexibility that you need with support for the many approaches to cloud computing. By working with IBM and VMware, two original innovators in virtualization technology, you can count on:

- IT leaders who work together to deliver complete end-to-end solutions.
- Solution quality with value-added features and trusted service.
- Significant joint investments in product integration and interoperability.

About VMware

VMware, the global leader in virtualization and cloud infrastructures, delivers customer-proven solutions that accelerate IT by reducing complexity and enabling more flexible, agile service delivery. VMware enables enterprises to adopt a cloud model that addresses their unique business challenges. The VMware approach accelerates the transition to cloud computing while preserving existing investments and improving security and control. With more than 500,000 customers and 55,000 partners, VMware helps organizations of all sizes lower costs, increase business agility and ensure freedom of choice. More information is available at vmware.com

For more information

To learn more IBM System x and VMware solutions please contact your IBM representative or IBM Business Partner, or visit: ibm.com/systems/x

Why IBM?

Your business is poised to take advantage of the next big opportunity. But do you have the tools to meet your goals? For more than 100 years, IBM has been creating offerings for businesses big and small across the globe that reduce costs, increase efficiency and improve competitiveness. System x solutions are the result of a design for building proven IBM innovation around industry-standard components. System x advancements in scalability, reliability and performance can help you take your business where you want it to go. At IBM we provide the technology that will help your business innovate and thrive. We make that possible today and have the vision and dedication to continue innovating into the future.