

INTRODUCING THE NEW IBM zSYSTEM 9.
*MORE THAN A NEW SERVER, IT'S A NEW APPROACH FOR
YOUR BUSINESS*

THE ON DEMAND BUSINESS APPROACH TO TODAY'S BUSINESS CHALLENGES

Your business faces many tough challenges. Two that stand out are the increased speed of change in the marketplace and added complexity in the IT infrastructure of your enterprise.

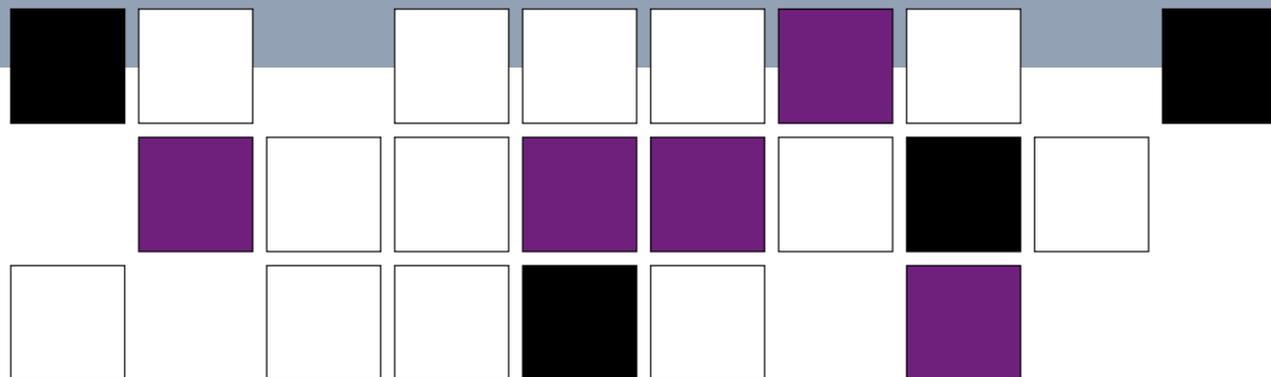
IT resources throughout your company must be more interrelated than ever—even though they were often added one component at a time to address various business opportunities and computing requirements. The result can be a siloed, complex and disconnected environment that includes established business systems along with the latest solutions. To help maintain your company's competitiveness—let alone lead your industry—you need to integrate and simplify your IT environment as you align it with the company's business goals and strategy.

The On Demand Business does just that with a structured approach.

THE MORE MATURE THE ON DEMAND BUSINESS, THE BETTER ITS RESULTS

A recent IBM study found that, on average when compared to industry peers, companies that have the most developed On Demand Business capabilities have experienced superior three-year growth in key areas of business performance. The most successful companies have integrated business processes and infrastructures internally and with their suppliers, customers and other external partners. They also managed those processes in a dynamic, flexible and highly responsive manner.

The results were impressive. The companies with advanced On Demand Business capabilities grew earnings 17 points faster, enjoyed 1.3 points better net profit margin improvement, experienced 1.3 points better return on investment and .7 point better return on assets. While the study does not provide cause and effect conclusions, it does suggest a compelling pattern of performance.¹ In the battle for growth and market leadership, you need every advantage.



THE ON DEMAND BUSINESS RELIES ON A SIMPLIFIED, INTEGRATED INFRASTRUCTURE

This infrastructure can be significantly enhanced with a focus on three key capabilities.

SECURITY-RICH, RESILIENT COMPUTING

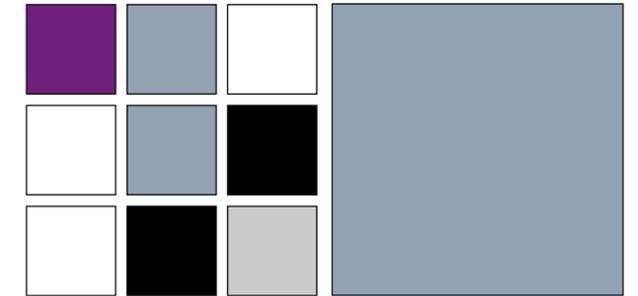
The overall environment is protected from security breaches. User privacy and the information traveling across the network are, too. More than just server availability, resilient computing is designed to provide the highest levels of application and data availability.

