



IBM Managed Hosting - Linux virtual services

An e-business on demand solution for managed server capacity

Highlights

- ***Allows you to tap into server capacity on demand, simplifying capacity planning***
- ***Lowers up-front expense while improving performance with virtual servers on IBM @server zSeries™***
- ***Provides rapid service deployment for a faster time to market***
- ***Manages workload peaks through flexible capacity capabilities***
- ***Consolidates workload on zSeries running Linux to help reduce IT expense, complexity***

Capitalizing on e-business on demand to help reduce costs

Many customers today are suffering from server farm “sprawl.” As business reliance on information technology (IT) and the Web grows, IT infrastructure grows—and customers are faced with constantly deploying new servers to keep up. Each of these dedicated servers requires connections, middleware, firewall protection, redundancy, backup, and more. The result: constantly escalating complexity and expense, a greater chance of problems and performance issues, and more potential points of failure—plus the mounting need for expertise to manage it all. These problems have many companies searching for new ways to acquire IT capabilities.

With IBM Managed Hosting - Linux virtual services, you can consolidate distributed server workloads onto robust IBM @server zSeries servers

running the Linux operating system—without the up-front expense of buying the physical hardware. As an IBM e-business on demand™ solution, your IBM Managed Hosting - Linux virtual services solution is delivered like a utility: you only pay for the processing, storage and network capacity you require, and can easily add more to handle peaks or as your needs grow. Instead of physical Web, database and application servers, your operations run on virtual servers, hosted and managed by IBM. A virtual server combines the elements of a physical server—computing capacity, storage capacity and network capacity—in a security-rich shared hosting environment. Through the e-business on demand concept and industry-leading technology and experience, IBM Managed Hosting - Linux virtual services helps you improve the availability and reliability of your IT environment while simplifying your infrastructure.



Solution Snapshot

Required per solution	Required per virtual server (Linux instance)
<ul style="list-style-type: none"> Linux server cage, which includes: <ul style="list-style-type: none"> Virtual router and firewall Base DNS and mail services Networking services (bandwidth) 	<ul style="list-style-type: none"> Linux instance management Dynamic storage services Service units
Available server types	Additional options
<ul style="list-style-type: none"> Linux server (managed) Linux Web server (Apache) DB2® for Linux WebSphere® Application Server for Linux WebSphere Commerce Suite for Linux Network-attached storage (NAS) for Linux 	<ul style="list-style-type: none"> High-availability services Linux assistance services
Complementary and custom services	
<p>A range of complementary services—including storage and backup, monitoring and security services—are also available. Enhanced customized services are designed to meet specific needs, and include virtual private network connections, advanced DNS and mail services, and advanced firewall.</p>	

Providing on-demand capacity for optimum efficiency

Our experience with e-business Hosting™ customers has shown that most companies overbuild their solutions with a capacity overhead of approximately 40 percent to cover growth and peak workloads. Routinely operating below maximum capacity, however, means that money is being spent on a resource that isn't being used.

With Managed Hosting - Linux virtual services, you can purchase processing power by the “service unit”—three service units are approximately equivalent to one 1GHz Intel®-based server. Since you can purchase service units based on your anticipated

demand, there is no need to over-deploy capacity to accommodate future growth or workload surges—so you can avoid wasting money on unused capacity. To further ease the burden of capacity planning, you can easily add more capacity as your business requirements dictate.

On-demand storage capacity also enables you to buy only the storage you need. This allows you to optimize your storage usage by eliminating separate, underutilized hard drives housed on physical servers or underutilized storage arrays. Linux virtual services leverages dynamic storage services to help provide discrete and reliable storage.

Complementary managed services are also available to help you optimize your complete environment, and we can customize services to fit your specific needs.

Offering mainframe performance without high up-front costs

IT managers are all too familiar with the dilemma of building and maintaining an IT infrastructure while facing limited budgets, multiple workload types, and the need for high availability and security. IBM zSeries mainframe servers provide power and performance, but capitalizing on the strength of mainframe-class servers has traditionally required a large, up-front capital expense and specialized IT expertise.

IBM Managed Hosting - Linux virtual services makes the power and reliability of the IBM zSeries mainframe available to you without requiring you to purchase the physical hardware. With Linux virtual services, you can avoid making a substantial up-front investment while capitalizing on the benefits of capacity on demand. In addition to lowering your up-front costs, you can leverage a state-of-the-art hosting infrastructure. Our world-class IBM e-business Hosting Centers™ provide redundant facilities and around-the-clock monitoring to help ensure virtually continuous performance and network availability.

