

# The Fujitsu BX400 PRIMERGY Server Keeps the Focus of Growing Midsized Companies Where It Belongs: On the Business

By DCIG Lead Analyst Jerome M Wendt



**As the economy rebounds, midsized companies looking to expand their business must usually first grow their datacenter. However datacenter growth introduces new levels of complexity that cast a long shadow over future business expansion as managing this technology can take the focus off of the business. The Fujitsu PRIMERGY BX400 server changes that model.**



## Company

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## Industry

Enterprise Servers and Storage

## Challenges of Datacenter Growth

- Economic rebound prompting IT infrastructure investment and growth
- Datacenter infrastructure jargon specialized and complex to understand
- Datacenter technologies complex to master and manage
- Managing this complexity takes focus off of the business

## Solution

Fujitsu PRIMERGY BX400 Server

## Benefits

- Blade servers may be configured to host either servers or storage
- Can start small and scale in whatever way the business demands
- No storage networking so no jargon to learn or skills to master
- All servers and storage virtualized
- Wizard-driven setup and management

Fibre Channel. Global name spaces. iSCSI. LUNs. NAS. Zoning. These terms are found every day in large businesses that are growing and/or consolidating their datacenters in support of their business. Large enterprises have already implemented these technologies but midsize companies first face the hurdle of having to master the complexity of larger datacenter deployments before they can confidently expand. The Fujitsu BX400 PRIMERGY blade server removes these long shadows of datacenter complexity while facilitating both IT consolidation and business growth.

## Solid IT Infrastructure Needed to Meet Anticipated Economic Rebound

Business growth for both large and midsize enterprises almost always means first growing their datacenters which is becoming more important as economies in the US and worldwide rebound.

A March 25, 2011 article in the *New York Times* [reported](#) that the gross domestic product (GDP) of the US economy grew at an upwardly revised annual rate of 3.1% in Q4 2010 led in large part by an increase in consumer spending.<sup>1</sup>

Economists are also increasingly upbeat. Ryan Sweet, a senior economist at Moody's Analytics, [says](#), "We know we will hit speed bumps but the recovery will gather momentum through the year and into 2012."<sup>2</sup>

So it is incumbent upon businesses that have been holding back on IT infrastructure upgrades to get on the bandwagon to meet these forthcoming demands. Upgrades that should get top priority include server consolidations, desktop and server virtualization and networked storage.

## Growing Datacenters Translates into Real Problems

Making investments in these areas makes sense, especially for large enterprises with large datacenters. But from the perspective of midsize businesses who are looking to expand their datacenter in support of anticipated business growth this is challenging for a number of reasons.

First and foremost, the networked storage infrastructure needed to support datacenter growth is accompanied by jargon that is unfamiliar to many savvy IT staff. iSCSI, fibre channel, LUNs, storage virtualization and zoning are all typically needed to deliver the robust, flexible storage infrastructure that growing midsize businesses now need. However the learning curve associated with mastering these technologies can be long and tedious.

Second, managers want to understand what it is they are buying and how these purchases positively impact the bottom line. While terms like "cloud" are aptly used to describe the benefits that these new datacenter infrastructures can deliver, it's challenging to explain why one networked storage protocol is better than another or why various layers of storage virtualization are needed to deliver on these benefits.

At an even more fundamental level, midsize business managers should not have to focus on these items. Their focus should remain on business growth, cost containment and better management of existing people and resources.

This is not possible if they first need to grasp how these technologies work and this in turn leads them to understandable reluctance to commit to these types of changes in their IT infrastructure.

***The Fujitsu PRIMERGY BX400 creates a datacenter in a box with server and storage blades that virtualizes these components and keeps the management and maintenance of them simple.***

— Jerome Wendt, DCIG Lead Analyst

## The Fujitsu PRIMERGY BX400: The Datacenter in a Box

It is these concerns that the Fujitsu PRIMERGY BX400 is designed to address. VMware has for some time referred to its server virtualization solution as a "datacenter in a box."<sup>3</sup> Fujitsu now extends this "datacenter in a box" concept to include both servers *and storage* with its PRIMERGY BX400.

The PRIMERGY BX400's inclusion of both servers and storage in a single unit has a number of features that should resonate with managers of midsize businesses for both financial and technical reasons.

