



Supporting medical imaging in the cloud

Carestream Health boosts the capacity of its cloud-based medical imaging service with the Intel® Xeon® processor E5 family



Carestream

“The data-intensive nature of our cloud-based PACS service places great demands on our data center infrastructure. With the Intel® Xeon® processor E5 family, we can significantly boost the processing output that can be achieved with each server. This will help us continue to deliver the scalable, high-performance platform we need to meet rising user demand while maintaining the quality of our service.”

Seffi Markov
Director of PACS Research & Development
Carestream Health



Company

Carestream Health is a global leader in medical imaging IT. It provides workflow solutions such as Picture Archiving and Communication Systems (PACS), Vendor Neutral Archiving (VNA) and a universal imaging viewer for referring physicians. Besides supplying on-site solutions, Carestream has been providing cloud-based services for the last five years, managing these via a cost-per-procedure operational model. With 10 data centers worldwide, Carestream’s Cloud Services enable scalable data center design, allowing broader and secure access to imaging results - including a zero-footprint viewer that can be used on a wide range of end-user devices.

Challenge

Providing access to medical imaging via the cloud is a compute- and data-intensive process. Even excluding growth in the number of users of its services, Carestream regularly needs to increase the processing power at its disposal to account for ever-more-detailed images and the larger file sizes they bring. Combined with rising global demand for its cloud services, this makes it essential for Carestream to have a powerful, scalable data center platform that can accommodate more users without compromising service quality.

Solution

As a regular user of the latest processing technologies, Carestream has a long-standing relationship with Intel that enables it to trial upcoming processor updates. It identified the potential of the Intel® Xeon® processor E5 family to help it boost the processing capacity of its cloud computing service. Carestream was interested in testing the new technology to determine how it could serve more users simultaneously while delivering top service.

Benefits

Carestream’s tests showed the Intel Xeon processor E5 family could help it meet the challenges of serving more users and handling more data-intensive workloads. Compared to the previous generation of Intel Xeon processors, the latest models can process images up to 28 percent faster¹. In particular, the parallel processing capabilities, support for Intel® Advanced Vector Extensions (Intel® AVX) and high memory availability of the Intel Xeon processor E5 family enable quicker image rendering. As a result, Carestream has determined that servers powered by the Intel Xeon processor E5 family can handle 24 percent more users than those with previous-generation processors.

Going forward, Carestream will be able to leverage the enhanced processing capabilities of the Intel Xeon processor E5 family to better support its growing customer base in the cloud. Carestream also plans to enhance its overall storage infrastructure with new hardware powered by the Intel Xeon processor E5 family. This data center optimization will ensure service levels are maintained and that Carestream’s customers will reap the benefits of the new performance enhancements.

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