

“I highly appreciate the way it enables smooth use of medical image data in the electronic medical record system. It also eliminated frustrating system hang-ups and slow startup.”

Dr. Noyuri Kizuki
Director of Kizuki Clinic

Improve usability of electronic medical record with compact PRIMERGY server with built-in SSD

At a glance

Country: Japan

Industry: Medical

Founded: 2003

Website: www.kclini.daa.jp

Challenge

The Kizuki Clinic wanted to improve the usability of its electronic medical record system.

Solution

In the summer of 2018, the Kizuki Clinic upgraded the servers to FUJITSU Server PRIMERGY TX1320 M3 (PRIMERGY TX1320 M3) in order to improve the electronic medical record system's usability.

Benefits

- The new servers are expected to advance “medical care that supports each and every patient,” one of the clinic's characteristics, and to serve as infrastructure for community healthcare coordination.

Customer

Kizuki Clinic is a private clinic that was established in the city of Ritto, Shiga Prefecture in March 2003. It specialises in Surgery, internal medicine, anesthesiology, and gastroenterological surgery as well as pediatrics, orthopedic surgery and dermatology to a limited degree.

Products and Services

- FUJITSU Server PRIMERGY TX1320 M3

Solving a wide spectrum of health problems as “primary care doctor in the local community”

Kizuki Clinic’s guiding principle is to “consult on all manner of health problems as a primary care doctor in the local community.” The Southern Lake Biwa area, where the clinic is located, has become increasingly populated because of its convenient access to Kyoto, Osaka and Kobe as well as its superior administrative services. Since many families with children are moving to the city, the clinic also sees children even though it is not specialized in pediatrics. In addition, entrusted by the city of Ritto to carry out its program to provide care to children who are recovering from illness, the clinic looks after them at a nursery named “Child House.”

Dr. Noyuri Kizuki, the clinic’s director, “loves trying out new things.” Upon opening her clinic, she introduced HOPE series, Fujitsu’s electronic medical record system for clinics. She utilized this system to accurately understand information on more than 10,000 patients individually.

Recently, use of medical images (e.g., X-ray images, computed tomography images and endoscopic images) has grown, the clinic now handles an ever-increasing volume of image data. However, the clinic faced the issue that its conventional servers took a lot of time to read and write image data in the electronic medical records, which may have increased patients’ waiting times.

“Since my clinic emphasizes the importance of communication with patients, the waiting time tends to be long. To prevent the waiting time from increasing further, I had another image processing system built in addition to the electronic medical record system, and I used both systems to treat patients,” said Dr. Kizuki, reflecting on the past.

To satisfy Dr. Kizuki’s needs, Canon ITS Medical, a Fujitsu partner that has done business with the clinic since its opening, proposed the use of Fujitsu PRIMERGY TX1320 M3 servers as an upgrade in the summer of 2018.

Recognize benefits of SSD, including read/write speed

Mr. Nariyuki Ohata, who works at Sales Promotion Office, Second Solutions Unit, Canon ITS Medical, explained the intention behind proposing PRIMERGY TX1320 M3: “Dr. Kizuki directly requested that we enable smooth use of image data in the electronic medical record system. However, considering that she runs the clinic by herself in a relatively small premise, it was necessary to ensure a small footprint,

low noise level, low heat level and low power consumption. I found that PRIMERGY TX1320 M3 satisfies all of these requirements quite well.”

PRIMERGY TX1320 M3 is a server suitable for office installation due to its compact dimensions of 98 mm x 400 mm x 340 mm. “Another point to note is that either hard disk drives (HDDs) or solid state drives (SSDs) can be selected for the internal storage,” said Mr. Seiji Ichimori, Director of Sales Promotion Office, Canon ITS Medical.

“Since SSDs use flash memory, they offer many benefits compared to HDDs, including fast reading and writing of images and other large data in addition to low power consumption and high impact resistance. Conversely, SSDs have a limited write capacity for which reliability is guaranteed, which is called the ‘guaranteed write capacity.’ We measured the volume of images and other data used in a year and confirmed that the SSDs have a sufficient margin after taking into account future increases in patients, so we could confidently propose introduction of the product.”

Clerical efficiency improve without any trouble after introduction

A year has passed since the introduction of PRIMERGY TX1320 M3, and no major trouble or service interruption has occurred. Regarding the improvements provided by the new server environment, Dr. Kizuki commented, “I highly appreciate the way it enables smooth use of medical image data in the electronic medical record system. It also eliminated frustrating system hang-ups and slow startup. Frankly speaking, the length of time that a patient waits to be seen has not changed noticeably because it is not caused by servers but rather by me emphasizing communication with patients. That said, the improved clerical efficiency has made it possible for our staffs to go home earlier than before.” The improved clerical efficiency is mostly attributed not only to server performance but also to customization of the electronic medical record system, including enhanced receipt checking functions. “This rapid, smooth customization was only possible thanks to the aforementioned benefits of SSDs,” said Mr. Ichimori.

The clinic is considering employing additional doctors and a medical secretary in order to see more patients. The specifications of PRIMERGY TX1320 M3 are high enough to easily build an environment to enable smooth coordination among a larger number of data entry staff members, thereby supporting the clinic into the future.

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