VIRTUALIZED AND INTELLIGENT RESOURCE MANAGEMENT

Business goals can be achieved and workload priorities can be met, because IT resources are capable of being apportioned automatically on the fly. IT resources are also optimized more effectively and ultimately utilized at higher rates—so you can get more out of your IT investments.

INTEGRATED AND FLEXIBLE ARCHITECTURE

Core business applications that support the enterprise have tremendous business value. Plus, it may be significantly more expensive to rip and replace them than to extend them. The On Demand Business unlocks, leverages and extends the value of those applications by integrating them with today's new solutions to capitalize on new business opportunities as it improves flexibility and responsiveness. At the same time, the enterprise retains and expands on the benefits derived from mission-critical applications and corporate data systems.



IBM MEETS THE IT DEMANDS OF THE ON DEMAND BUSINESS WITH A HOLISTIC APPROACH TO SYSTEMS DESIGN

IBM is committed to deliver advanced IT resources—servers, operating systems, middleware, storage and networking technologies—that support open standards and work better together to meet client's needs. IBM's systems start with a server that is more secure, available and scalable, and a choice of operating systems, including IBM z/OS®, Linux® and others. The latest IBM software further integrates applications, manages the breadth of the infrastructure and simplifies IT operations. The holistic approach also incorporates the latest IBM networking and storage technology that delivers improved responsiveness, lower costs, higher availability and better recoverability.

The new IBM zSystem 9, embodying IBM's holistic approach to systems design, underscores IBM's leadership in the mainframe market. With the z9 at the foundation, your infrastructure can have the flexibility to evolve as your On Demand Business evolves.

THE NEW IBM zSYSTEM 9, PIONEERED BY IBM SYSTEMS AND TECHNOLOGY GROUP, EXTENDS IBM'S INDUSTRY-LEADING MAINFRAME TECHNOLOGIES

VIRTUALIZATION—AT THE HEART OF zSYSTEM 9

IBM has led the industry in designing and delivering virtualization solutions. IBM mainframe servers already support hundreds—potentially up to thousands—of virtual IBM @server® zSeries® systems. They share processors, memory and channels between mixed application workloads. And they have the capability to allocate resources at a highly granular level, on the fly, according to business priorities.



Virtualization can enable simplification. For example, create multiple servers on a single system and virtual pools of storage that aren't tied to specific hardware. When you do, you can avoid the inefficiencies caused when just one application resides on one server. You can also run and manage diverse applications, even multiple operating systems, simultaneously. When you do, you enable high utilization levels and help reduce your need to invest or purchase a new server for every new application.

OPTIMIZE YOUR ENVIRONMENT AND ALIGN IT WITH BUSINESS PRIORITIES

Offering some of the industry's most sophisticated and intelligent workload management capabilities, z9 workloads are assigned their own resources based on business goals and importance. At the same time, z9 has the capability to manage diverse workloads and system resources autonomically, based on business policies and workload performance objectives.

MANAGE RESOURCES ACROSS THE MIXED ENVIRONMENT

The z9 leverages a heritage of advanced technologies, including Workload Manager, Intelligent Resource Director, logical partitions, IBM HiperSockets™, IBM zSystem Application Assist Processor (zAAP) and more, that are specifically designed to provide advanced capabilities and support for workloads running within the zSystem architecture.

However, data centers do not live by IBM mainframes alone. In today's environment, it is increasingly common for customers to have multiple servers and storage devices running various operating systems and middleware. The IBM Virtualization Engine™ product helps address the special needs of today's mixed IT environment. Virtualization Engine technology helps manage applications and resources across the enterprise. And the new IBM zSystem 9 is an ideal hub for managing these cross-infrastructure resources.

