



Bank of us boosts processing power to underpin business growth

HPE SimpliVity streamlines IT delivery at the only Tasmanian customer-owned bank

Objective

Replace ageing servers, storage and networking to improve operational efficiency

Approach

Compared competing solutions using the decision criteria of redundancy, resilience, simplicity and cost

IT matters

- Reduces restore time for largest database from four hours to five minutes
- Cuts complex SQL procedures from twenty minutes to four minutes
- Supports implementation of new applications and latest software versions

Business matters

- Improves customer service by reducing system downtime
- Supports compliance with banking regulations
- Frees IT staff to work on more business-critical projects



When it was granted its banking licence, Bank of us changed from being a building society to become the only Tasmanian customer-owned bank. Following the transformation, business growth and regulatory compliance could no longer be supported by the ageing IT infrastructure, so a new platform was needed. HPE SimpliVity was the answer.

Challenge

Support for new bank status

Bank of us is the only Tasmanian customer-owned bank. It is owned entirely by its 30,000 customers rather than by public shareholders, and profits are invested back into products and services to provide a better banking experience.

As a financial institution, Bank of us began as the Launceston Equitable Building and Investment Society, nearly 150 years ago. It subsequently merged with Bass Building Society to become Bass and Equitable Building Society (B&E), which became Bank of us when it was granted a banking licence in 2017. A member of the Customer Owned Banking Association (COBA), the bank now has eight retail stores, 120 employees and A\$800 million in assets.



“HPE SimpliVity has provided us with better resilience so we can operate our infrastructure and perform system maintenance more efficiently and easily. It has allowed us to focus our skilled IT resources away from onerous system administrative tasks onto delivery of new products and service projects, which add much greater value to the business and our customers.”

– Ben Moreland, network and IT systems manager, Bank of us

When Tasmania’s Bank of us changed from being a building society to become a customer-owned bank, its old IT environment needed to be replaced and HPE SimpliVity was the answer.



Core banking and other IT services are delivered to all locations from a production data centre in Devonport, which is mirrored by a disaster recovery (DR) site in nearby Ulverstone. However, business growth increased banking compliance and some ageing infrastructure underlined the need for a re-think.

“The DR site mirrored our production site, which was quite costly because we needed to have identical infrastructure at both sites,” says Ben Moreland, network and IT systems manager.

“We would operate on HPE servers that were connected to an IBM SAN, and there were iSCSI connections to Extreme Networks switches. While it worked, it gave us a headache, especially as the hardware got older. Having to deal with three different maintenance contracts and three different vendors was quite difficult, and it was a lot of effort to keep those systems running.”

The Bank of us core banking system runs on an IBM AIX POWER8 server, but everything that connects into that operates on Windows® virtual servers. As the banking system improved and developed, more virtual servers had to be rolled out, which put pressure on available CPU and memory.

“We were constantly having to move servers around to different nodes to ensure we could have the memory and CPU available to operate the forever growing number of servers we needed to run our core banking environment,” says Moreland.

Since it acquired bank status, Bank of us also had to satisfy the increased scrutiny of APRA, the Australian financial institution regulator, which meant improving its redundancy capability and system resilience. Also, with growing databases, the bank had to rely on Veeam and tape backups, and some restore times were unacceptably long, which led to downtime.

“Our largest database took about four hours to restore onto the DR site ready for use,” says Moreland.

“While we could get our core banking systems online with customer-facing services such as internet banking within 15 minutes to half an hour, we could only offer limited banking services in our retail stores until our auxiliary databases were restored.”

“The servers, the SAN and the Extreme switches were all approaching end of life and running out of warranty, and this all played a part in our decision to upgrade and implement a better infrastructure.”

Solution

Migration to hyperconvergence

Bank of us approached Data#3, an HPE Platinum Partner and trusted IT services and solutions provider. Data#3 suggested two options that would help solve the bank’s technology challenges—a straight replacement with HPE servers and storage and Aruba switches or an HPE SimpliVity hyperconverged solution.



Having also considered a Nutanix hyperconverged system, the bank opted for HPE SimpliVity because it offered the best redundancy, resilience and cost and because its simplicity would reduce the resources and training required to operate it.