The security-rich zSeries server platform is the same platform already trusted by many of the world's largest organizations to keep their mission-critical applications running around the clock. As the foundation of the zSeries platform, the revolutionary z/Architecture™ provides optimal flexibility in selecting, building and rapidly deploying applications across your e-business infrastructure, while taking advantage of zSeries availability to ensure that your business is always up and running.

Gaining a competitive edge through rapid deployment

Speed has always been crucial in business, but e-business has pushed the need for speed to new heights. IBM Managed Hosting solutions can help you improve your competitive position through rapid service deployment. As an e-business on demand offering, Managed Hosting - Linux virtual services enables you to deploy additional virtual servers quickly once the initial service has been implemented. You also have a choice of "ready-to-go" server platforms, including an Apache-based Linux Web server, DB2 Universal Database™ and WebSphere—plus a managed Linux server environment that is ready for your own applications. The reduced time-to-market from concept to service delivery can help you achieve a first-mover advantage or fast-follower capabilities.

Handling usage peaks with flexible options

Workload surges, anticipated or unanticipated, can cripple your company if the surge exceeds the limits of your capacity. Although paying for extra capacity is an unattractive option, until now it has been the only way to safely handle the workload surges you expect as well as those you don't.

Managed Hosting - Linux virtual services includes a ten-percent additional processing capacity per virtual server at no extra charge. This enables you to commit to a certain number of service units, based on the average of your anticipated processing needs, and still handle surges in your workload. For further flexibility, Linux virtual services allows you to schedule additional capacity for workload peaks, such as batch processing, without paying for capacity beyond your commit level.

Reducing IT expense by consolidating your workload

Individual Intel-based servers are relatively inexpensive, but the associated operating expenses can quickly multiply. Software resources need to be duplicated for each server, and all server communication is done through external networking hardware—significant factors that can require a great deal of time and expensive systems management skills to handle.

Consolidating the workload of your distributed system onto virtual servers on a zSeries running Linux helps you improve system reliability while simplifying system maintenance and administration. Because your workload runs on virtual servers, your physical requirements are removed—you don't need to purchase a mainframe or a physical cage. By cutting the number of potential points of failure, workload consolidation gives you greater availability and reliability while reducing cost. Delegating hosting and management of your solution to IBM enables you to focus on the long-term growth of your company and frees your IT staff from time-intensive operational issues.

Migrating to the Linux operating system can also help improve the performance of your IT environment. The world's fastest-growing server operating system—in large part due to its inherent cost benefits, scalability and reliability—Linux has a proven record as an enterprise-class operating system, providing the foundation for more than 2,800 independent software vendor (ISV) applications. Choosing Linux virtual services enables you to leverage these Linux benefits and reduce your dependency on proprietary operating systems.

Relying on the experience of a global team

The people of IBM Global Services have extensive experience deploying and managing hosting solutions for companies of all sizes. IBM Managed Hosting - Linux virtual services builds on this foundation of experience and leverages our industry-leading support for Linux and the zSeries platform. You choose the amount of compute capacity, storage capacity and network capacity you need, and IBM does the rest. Provided through our world-class IBM e-business

Hosting Centers, IBM Managed Hosting - Linux virtual services gives you the equivalent to a physical infrastructure in a virtual environment—all backed by the expertise of IBM e-business Hosting™ professionals.

For more information

To learn more about Managed Hosting - Linux virtual services, contact your IBM sales representative or ask your IBM Business Partner about IBM e-business hosting, and visit:

ibm.com/e-business/hosting



© Copyright IBM Corporation 2002

IBM Global Services
Route 100
Somers, NY 10589
U.S.A.

Printed in the United States of America
06-02
All Rights Reserved

IBM, the IBM logo, the e-business logo, the e-business hosting logo, DB2 Universal Database, e-business on demand, e-business Hosting, IBM e-business Hosting, IBM e-business Hosting Centers, The Next Utility, WebSphere, z/Architecture and zSeries are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both.

Intel is a trademark of Intel Corporation in the United States, other countries, or both.

Other company, product and service names may be trademarks or service marks of others.

References in this publication to IBM products or services do not imply that IBM intends to make them available in all countries in which IBM operates.