GAIN BUSINESS RESILIENCY AND STRENGTHEN SECURITY ACROSS HETEROGENEOUS ENVIRONMENTS

Designed for up to 99.999 percent availability with parallel simplex clustering, zSystem technology continues to help reduce planned and unplanned outages, as well as the recovery time when outages do occur. But it's more than server availability. It's about focusing on application security and data availability, protecting privacy and minimizing business downtime. And the z9 is designed to provide near-continuous data availability in solutions designed for the On Demand Business.

By increasing secure transactions throughput, IBM zSystem 9 can improve responsiveness. Security is strengthened through enhanced encryption and hashing algorithms. The system helps to secure and control access to data and system resources, and is designed to respond automatically to network intrusions—from inside or outside.

A LEADER IN INTEGRATION HELPS ENABLE DATA AND RESOURCE SHARING ACROSS YOUR ENTERPRISE

Integrate across the enterprise and drive multiple benefits. Increase IT flexibility and help to reduce costs with enhanced virtualization capabilities. Expand opportunities to integrate new and existing applications across company silos. Enjoy broader support of Web services and leverage service-oriented architecture. All enabled by IBM zSystem 9 technology.

On z9, the IBM WebSphere® product family—a leading software platform for On Demand Business—helps accelerate application development and improve IT flexibility. It enables enterprise-wide integration across multiple different platforms and enhances enterprise-wide information integration.

And with larger capacity zAAPs on z9, you can strategically deploy and integrate even more Java™ technology-based workloads on the very same platform that runs core business applications and databases in a highly cost-effective manner.

TRANSFORM YOUR IT ECONOMICS—WITH IBM zSYSTEM 9 TECHNOLOGY

Innovative z9 technology is designed to drive efficiencies throughout your system to allow you to reduce downtime and increase utilization. The z9 is capable of running at levels of up to 100 percent capacity for optimum asset utilization and return on investment. Startling performance, considering other platforms typically run at 5 to 25 percent. And workload management can put your system's resources where they're needed, when they're needed, enabling utilization rates beyond what UNIX® or Intel® technologies usually provide. With z9, resources are highly available, because built-in intelligence is designed to autonomically detect problems and fix them on the fly.

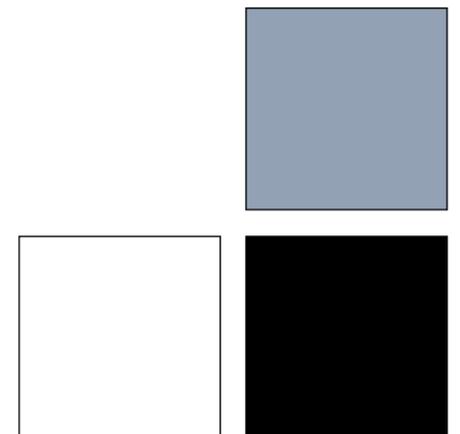
With its open platform, zSystem technology enables you to modernize and leverage existing applications and data. And its specialty engines, like the Integrated Facility for Linux and zAAP, can integrate with and capitalize on existing assets better. Additionally, the specialty engines provide a whole new set of economic benefits.

IBM zSystem 9 technology has capabilities that allow dynamic configuration of processing power and input/output bandwidth, based on business priorities. The new z9 supports up to twice as many logical partitions as its zSeries predecessor, allowing hundreds of virtual partitions—each of which can have its own operating system and applications. Create virtual servers quickly with z9 technology's advanced support for Linux software, and be ready to deploy a new application in as few as five minutes.

IBM offers flexible pricing and financing terms to make zSystem even more appealing. Subcapacity pricing helps align your IBM software costs with usage. IBM zSystem 9 can also take advantage of a very low-priced operating system, enabling the adoption and expansion of select new workloads. IBM zSystem 9 can help lower your ongoing costs per computing-cycle as you move from one server generation to the next. And with the upgrade paths that zSeries servers and zSystem offer, you can extend the productive life of your mainframe and improve its residual value for future upgrades.

Combine that with IBM Global Financing and you further optimize your total cost of ownership. You may also gain significant tax advantages.