“Another reason why we decided to go with the HPE SimpliVity option was the trust and good relationship we have with Data#3. It also retained the HPE brand which we knew, trusted and were very familiar with and it ran off VMware®, which would allow us to retain our licences,” says Moreland.

HPE SimpliVity 380 incorporates HPE ProLiant DL380 servers and is a compact, scalable 2U rack-mounted solution that delivers server, storage and storage networking services.

Using implementation services from HPE Pointnext, Bank of us installed two HPE SimpliVity 380 nodes at its main production centre and one at the DR location. They are connected to Aruba 3800 switches and are covered by a 24x7 HPE Foundation Care support contract. The infrastructure now includes some 45 virtual machines.

Benefit

Increased power with reduced maintenance

Increased processing power has transformed operational efficiency for Bank of us. The four hours it took to restore the biggest database has now been reduced to five minutes due to hyperconvergence and deduplication. Another example is that one of the more complex SQL stored procedures that runs queries on a large database used to take twenty minutes and now runs in four minutes.

“We don’t have to limit servers any more. Previously, we always had to consider the minimum number of CPUs and minimum amount of RAM we could run things on because we were running out. Now, we can just apply the recommended requirements and not be anywhere near the maximum capacity,” says Moreland.

Bank of us now has 11 TB of physical storage rather than the previous 6 TB, which enables it to regularly carry out more backups and because reports can be generated more rapidly, technical staff find that productivity has risen. The time taken for some tasks has been halved. Coupled with HPE SimpliVity single pane of glass management, this has freed IT staff to work on other projects such as security, which is an extremely critical area for the bank.

“It has definitely cut down our system admin teams’ supervision time by 5 to 10 hours a week. Having a single pane of glass for network, storage and servers means not having to log on to three different systems to monitor three separate solutions. We’ve even presented the SimpliVity dashboard on a TV in our IT area so it’s always visible. That level of management means we can monitor it throughout the day and can always see what’s going on without having to stop work and log on to check it,” says Moreland.

“With HPE SimpliVity we know that in a disaster situation we can be up and running for the customers much more quickly and our VM servers require less reboots and maintenance because they are not running on ancient hardware.”

Migrating to the increased power of HPE SimpliVity also enables Bank of us to implement new applications and run newer versions of existing software, which were precluded by the legacy systems.

“We have started a core banking system upgrade that will take six months, and it requires a fleet of new servers with much larger resource requirements,” says Moreland.

“HPE SimpliVity has allowed us to undertake a project, which we would not have previously been able to do because we were at capacity with the number of servers we could accommodate. Now, if someone says they want a server that needs 16 GB of RAM we are not at all worried. We know we can put that server onto our HPE SimpliVity environment, and it will run at its requirement and not impede anything else.”



Case study

Bank of us

Industry

Financial services/
banking

Customer at a glance

Hardware

- HPE SimpliVity 380
- Aruba 3810M Switch Series

HPE Pointnext

- HPE Installation and Startup
- HPE Foundation Care

“With dedupes, restoring a server or taking a backup feels almost instantaneous. With just a couple of clicks a server is there in front of you.”

– Ben Moreland, network and IT systems manager, Bank of us

Switching from the old infrastructure to hyperconverged has been good news in the data centres, enabling the bank to save 10U of rack space. It has also reduced drainage of UPS battery capacity, extending run time by 15 minutes—a useful benefit if disaster occurs and every minute counts.

Previously, IT staff had to travel to the DR site to plug in external drives, so they could kick off restores but that has now been eliminated because dedupe to the DR site node happens automatically. Also, it runs over the existing WAN infrastructure, so the bank has not needed to spend thousands of dollars on a dedicated high bandwidth point-to-point link.

“In the next couple of years, we are planning to move some services to the cloud but we implemented HPE SimpliVity at the right time. It enables us to meet current growth demands and is good solid hardware that will provide us with three to four years of on-premises availability, as we transition some systems to cloud hosting providers,” concludes Moreland.

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a00075085EEW, June 2019

