

**eGuide:**

## **IBM System X Game Change - High Performance, Affordable, Easy to Deploy Servers**

In today's business world, companies that fail to use innovative IT solutions incur huge costs, struggle with inefficiencies and have poor bottom lines. CFOs, VPs and heads of IT of medium-sized businesses need to assess the needs of their companies and recommend working hardware and software solutions that will make the companies more competitive.

IBM has developed IT solutions to help mid-sized businesses be more competitive, reduce costs, drive efficiency and improve their bottom line. By rapidly embracing innovative technologies by IBM, your company has greater chances of succeeding in the market.

Just like larger enterprises, mid-sized companies face the challenge of managing costs and data but with fewer resources. To solve these problems, you need solutions that are designed, sized and priced with your business in mind. One of the solutions that you should consider for your organization is the IBM System X Server.

### **How to Choose the Right IBM System X Server for You**

IBM System X offers exceptional value, quality, performance and ease of use, helping you to stay ahead of your business and IT challenges. With this server, you have a solution that is tailored for your needs today and that is flexible for future challenges.

There are compelling reasons for investing in a System X server. The server is competitively priced and comes ready to be used and work the way you expect it to. By purchasing the server, you get a high-value solution both in terms of acquisition price and total cost of ownership (TCO) over the life of the server. Moreover, by choosing an IBM System X server, you are also partnering with IBM, a trusted global IT company.

The two most common System X servers are the IBM System X3650 M4 Express server and the IBM System X3100 M4 Express server. Below is an overview of the servers:

#### **IBM System X3650 M4 Express Server**

This powerful, flexible two-socket rack server is tailored for business-critical applications and cloud computing.

- Industry-leading reliability and increased performance to support growth
- Up to 80 percent higher processing power generation two-socket systems
- Four times more memory than previous generation two-socket systems
- Higher networking bandwidth

### **IBM System X3100 M4 Express Server**

This compact, quiet tower server is optimized for small business environments. Its core benefits include:

- Low-cost business productivity
- Wide range of processors means you get the best choice of performance versus savings for your business
- Ability to run your business from beside your desk
- Increased security for high-traffic spaces
- Memory, storage and input/output (I/O) flexibility to help handle your future needs

### **Why Choose System X for your Business**

System X servers are built with IBM's innovation around industry-standard components. The solutions in System X are compiled from rack-optimized servers designed for business productivity to scalable enterprise x86 servers to entry-level tower servers. You can easily deploy and manage IBM servers for your company and benefit from leading technology, leadership quality and service.

As business needs change in the 21<sup>st</sup> century and competition and innovation heats up, it has become increasingly important for IT providers to offer solutions that address spiraling costs and inefficiencies due to underutilization of x86 servers. Moreover, to be able to meet the scaling needs of your company as the demand for new applications and services increase, new innovation is required. This is where System X servers come in.

System X servers are built to significantly expand the capabilities of x86 servers by leveraging IBM's innovation and technology. There are three main design goals that make System X a better solution than the x86 servers.

#### **i) Maximize memory**

Other servers use the same processor, but System X servers offer memory expansion. This means maximum performance for many workloads. The ability of System X to expand the memory independently of the processor means it can be configured to efficiently handle the needs of the business. For example, you do not need to add another expensive or underused processor simply because you want more memory for your existing applications.

## **ii) Minimize costs**

System X has reduced the cost of acquiring enterprise servers while preserving the ability to expand the server to greater capabilities. With IBM, you do not have to buy anything upfront as is the case with some competing servers. Moreover, you can extend System X server memory as you need.

## **iii) Simplify deployment**

IBM System X servers have single points of management and remote administration. This means they can be administered easily, deployed faster and qualified in a simpler way. The eXFlash SSD technology used for the servers allows users to drastically reduce drives and cables. With IBM's innovation, your company will be ahead of the competition through the affordable IT solutions that reduce your costs. The savings you accrue from the cost reduction can be channeled to other parts of the company to improve efficiency in project execution and increase your bottom line.

## **iv) Reduce costs and energy efficiency**

As the needs of your company grow, it becomes important to take stock of the energy used in the data center. The heat that the servers produce can significantly increase your costs. The good news is that with System X, you can control power usage based on the needs of your company. The servers help to increase performance per watt. Therefore, you can budget and control the amount of power consumed by the servers.

When System X servers are used together with BladeCenter servers, you can decrease the number of physical assets you need to watch over and increase the utilization of hardware. Using IBM Virtualization Manager, you can manage consolidated and virtualized environments easily through a single interface. The Virtualization Manager enables you to manage your company's virtual systems from almost anywhere.

## **v) Improve application performance**

The IBM System X server is unrivalled in application performance. The servers offer the industry's best performance per workload, ensuring maximum utilization. Moreover, it is versatile, scalable and can be optimized to grow as the needs of

your company grow. With a data center that is more reliable and easy to manage, your employees will have more time to focus on activities that will help to grow the business.

