

# Case Study Pea Soup

»The raw performance of PRIMEFLEX for VMware VSAN is extraordinary and we now supply Cloud services to five different media companies who each have their own virtual data centre. This enables them to broadcast valuable content in a totally secure and seamless fashion.«

Martin Bradburn, CEO, Pea Soup



# The customer

Country: United Kingdom Industry: Cloud Computing

Founded: 2014 Employees: 4

Website: www.peasoup.net



# The challenge

Pea Soup needed a resilient, flexible and high-performing server platform to host its innovative software-defined Cloud. Finding a compatible and versatile RAID controller was a key part of bringing its vision to life.

## The solution

Working with global reseller Arrow, the company installed six FUJITSU Integrated System PRIMEFLEX for VMware VSAN adjusted to the individual requirements of Pea Soup with the potential to scale to host thousands of virtual machines and 4.4PB of storage.

#### The customer

Pea Soup was founded in 2014 by two enterprise computing veterans who believed they could revolutionise Cloud Computing. It aims to simplify Cloud provisioning in order to more easily deliver computing solutions to its customers. The essential method of doing so was to build it as an entirely software-defined environment.

#### The challenge

Pea Soup needed to ensure its on-demand Infrastructure-as-a-Service (IaaS) was competitive with similar services from Google, Amazon and Microsoft. That required a solution with optimal security, stability and performance. Creating a hardware platform with inherent reliability and high performance to support a software-based data centre was therefore its first priority.

"The original goal was to build a data centre based on VMware that would provide laaS and attached services, such as Disaster Recovery, with a hybrid Cloud providing the link between the two," explains Martin Bradburn, CEO, Pea Soup. "We decided that a software-based data centre without a SAN environment and working purely on servers using the N+1 model was the way forward. This would create a truly software-driven Cloud platform."

In order to bring this vision to life, Pea Soup needed to find the right server backbone to support the business. With media content providers as its core initial market, it needed a robust and flexible solution that could effortlessly handle streaming huge volumes of data. It soon discovered that the equipment it needed was too specific for many of the major vendors to match.

"We looked at multiple vendors but the idea of a virtual SAN is so new that few could demonstrate a compatible solution and, furthermore, the prices quoted were through the roof," adds Bradburn. "Servers have become commoditised and there is little to distinguish one from the other but, in this case, we needed a specific RAID controller to provide the internal storage and only Fujitsu could give us one that met our specifications."

To realise its ambitions, Pea Soup partnered with Arrow, a Fortune 150 company that specialises in providing end-to-end IT infrastructure solutions including data storage, servers, enterprise software, network security, unified communications and virtualisation.

#### The benefit

- The software-centric Cloud approach based on PRIMEFLEX for VMware VSAN creates a lean operating environment with phenomenal performance
- The FUJITSU Server PRIMERGY provide optimal reliability so Pea Soup can meet its 99.99 per cent SLAs
- Pea Soup is now able to handle multiple TBs of streaming data for a variety of media companies
- The RAID stack offers high data throughput, a comprehensive fault tolerance function and user-friendly management options

#### Products and services

- FUJITSU Integrated System PRIMEFLEX for VMware VSAN
- FUJITSU Server PRIMERGY RX300 S8
- Fujitsu RAID Controller D3116C

#### The solution

Together they have built a high-performance computing infrastructure based on six PRIMEFLEX for VMware VSAN servers configured in two clusters. Hosted in Telecity's Tier 3 data centre in London's docklands, it uses the latest version of VMware Cloud and VSAN and has the capacity to scale to a 32 node cluster able to host thousands of virtual machines and 4.4PB of storage.

Key to the success of the company's vision is the disk architecture of the servers wherein several independent hard disks form a large logical drive when switched together. The mix of disks is what enables the virtual SAN approach and because 10 per cent consists of solid state disk, it can provide outstanding performance at the front-end.

"It only took us two months to get the system up and running. We started with a single server to pilot and prove the concept and then quickly brought the rest of the system online," continues Bradburn. "We had customers waiting and 6TB of data ready to upload so the reliability and versatility of the Fujitsu servers was critical."

### The benefit

At the heart of this pioneering approach is the Fujitsu RAID Controller D3116C which sets new speed and data security standards for internal storage drives. The RAID stack offers high data throughput, a comprehensive fault tolerance function and user-friendly management options. Moreover, the controller management is integrated seamlessly into the Fujitsu server management concept. Combined with faultless reliability, it has provided the perfect platform for this innovative young company.

"Establishing our brand and reputation is critical so the fact we have had no downtime is fantastic. On one occasion, the Fujitsu system alerted us to a potential disk failure and a replacement arrived within 24 hours," says Bradburn. "And the platform has so much in-built redundancy that it can easily cope with any individual issues should they arise."

The FUJITSU Server PRIMERGY are now the foundation on which Pea Soup is building its business. Among its initial customers are major broadcasters for whom availability is essential. They can rest easy because this pioneering software-centric Cloud offering has the bandwidth, resilience and user-friendliness to guarantee 99.99 per cent SLA.

"The raw performance is extraordinary and we now supply Cloud services to five different media companies who each have their own virtual data centre. This enables them to broadcast valuable content in a totally secure and seamless fashion," comments Bradburn. "They then white label our services and stream the content to other providers who have hundreds of thousands of viewers."

#### **Conclusion**

With the core infrastructure in place, Pea Soup has plans to broaden its horizons and is currently evaluating new regions where it can build similarly cutting edge Cloud solutions. The company expects Fujitsu to be instrumental to this expansion.

"We're looking to open in two other global data centres initially and both Canada and the African continent are high on our list," concludes Bradburn. "We're also going to open a second dual-cluster data centre here in the UK. Because of the market-leading flexibility, performance and scalability offered by Fujitsu, it will continue to facilitate our growth and the ability to provide a software-defined Cloud.

"Fujitsu's PRIMEFLEX for VMware VSAN using the Fujitsu RAID Controller D3116C offered the versatility, performance and resilience that our business model demanded. No other major vendor came close to meeting our specifications."

Martin Bradburn, CEO, Pea Soup

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