Local Government solves Nutanix AMD architecture incompatibility issue with Loadbalancer

CASE STUDY

Hutt City Council were running a different product on VMware and Intel architecture.

Even though Nutanix was advertised and listed in their load balancer's compatibility matrix, they were surprised to learn as part of their testing that the new hypervisors underlying AMD architecture caused kernel panics.

They therefore needed to find a way to solve this problem to avoid compromising a key project.

"Good product, filling a niche for combined Nutanix/AMD architecture that others can't."

Holger Goertz,
Senior Infrastructure Engineer, Hutt City Council

Challenges

- Existing load balancer vendor incompatible with Nutanix AMD architecture

Solution

- 2 x Virtual Enterprise load balancer subscriptions from Loadbalancer.org

Benefits

- Tried and tested Nutanix Ready load balancer
- Clever, not complex, appliance
- Easy load balancer migration

Challenge

Hutt City Council, a New Zealand Local Government, were in the middle of a critical data centre migration when they realised that their load balancing vendor's appliances were not compatible with the VMWare and Intel architecture they were running.

Even though Nutanix was advertised and listed in the load balancer vendor's compatibility matrix, they were surprised to learn as part of their testing that the new hypervisors underlying AMD architecture caused kernel panics.

Nutanix's hyper-converged infrastructure (HCI) software platform runs on servers powered by AMD EPYC™ processors and is used to deliver a high-performance, scalable, and secure hybrid cloud foundation.

At the time, this was the last round of testing during a data centre migration and platform swap; not a very convenient time for them to realise this. However, luckily, they had done extensive testing beforehand which flagged the issue.

As Holger Goertz, Senior Infrastructure Engineer at Hutt City Council explained:

> "Escalation to the load balancing vendor's support team confirmed that the 'feature' to run on Nutanix AMD architecture was not actually an available option at the time."

Although a feature request was logged with the load balancing vendor at the time, Hutt City Council are unsure if this was ever rectified in subsequent releases.

In the meantime, Hoeger Goertz and his team had to find, test, and find and migrate to another compatible load balancing solution in a hurry.

Solution

After much research, Loadbalancer.org was the only other viable certified virtual load balancing option for Nutanix AMD architecture listed in their compatibility matrix at the time.

Migrating to Loadbalancer's Nutanix Ready, Enterprise load balancer was an easy decision that swiftly got the data center transition back on track.

Benefits

The Loadbalancer Enterprise appliance has been rock-solid from a load balancing perspective, providing the following benefits:

Tried and tested credentials

The system's established architectural foundation and thorough documentation ensured a smooth and efficient deployment.

Ease of use

The Enterprise Loadbalancer was intuitive, reducing the risk of human error and accelerating time to deployment.

Seamless migration

The migration from the old load balancing vendor to Loadbalancer.org was smooth. Their process simultaneously mitigated risk, streamlined our infrastructure, and expedited the vendor migration.

The adoption of the Loadbalancer.org Enterprise appliance provided High Availability, enhanced performance and horizontal scalability to their established infrastructure.

Goertz elaborated:

> "We are just about to deploy our second Loadbalancer.org virtual appliance at another site with Nutanix AMD architecture."

Leveraging the proven benefits of additional Loadbalancer. org appliances will streamline Hutt City Council's operations and guarantee the smooth, efficient rollout of new application services.