### **Highlights of IBM System X**

- a) The IBM System X server is one of the infrastructures that today's small and medium sized enterprises need to stay competitive. The server delivers quality dynamic infrastructure that you can trust.
- b) The server improves performance and reduces operating costs, helping you to improve your bottom line. Notable performance features of the System X server include increased utilization, virtualization, simplified management, energy efficiency and higher performance.
- c) With the servers, companies can manage present and future risks in challenging economic conditions.
- d) The servers help to improve services through an end-to-end approach to systems' management.

With the new generation System X server, businesses can reduce their costs through management, virtualization and scalability capabilities. As businesses become more interconnected and must manage large data pools without increasing costs, the need for innovative ideas and solutions becomes even more real. The IBM System X server is the answer to modern data management challenges of medium sized companies.

System X servers can help a company improve service and lower costs while still managing risk.

### **Benefits of the IBM System X Server**

Some of the benefits of using IBM System X servers include:

#### **i) Cost Reduction**

The System X is powered by IBM's X-Architecture in both innovation and industry standards, which helps to significantly reduce operating costs. Many companies looking to manage their data efficiently are concerned with the energy consumed by the servers in the data center. System X servers are built with IBM's innovative technology that helps to lower ownership costs and energy consumption.

#### **ii) Improved Service**

As you purchase more servers for your data center, it can become difficult to manage them. Unmonitored servers can lead to increased costs due to underutilization or inefficient operations.

By purchasing the System X, you are assured of higher performance for your servers thanks to IBM's dynamic management tools and world class service and support. The tools enable system administrators to effectively monitor the company's servers and set them up to operate to changing business needs.

The standard System X comes with an innovative system management tool that will help you to achieve greater control, integrated visibility and automation across all your business and IT infrastructure. You can use the system management tool to improve the reliability and uptime of your servers. This will in turn ensure the quality of service delivered while maximizing your return on investment for the lifetime of the asset.

### **iii) Managed Risks**

With System X, businesses can rapidly adapt and respond to both risk and opportunity to accelerate growth, reduce the cost of doing business, and maintain continuous operations. The System X server has proactive management tools such as Predictive Failure Analysis and light path diagnostics which help system administrators to quickly identify potential hardware problems before they happen. The tools also make it easy for the administrators to fix the problems identified. The result is an optimum operating server that keeps your systems up and running ensuring no workflow processes are interrupted.

### **iv) M4 Business Servers**

Organizations can meet their business challenges by using the family of M4 Business Solutions from System X that include tower and rack servers. The flagship servers from System X offer excellent balance of uptime, density, flexibility, performance and cost efficiency for critical business processes. Examples of workloads that can be managed with M4 Business Solutions include memory capacity, I/O processes, and a new value of demand features.

System X uses a variety of virtualization solutions and operating systems that allow businesses to simplify and consolidate heterogeneous workloads on a single platform. You can boost your IT resiliency and reduce your costs by using the virtualization on System X.

### **v) Integrated Solutions**

The cost of deploying solutions for cloud environments, analytics and technical computing can have a significant impact on your company's IT cost. To reduce these costs, companies can leverage on IBM Intelligent Cluster solution.

IBM Intelligent Cluster helps to reduce the complexity of deploying pre-integrated solutions that have been built with the best industry components and with optimized solution design. With the solution in place, you can focus on the core efforts of maximizing your business profits instead of wasting valuable resources on installing, optimizing, designing and supporting the infrastructure that is required for the proper functioning of various business processes.

#### **vi) Higher Efficiency Virtualization**

You can purchase System X servers in BladeCenter and rack form factor with the infrastructure, management, storage, networking and servers. This complete solution is tested to integrate with various platforms that are unique in their ability to speed up deployment and lower the risk of more complex virtualized data centers.

The storage device, network and servers are designed to be reliable and work together to produce the highest performance. The complete system is designed with intuitive management features with simplified steps from switching on the power to maintenance. With the full System X infrastructure, companies can quickly realize their return on investment.

#### **vii) Move Operations to the Cloud Easily**

System X virtualized platforms can be easily moved to the cloud to be integrated with other applications made or supported by IBM. The virtualized platforms are based on VMware Enterprise and make it easy to request, provide and deploy both workloads and resources automatically and securely through a self-service portal.

Companies can dramatically reduce the total cost of ownership by taking their applications to the cloud or using cloud services.

### **IBM System X Server: The Best Server for Medium Sized Businesses**

If you are looking to take advantage of the next big opportunity, your IT environment should also help you meet your goals. IBM System X servers are built on the smarter premise that your business should be supported by infrastructure that is reliable, offers high performance and can be easily scaled as the needs of your business change. IBM's System X servers are tailored to help you innovate and thrive.