What's more, a recent study suggests that over the next five-year period mainframe ownership costs will be lower—by about US\$13,000 per end user when compared to UNIX environments, and by about US\$18,000 when compared to PC environments.²



zSYSTEM TECHNOLOGY: RIGHT FOR TODAY, READY FOR TOMORROW

Core competencies like virtualization, business continuity, intelligent workload management, autonomic functionality and the ability to process secure transactions—with the capability of running at up to 100 percent utilization—put the zSystem in a class of its own. And with IBM's roadmap for the future, the new z9 can play an even greater, more expanded role as the infrastructure hub for the On Demand Business.

PLANS FOR zSYSTEM INCLUDE:³

INITIAL FOCUS

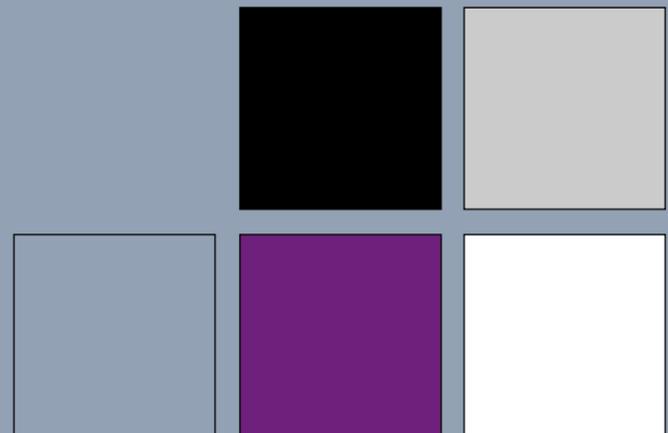
Assist in simplifying enterprise-wide adherence to common regulatory compliance and privacy policy. Enable the discovery and mapping of enterprise-wide asset and infrastructure resource associations by business process. Discover and monitor end-to-end workload transaction paths across all infrastructure resources involved. And drive deeper integration between the hardware, operating system, middleware and application stack.

EXTENSION OF CAPABILITIES

Monitor and track mission-critical business processes across the enterprise to ensure security, compliance and resiliency. Identify issues, points of failure and the scope of recovery. Monitor and manage applications end to end, across platforms, according to business goals, policies and workload performance objectives. Expand service-oriented architecture capabilities to cover a broader array of workloads, as well as simplify, integrate and automate the deployment of applications across the enterprise.

