

“We run simulations with enormous log files within a cloud environment where there are hundreds of CPUs trying to access storage. That’s why capacity and throughput are key, and that’s what Fujitsu has delivered.”

Deepak Kumar Tala  
CEO  
SmartDV Technologies India

SmartDV deploys a reliable, high-performing FUJITSU Storage ETERNUS DX100 platform to support protocol verification IP modelling and simulation for 200 users.

#### At a glance

Country: India  
Industry: Electronics  
Founded: 2008  
Website: [smart-dv.com](http://smart-dv.com)

#### Challenge

SmartDV’s aging storage environment was suffering from performance issues and could not be scaled further to meet the company’s needs. It wanted to find an affordable alternative with the capacity to grow on demand.

#### Solution

The company deployed FUJITSU Storage ETERNUS DX100 with 500TB of memory to support complex simulations for 2,000 server cores, as well as two FUJITSU Server PRIMERGY CX400 multi-node systems.

#### Benefit

- Simple management reduces burden on IT team
- Increased throughput improves application performance
- Improves user productivity through increased availability and reliability
- Scalability enables seamless expansion to 1PB
- Near-silent operation minimizes disruption
- Reduces energy consumption leading to lower electricity bills

## Customer

Founded in 2008 and based in Bangalore, India, SmartDV Technologies India Private Limited provides high-quality, standard and custom protocol-verification IP (VIP) products for leading global semiconductor companies. Each VIP from SmartDV is shipped with a compliance test-suite and complete functional coverage to accelerate time to market. The company offers industry standard design and VIP, including I2C, ethernet, lin, Flexray, SATA, SAS, and SPI.

## Products and Services

- FUJITSU Storage ETERNUS DX100
- FUJITSU Server PRIMERGY CX400
- FUJITSU Server PRIMERGY CX2550
- Fujitsu Technical Maintenance Services

## Overhauling a critical-storage platform

SmartDV's business relies on increasingly complex modelling and simulations to automate the creation of the verification environment and test cases for application-specific integrated circuits (ASIC). At the core of these processes sat three storage devices to handle all the data required, however, these were becoming outdated, lacked capacity and suffered from performance issues. The company wanted to find a new storage platform that could effortlessly cope with its ever-increasing storage demands.

"Our previous storage partner could no longer scale to meet our needs; there was a lot of reluctance on its part to find the right solution," explains Deepak Kumar Tala, CEO, SmartDV.

"Meanwhile, we had to regularly reboot servers, leading to loss of engineering time, low productivity, and missed customer deliverables."

The real issue was the sheer volume of data, which had grown from 64TB to 200TB in just two years. SmartDV wanted a storage environment that could deliver 500TB with the ability to scale up to 1PB when needed. It also wanted to increase IOPs throughput to improve application performance and reduce simulation times.

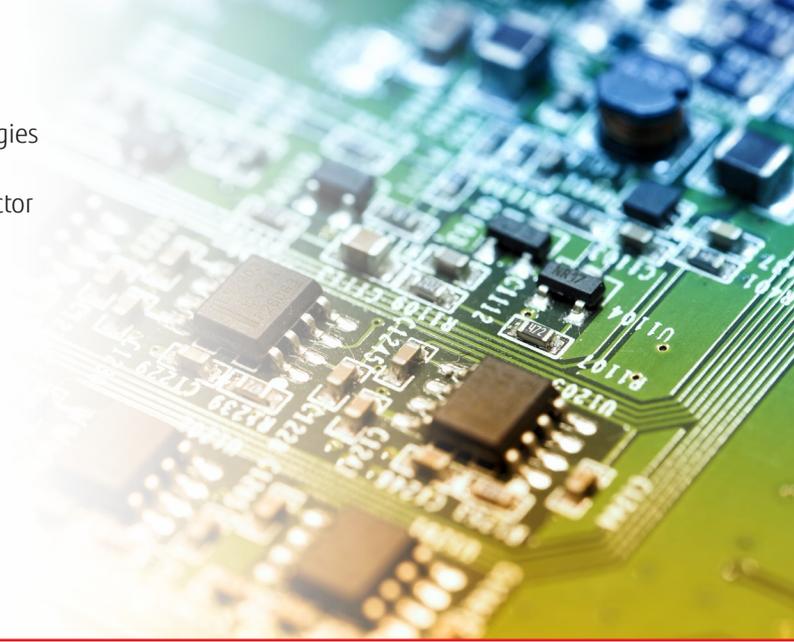
"We were looking for build quality, combined with value for money and performance," adds Tala. "After comparing numerous vendors, it quickly became clear that Fujitsu offered the best price-performance ratio, along with great local support."

### Building a flexible, reliable solution

SmartDV presented Fujitsu with its specifications and then together created a spreadsheet that provided a detailed, feature-by-feature comparison across all Fujitsu's storage devices. This enabled SmartDV to identify the best solution: the FUJITSU Storage ETERNUS DX100 with 500TB capacity.

Combining leading performance architecture with automated quality of service management, the FUJITSU Storage ETERNUS DX100 aligns storage resources with business priorities, enabling SmartDV to realize higher system utilization and enjoy increased system consolidation capabilities, as well as a faster ROI.

"Fujitsu engineers worked with us onsite to help configure all standard processes – it was remarkably seamless: one day for installation and one day for integration," continues Tala. "We then shut the servers down over one weekend so we could migrate all the data and 2,000 cores to the new storage platform."



The Fujitsu storage environment now provides 200 users with a responsive, robust and reliable environment to crunch masses of data: "We run simulations with enormous log files within a cloud environment where there are hundreds of CPUs trying to access storage. That's why capacity and throughput are key, and that's what Fujitsu has delivered," says Tala.

### Simplicity, performance, scalability

SmartDV's immediate reaction to the new Fujitsu solution was to admire its simplicity and manageability. Having grown used to firefighting and spending lots of time maintaining the old system, perhaps the biggest benefit of Fujitsu storage is that it simply gets on with the job.

"There are no performance issues, no more complaints, and no more drains on my resources. That means my employees are happier and more productive," comments Tala. "Essentially, it is as if it doesn't exist because it requires no attention from me and runs surprisingly quietly."

Fujitsu also provides 24-hour response time support in the case of any issues, however, so far there has been little need for it: "The support Fujitsu gives us is much faster than the other big players, which gives us peace of mind, however, there hasn't been any reason to pick up the phone so far," says Tala.

In addition, SmartDV has deployed two FUJITSU Server PRIMERGY CX400 chassis, that can each be equipped with up to four server nodes, which boast the same reliability, while also providing near silent operation at an affordable cost and minimal energy consumption. "The servers and storage are both remarkably energy efficient, which of course saves us money and reduces our carbon footprint," remarks Tala. "They are also cost-effective."

Following the success of this initial deployment, SmartDV intends to scale up the existing ETERNUS storage to 1PB within twelve months and is also looking at ordering an additional 512 FUJITSU Server PRIMERGY CX400 systems. This will ensure that the IT infrastructure can grow as the company continues its rapid growth.

"This is our first engagement with Fujitsu and we have been impressed with the personal touch the team provides – the way in which they understand our requirements is very different from other vendors," concludes Tala. "The combination of local presence with access to global resources makes Fujitsu an ideal hardware partner."

## FUJITSU

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