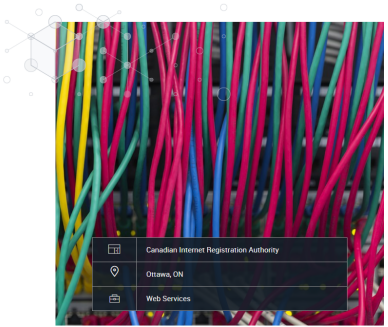


NetApp and Scalar Help CIRA Accelerate Their World-Class .CA Domain

During a time of exponential growth, the move to NetApp clustered Data ONTAP allowed CIRA to scale up and provided them flexibility during their transition from old hardware.



Objective

Migration to NetApp clustered Data ONTAP® storage operating system.

Highlights

- Longtime NetApp customer with well planned strategic upgrades for each generation of the NetApp operating system

Technology Used

- Open communications, strong project management, and solid post migration documentation

- The move from legacy NetApp 7-Mode to Clustered Data ONTAP provides disruption-free upgrades

Customer Challenge

Safe, stable, secure, and resilient – these are the pillars upon which the Canadian Internet Registration Authority (CIRA) – best known as the managers of Canada's .CA domain – bases all technical decisions. CIRA's mandate is to build a better online Canada and shape the Canadian Internet by building a world-class registry. Recognized as one of the fastest growing country code top level domains, the member driven organization has experienced exponential growth with over 2.4 million domains under management.

CIRA's employees work hard to maintain the confidence of its stakeholder community, using cutting edge technology to build .CA into one of the leading domains in the world. Prominent Canadian organizations such as all levels of government, universities, hospitals, and countless small, medium, and large businesses rely on CIRA products and services.

To properly manage service level and uptime commitments to customers, CIRA has three data centre environments dedicated to production, staging, and disaster recovery. Amanda Swain, Manager of IT Operations, says "NetApp provides innovative systems that are trusted and tested within a vast community. We are a long-time NetApp customer and we have come to count on both NetApp and Scalar to help us deliver our services."

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Approach

While CIRA has been running NetApp for well over a decade, the team recently went through a large migration project across multiple sites, transitioning to the NetApp clustered Data ONTAP® OS. "NetApp and Scalar help us understand the product roadmaps and keep us up to date on how the technology is advancing," said Swain. Scalar spearheaded the migration project, working in tandem with the CIRA technical team. "It really is a partnership. It is not just implementation and then hand-off, which is what many technical service providers do. The knowledge transfer happens organically throughout the process and when they complete the project, we are well equipped to manage the systems," Swain added.

Eric Malenfant, Senior Systems Administrator at CIRA readily agreed, "the expertise I received from Scalar was just fantastic and the documentation provided at the end of the project was top notch." Michael Leblanc, Senior Systems Administrator at CIRA added, "what you walk away with after the fact is just as important as the service you receive during the implementation process – it is like building a house, if the blueprints are not given to the owner after the house is built, it makes it difficult to make changes in the future."

The team also emphasized the importance of planning the migration of three sites in the span of two to three months. "We planned for everything and experienced only one small hiccup throughout the process," said Malenfant.

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SENIOR SYSTEMS ADMINISTRATOR AT CIRA

Solution

The move to NetApp clustered Data ONTAP not only allows CIRA to easily scale up, it provides flexibility when cycling out old hardware. "Under the older version of the operating system, the disruption of moving volumes and services was significant. With clustered mode, the process is non-disruptive," said Leblanc. It is critical that CIRA systems stay up and running, "our D-Zone Anycast DNS network is constantly updating every single one of our DNS servers around the globe with approximately 9,000 zones for high profile customers. We need to keep everything running, because if we are down, our customers are down," said Malenfant.

SnapMirror and SnapVault improvements were also cited as a welcome enhancement. SnapMirror provides disaster recovery protection and simplifies the management of data replication, while SnapVault speeds and simplifies backup and data recovery, protecting data at the block level. "We now have the ability to snap an entire SVM (storage virtual machine), not just the data and volume, but how that data is presented to the world: the IP address, the security configuration, everything that encapsulates the environment. This is very powerful," said Leblanc.

Outcome

"It is always a team effort with Scalar and NetApp. They have willingness and appetite to share information and provide best practices, helping us learn from their expertise, and it is not just about NetApp technology. They help us understand how to optimize our NetApp systems with the other technology in our environment," said Swain.

With the most recent successful migration to clustered mode under their belts, next on the horizon is the eventual move to ONTAP 9 and flash. ONTAP 9 builds the foundation for a Data Fabric, making it easy to move data where it's needed across flash, disk, and cloud resources. "We are excited about the next generation of software and look forward to seeing how we can best utilize all those new features. For now, we are concentrating on getting our current systems operating, but 9.0 will definitely come into the pipeline in the future," said Leblanc.

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MANAGER OF IT OPERATIONS AT CIRA

Results



Onsite project management during the migration



NetApp subject matter expertise, knowledge transfer, and overall technical guidance on interoperability within the CIRA environment