FUJITSU

CASE STUDY
Emory Healthcare partners with Egenera and Fujitsu

» With Egenera's Pan Manager on Fujitsu blade servers, I can run and add, replace and repair server capacity in minutes «

Bill Akins, Senior System Specialist, Emory Healthcare

As the largest and most comprehensive healthcare system in Georgia, Emory Healthcare is in the business of making critical, life-saving decisions every day. Emory's healthcare providers are constantly on the move – room-to-room, bed-to-bed, patient-to-patient – so increasing employee mobility and data / application availability to clinicians is extremely important. To support its staff's need for online access anytime and anywhere throughout its health network, Emory is virtualizing its desktops to enable its doctors and nurses to be mobile while offering guaranteed access to critical systems for patient care.

The centralization and virtualization of the desktop requires Emory's data center IT infrastructure to be extremely reliable and resilient yet manageable, flexible and agile.

To meet this diverse set of requirements, Emory is leveraging Egenera's PAN Manager software on Fujitsu PRIMERGY BX900 blade systems to manage up to 25,000 virtual desktops, with 4,000 to 5,000 concurrent yet constantly rotating users – all with a single system administrator. The combination of Egenera's PAN Manager software on a Fujitsu Blade Frame platform delivers a virtual desktop infrastructure (VDI) that provides Emory the confidence and ability to keep the healthcare system up while equipping the organization with the ability to scale the services as it continues to grow.

"*With Egenera's PAN Manager on Fujitsu blade servers, I can run a script and add, replace or repair server capacity in minutes,*" says Bill Akins, Senior System Specialist at Emory Healthcare. "*In addition to the infrastructure automation and seamless integration, I have seen an increase in both cost savings and my own efficiency. Egenera's open software coupled with Fujitsu innovative blade products enables us to work within our existing environment and upgrade the blade environment when we feel the need. The Egenera/Fujitsu choice was an easy and smart decision to make.*"

Emory is in the process of scaling out the solution and, by the end of 2012, expects to have 4,000 to 5,000 concurrent users accessing desktop services remotely. As a result of its VDI initiative, Emory Healthcare has realized significant cost savings and avoided unnecessary capital and operational expenses.

THE CUSTOMER

Country: USA, Atlanta, Georgia
Industry: Healthcare
Founded: 1905
Employees: 10,000
Website: www.emoryhealthcare.org

EMORY HEALTHCARE

THE CHALLENGE

Emory Healthcare needed to provide remote desktop services to enable employee mobility, provide remote and secure access via multiple devices, and lower desktop administrative costs by 50 percent.

THE SOLUTION

The solution that Emory instituted included Citrix XenDesktop for desktop delivery with Fujitsu PRIMERGY BX900 blade servers in the data center and PAN Manager with vBlades for hosting and managing the back-end environment.

THE BENEFIT

- Physical and virtual resources can be dynamically and rapidly provisioned to scale infrastructure and meet demand for desktop services.
- Failures are automatically recovered, including both local failures of hardware, OS and hypervisor as well as outage of the entire data center.
- Service levels are improved through quality of service management and automation.

Additionally, Emory has seen a dramatic improvement in the accessibility of desktop services as well as an 80 percent reduction in data center complexity.

Additional specific benefits of the joint solution include:

Agility in the Infrastructure

From a hardware point of view, PRIMERGY BX family is designed so that chassis components can be used throughout the family to accommodate changing business requirements quickly and easily. With space for up to 18 Server Blades, eight Connection Blades, six power supply units and two management boards in a 10U high chassis, the PRIMERGY BX900 blade system has the highest density available. Combined with chassis interconnectivity the system allows for the most flexible scaling that ensures flexibility in growth scenarios.

From a software perspective, Egenera PAN Manager software on Fujitsu blades allows Emory Healthcare to quickly deploy new systems, provision patches or change applications as requirements change or new desktop infrastructure is needed. Additionally, with PAN Manager changes can be easily rolled back if needed. This allows IT to return the environment to the original configuration quickly and with little to no impact on the end-user. This prevents users from experiencing hours of unexpected downtime that can result from compatibility issues that arise during routine patch roll outs.

Reliability and Availability

In a critical patient care environment where managing health and saving lives is on the line, Emory Healthcare cannot risk an outage of key IT services. It is important for Emory to have reliable and protected infrastructure on which to host and access its critical patient care applications. The BX900 blade technology features a fully-redundant design that completely protects itself from possible failures. This, coupled with PAN Manager, which provides the service level management and business continuity automation, enables Emory to assure that desktop services are always available so Emory's providers can administer patient care as they travel throughout the health system environment.

Productivity

With Egenera's PAN Manager, a single person can manage Emory's VDI environment. PAN Manager provides a "single pane" view of the entire environment, which means hundreds of machines can be seen from a single user interface. It also means that, in just a matter of minutes, Emory can access, manage and resolve issues at every layer on the environment – down to individual desktop VM's.

The challenge

Emory Healthcare has over 10,000 employees across more than 20 healthcare centers in Georgia. Providing reliable and timely patient care with a highly mobile workforce across an IT infrastructure with over 10,000 personal computers and over 600 mobile workstations provides a set of operational and administrative challenges.

Emory needed to provide remote desktop services to enable employee mobility, provide remote and secure access via multiple devices, and lower desktop administrative costs by 50 percent. Criteria for the selection included:

Ease of Maintenance

As a 24/7 full-time business, Emory's IT infrastructure must support maintenance work without any outages in service. The IT administrator must have the ability to upgrade a desktop without users noticing a difference or experiencing any downtime.

Everyday Reliability

In an environment where users rely on the IT infrastructure for every day patient care, it is important that hospital staff never have to think about IT as the expectation is it will work seamlessly without fail.

Highly Available Services

It was crucial that Emory have an infrastructure solution that provided, via a single product, monitoring, management, and automation functionality to guarantee highly available desktop services.

The solution

The solution that Emory instituted included Citrix XenDesktop for desktop delivery with Fujitsu PRIMERGY BX900 blade servers in the data center and PAN Manager with vBlades for hosting and managing the back-end environment. The combination of PAN Manager on Fujitsu PRIMERGY BX900 Blade Server turned the physical servers into a cohesive managed fabric with a shared processing pool from which:

- Physical and virtual resources can be dynamically and rapidly provisioned to scale infrastructure and meet demand for desktop services
- Failures are automatically recovered. This includes both local failures of hardware, OS and hypervisor as well as outage of the entire data center with recovery times measured in minutes
- Service levels are improved through quality of service management and automation

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