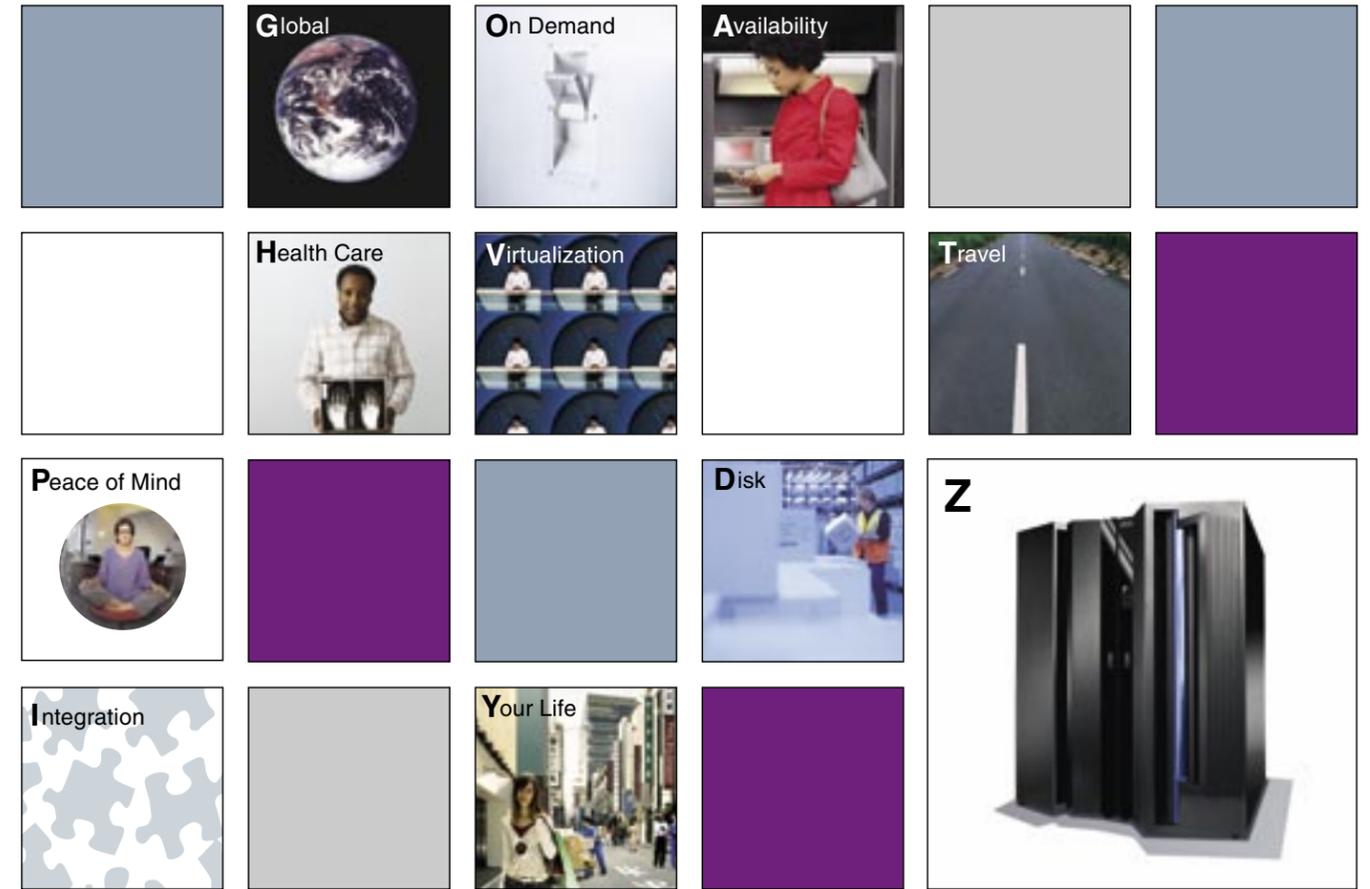
FUTURE DIRECTION

IBM zSystem technology becomes the enterprise-wide business resiliency and security manager, helping to ensure end-to-end regulatory compliance and security policies, predicting failure and initiating intelligent recovery actions without intervention. zSystem technology also delivers predictive management and intelligent workload balancing across the heterogeneous environment. Provisions autonomically and allocates virtualized resources by business priorities, cost and service level agreements. Provides an optimized intelligent hub for mission-critical applications and data by enabling the integration and management of business processes, resources and data across the enterprise—according to predefined business priorities.



IBM zSYSTEM 9 TECHNOLOGY, DESIGNED TO REDUCE COMPLEXITY, INCREASE BUSINESS FLEXIBILITY, DRIVE DOWN COSTS

Enable the resilient, security-rich support you need to protect your environment. Integrate and manage your IT environment more efficiently and cost-effectively. The new IBM zSystem 9 enables you to do all of that—and helps you align your IT to support your business goals and priorities.



ENABLING BUSINESS A THROUGH Z

FOR MORE INFORMATION

For more information about IBM zSystem 9 technology, contact your IBM marketing representative or IBM Business Partner, or visit:

ibm.com/eserver/zseries



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1 Median difference in three-year improvement of performance metric between the most advanced companies and their sectors. While multiple factors can influence financial performance, based on this analysis the financial performance of an advanced On Demand Business is statistically higher than industry peers. Source: IBM On Demand Business Impact Research Analysis. April 2005.

2 Arcati Research 2005. "The Dinosaur Myth 2004 Update."

3 All statements regarding IBM's future direction are subject to change or withdrawal without notice, and represent goals and objectives.

