

January 7, 2018 – Hans Steeman

Panasas - a stable HPC scale-out NAS factor in a turbulent world

The demand for HPC solutions remains stable and the American company Panasas has been able to play a significant role there for some time (17 years). A company that doesn't go along with the latest hype, and rather operates steadily with a limited budget, turns out to be an icon in the market that manifests itself firmly. It specializes in high-performance computing (HPC) scale-out NAS and has more than 500 clients spread over 50 countries. At the California-based headquarters in Sunnyvale, we spoke with Panasas CEO and President Faye Pairman (photo).

The company was founded in Pennsylvania (Pittsburgh) and has no constant battle with investors and difficult shareholders to generate high growth figures. For more than 17 years, the high-performance computing (HPC) and supercomputer storage provider has been privately owned.

Led by a female CEO

Since 2010, the CEO and President Faye Pairman, one of the few female CEOs in the world, is the driving force behind the company. The difference between Panasas and many other IT companies in Silicon Valley is the decent, somewhat conservative, appearance. You immediately get the feeling that every step is well thought out and does not go along with the latest hype. This does not alter the fact that product innovations continue as usual, but now again in a balanced way. An architecture has been introduced, and recently renewed, with a parallel file system array.

Thanks to this concept, where each blade is equipped with two hard disks, an SSD and a system card with an Atom controller, the products can be tailor-made for each customer. Because of this flexibility, Panasas can offer the perfect solution to any company, no matter the storage capacity and processing power required.

Storage

This optimization is particularly relevant now that the market of high-performance computing is also undergoing changes. Increasingly, the work consists of processing large numbers of small files and no longer small numbers of large files. This development allows storage nodes to get more access to retrieve and restore files, and the flash drives are there to help with this process. However, the calculation units must also contribute to the processing of the growing amount of metadata that goes with the files. These challenges occupy Panasas engineers.

Blades

This will become visible in the coming period, for example by integrating more drives per blade (and using more industry standard hardware), but also a mixed mode with configurations helps to increase flexibility. The range can consist of fully flash-based performance blades, blades with extra capacity in terms of storage or just computing power. This is the way one wants to anticipate the changing market. In any case, the system architects have plans in the works.

Faye Pairman regularly underlines that the company is supported by a relatively conservative investor and that it is a relatively small company with 100 employees. That imposes restrictions on growth. "We are firmly paving the way in the USA, and are somewhat quieter in the rest of the world." The market is globally divided as 69% USA, 21% EMEA and 10% APAC: according to Faye. Resellers and channel partners (65% of sales) have to play a bigger role outside the USA. The Panasas growth continues and people try to become less dependent on the select group of high-performance (government) users. A broader target group creates more stability. The recently announced optimizations in the portfolio respond to this. The HPC architecture was too far ahead of the market for those customers. That is changing now.