- **It's practical.** A midsize business manager's idea of a "dedicated space" for use as a datacenter may be a broom closet, a spare room or even a few square feet of office space. The PRIMERGY BX400 is designed with those limitations in mind. It is small enough to fit under a desk plus it includes wheels so it can be moved around or pulled out for easy access and maintenance.
- **It's flexible.** The PRIMERGY BX400 can scale up to eight (8) blades that can be used for either server

or storage as a midsized business does not always know how its business is going to grow. Maybe it is going to need more application servers or, conversely, fewer application servers that store a lot of data. The point is that a company can start out with as few as two blades (one for server and one for storage,) consolidate the physical servers and storage that it does own on these blades and then scale the PRIMERGY BX400 in the manner that best meets those needs.

- **Proven, reliable technology.** Reliability in the systems that a midsized business uses is paramount as any downtime can easily result in lost sales and dissatisfied customers. To address these concerns the PRIMERGY BX400 is part of the proven Fujitsu PRIMERGY BX family of blade servers that can host either server or storage blades without requiring any cabling.

Existing or new physical servers may then be virtualized using an industry standard server virtualization platform such as VMware. To virtualize storage, an integrated virtual storage appliance hosts NetApp's proven Data ONTAP-v storage software. Data ONTAP has been used for years in business critical environments so it has the stability and reliability that managers expect and need in order to confidently run their business on it.

### Fujitsu BX400 Plus Data ONTAP-v Equals Optimized Management

Data ONTAP-v also includes a number of features that enable it to optimize available storage capacity stored on the PRIMERGY BX400 as well as protect data stored on it. For example, Data ONTAP-v thin provisioning helps to ensure that only storage capacity with data stored on it is consumed while other storage capacity remains in a free pool.

On the data protection side NetApp Snapshot technology and application level integration provides an "in-the-box" solution that can both backup and recover application data. Further, because Data ONTAP-v supports both block and file storage networking protocols, it can present storage to applications in the manner that best fits their needs.

However possibly the most important features on the PRIMERGY BX400 may be the ones that it **DOES NOT** possess. All storage network connectivity is internal to the PRIMERGY BX400 so there is neither any new datacenter specific jargon to learn nor any requirements to install a dedicated storage network. This eliminates the need to master technologies like fibre channel and iSCSI as they are not needed to manage a PRIMERGY BX400 deployment.

The PRIMERGY BX400's built-in wizards and dashboards complete the simplicity of the solution as they perform all server and storage management. This eliminates the need to create and maintain cumbersome Excel spreadsheets that are normally associated with managing networked storage implementations.

### The Fujitsu BX400: Technical Innovation with a Business Focus

The economy may not be great but a recovery is occurring and midsized businesses need to respond with the right IT infrastructure to keep up with these new demands. The Fujitsu PRIMERGY BX400 offers a number of cutting edge features and technologies that enable midsized businesses to introduce the right data-center technology into their environments without the cost, complexity and overhead normally associated with such a solution.

The Fujitsu PRIMERGY BX400 creates a datacenter in a box with server and storage blades that virtualizes these components and keeps the management and maintenance of them simple. But maybe most importantly the PRIMERGY BX400 delivers on the objective that midsized business managers are most interested in achieving: keeping their focus on the business. ■

### About DCIG

DCIG analyzes software, hardware and services companies within the storage and ESI industries. DCIG distributes industry, company and product analysis by way of viral marketing and community building using the burgeoning blog infrastructures created worldwide.

### About Fujitsu

Fujitsu is a leading provider of ICT-based business solutions for the global marketplace. With approximately 173,000 employees supporting customers in 70 countries, Fujitsu combines a worldwide corps of systems and services experts with highly reliable computing and communications products and advanced microelectronics to deliver added value to customers. Headquartered in Tokyo, Fujitsu Limited (TSE:6702) reported consolidated revenues of 4.6 trillion yen (US\$50 billion) for the fiscal year ended March 31, 2010.



<sup>1</sup> "U.S. Growth More Robust Than Earlier Estimated." 25 Mar. 2011. Web. 7 Apr. 2011. [http://www.nytimes.com/2011/03/26/business/economy/26econ.html?\\_r=2](http://www.nytimes.com/2011/03/26/business/economy/26econ.html?_r=2).

<sup>2</sup> Ibid.

<sup>3</sup> *Creating a Portable Data Center "in a Box" Using VMware Infrastructure 3.* VMware, 2006. Web. 7 Apr. 2011.



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