Tintri VMstore™ Provides High Performance for Together Housing's VMware Environment

VMstore

Together Housing is a leading provider of quality affordable and modern homes for rent across Northern England. The group combines decades of skill and experience managing over 35,000 homes, affecting over 50,000 people's lives and employing approximately 1,250 staff.

The Challenge: Rapid Growth Puts Pressure on Avaliable Storage Space

Stuart Curran is the IT infrastructure manager for the Together Housing Group. He and his team of ten IT professionals are responsible for the group's MS Exchange servers, Active Directory, VMware ESXi, and VMware View virtual desktop environments, as well as its proprietary Microsoft SQL-based housing management system.

Due to rapid growth, Together Housing was rapidly running out of disk storage space for its virtualized environment. "We went to our existing storage vendor and asked for pricing on more units, but the extra disks were massively expensive," Stuart reported. "We decided to look for other storage solutions that could provide higher performance at a lower cost."

The Solution: Tintri VMstore T620

Stuart is a self-proclaimed "techie" who loves to try out all of the new IT tools and technologies. "I really like running PoCs–they make my job more enjoyable," Stuart admitted. "We actually found Tintri VMstore from a Google search. I typed in the name of one new storage company I had heard of, and then just added 'versus' after its name. It gave me a nice list of suggestions of the companies that vendor competes with. We selected a good mix of different solutions and conducted stress tests on each platform using standard testing tools."

Stuart and his team tested four different storage options. They started by evaluating the IOPS of each solution, using Iometer, VMware IOanalyzer, and other third-party stress-testing applications. "We restored a backup of our entire infrastructure onto each one of the boxes we were testing," Stuart reported. "VMstore was the solution that surprised me the most–I was very impressed with how well it could handle all of our different workloads. In terms of IOPS, VMstore performed the fastest of all four of the storage solutions we tested."

The Result: Consistent Low Latency; High Performance at Lower Cost

"Our SQL administrators are always telling us they need more IOPS and bandwidth, when in reality, they actually need lower latency," Stuart explained. "If they are trying to retrieve a record in SQL, it's not a lot of data. They don't need any extra bandwidth or more IOPS just for that. They just want to get their information quickly, so low latency is actually what they need."

The biggest difference noted in the PoC was the latency response of each of the tested solutions. "VMstore was the only solution with consistently very low latency," noted Stuart. "The other solutions could achieve relatively low latency sporadically, but then they would spike up to 100μs every so often. VMstore gave us the 'best feel' or response for all of the processes we were testing, even for things as simple as accessing a file."

Together Housing's IT team decided to benchmark the better 'feel' of the Tintri VMstore solution by utilizing the in-house infrastructure monitoring tool to measure the latency of the VMstore environment. "The independent testing solution provided the hard data to confirm the observed low latency. VMstore is amazingly fast–all of the time."

Stuart then conducted a technical 'deep dive' on VMstore to understand why it performed so well. "After I looked 'under the bonnet', I could finally understand why VMstore delivers the lowest latency," Stuart revealed. "VMstore has taken an entirely different approach than the

Challenges

- Meeting new capacity requirements
- Needed an increase in storage performance
- All-flash storage systems were fast but too expensive

Solution

- Tintri VMstore T620

Results

- Simplified storage management
- Faster troubleshooting with increased visibility across storage, hosts, network, and virtualization environment
- Consistently low latency
- High-performing storage at a lower cost

Tintri
Intelligent Infrastructure

other vendors by designing VM- and application-aware storage. It actually knows what VMs are running on each system, so it can automatically deliver the best performance without affecting anything else on that SAN. The VMstore approach is unique and truly brilliant!"

Another big selling point of the Tintri VMstore solution was its ease of management. "Before VMstore, my lads and I had to log onto the storage console every day to reassure ourselves of how big the LUNs were getting, how many VMDKs and virtual machines were on each of the LUNs, and to find out if we were approaching capacity limits on any of our systems. We would then have to move a bunch of virtual machines around to different LUNS, worry about the aggregates, and tweak numerous settings. We were always playing the game of 'Storage Tetris' with our legacy platform."

"With VMstore, we don't have to create LUNs anymore," Stuart shared. "We just get one big 20TB export that's the size of the entire disk system, and then dump all of our VMs onto that disk. There's nothing to manage, nothing to worry about, and no performance impact involved. We have completely eliminated the headache of trying to manage all of the different pieces of our 'SAN jigsaw' every day. It is so automatic, we rarely log on to the Tintri Global Center at all anymore because we know everything's okay and that we have a lot of storage space left. With VMstore, we can now shift our focus from babysitting our storage environment back to more strategic IT projects."

"With our old storage system, our application team would call us regularly and complain that everything was running slowly, but we would always have a tough time figuring out why," Stuart stated. "We'd log on to the legacy storage system to look at IOPS and latency, see what was coming out of the Cisco switches, and then go into VMware and look at all the virtual machine metrics in there. We had to create multiple spreadsheets to pull all of that disparate information together to try and figure out what was going on. It was an absolute nightmare."

Storage management is much easier with Tintri VMstore, according to Stuart. "VMstore provides far better visibility—all the way down to the VMDK level," said Stuart. "That information helps us even where VMware can't. With VMstore, we can now see latency on the hosts, the storage, and the network—all in one view. That's one of the really great things about VMstore. Not only does it provide high IOPS and low latency, it enables us to easily manage our entire environment as well."

Stuart concluded: "With VMstore, I can finally take a nice deep breath when I think about our storage environment. Knowing that it's just 'ticking away' consistently makes our entire IT team very happy."

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Stuart Curran, IT Infrastructure Manager, The Together Housing Group

Experience Different! For more information on how Tintri VMstore can turbo-charge your business success through a simple, Intelligent Infrastructure, visit tintri.com/vmstore.