Nutanix and Vcinity

KEY BENEFITS FOR BUSINESS AND IT

- Get as much as 30X faster time to value from concept to production
- Eliminate under-utilized infrastructure silos, using up to 80% less space and 50% lower CapEx.
- Get fast VM related compute and storage performance
- Unprecedented in-flight data security
- FIPS 140-2 Complaint (AES-256)

> "Adding Vcinity's dual line-rate encryption did not adversely impact the throughput for Nutanix replication workflows. In fact, our RAD X system integrated seamlessly with the Nutanix environment."
>
> – Steve Wallo, CTO, Vcinity

Nutanix makes infrastructure invisible, elevating IT to focus on the applications and services that power their business. The Nutanix enterprise cloud platform leverages web-scale engineering and consumer-grade design to natively converge compute, virtualization and storage into a resilient, software-defined solution with rich machine intelligence. Nutanix has helped large and small IT organizations simplify their datacenter and gain predictable performance, linear scalability, and cloud-like infrastructure consumption.

Vcinity provides robust security features with line-rate WAN encryption without increasing latency or reducing data throughput. In addition, Vcinity's DataPrizm™ feature provides another layer of protection by distributing data over disparate, separately encrypted network paths.

SOLUTION OVERVIEW

Together, Nutanix and Vcinity help deliver end-to-end solutions for secure data replication over the WAN. Here are top features of the joint solution:

- Easy to design and deploy: Leverage sizing tools and reference designs to go from concept to production as much as 30X faster than traditional approaches
- One platform for all: Consolidation on to a single solu- tion with predictable scalability delivered by Nutanix's web-scale architecture
- Secure in-flight data with line-rate, single or dual encryption without degrading throughput

TECHNICAL DETAILS

Nutanix solutions natively converge server and storage resources into a single, 100% software-defined appliance that comes ready to run all enterprise applications, at any scale. Built on a distributed web-scale architecture, a single Nutanix hyperconverged appliance can simultaneous run different workloads, including enterprise databases and applications, VDI, and big data workloads.

Vcinity provides robust security features for the WAN with line-rate data obfuscation, single or dual encryption (AES-256 and SIMON-256) including support for 3rd party key management and orchestration solutions.

- 30 Gbps of either AES-256 or SIMON-256 encryption per RAD X-1040
- DataPrizm™ feature splits a network flow across up to 8 disparate paths with up to 8 DataPrizms per RAD X-1040
- Supports a unique encryption key with dynamic key management per flow / per path
- KMIP API support for third party solutions

TECHNICAL RESOURCES

- www.vcinity.io/radical

ABOUT VCINITY

Vcinity increases the agility and velocity of digital transformation for enterprises by enabling applications to instantly and securely operate on data regardless of where it resides. Our solutions create a new paradigm which facilitates the ability to operate on data without having to move or copy it first, while maintaining local performance.

Learn more at https://vcinity.io.

ABOUT NUTANIX

Nutanix makes IT infrastructure invisible with an enterprise cloud platform that delivers the agility and economics of the public cloud, without sacrificing the security and control of on-premises infrastructure. Learn more at www.nutanix.com or follow up on Twitter @nutanix.
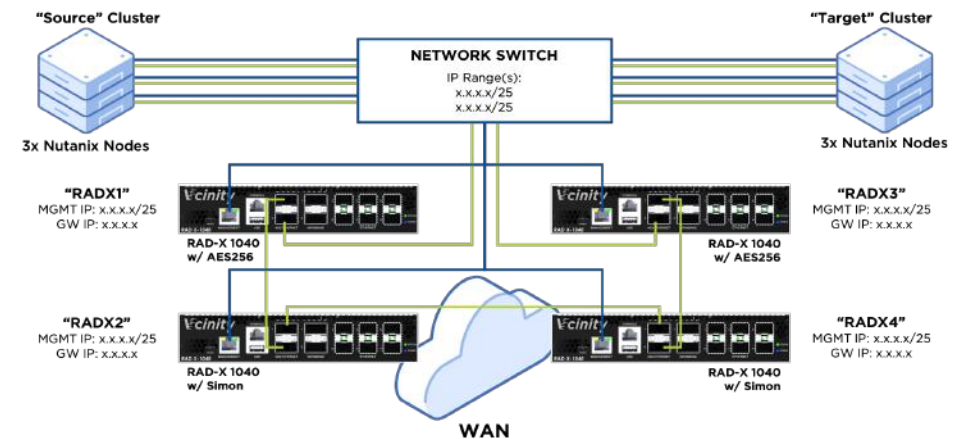

Figure 1: Vcinity's Dual Encryption for Nutanix Replication Workflows

As shown in the figure above, a pair of Vcinity's RAD X-1040s emulated the WAN at a variety of latencies from 0ms to 180ms. The first pair of RAD X-1040s (RAD X1 and RAD X3) provided default gateway to each of the Nutanix clusters, adding a layer of AES encryption to the traffic as it traversed through them. The second pair of RAD X-1040s (RAD X2 and RAD X4) provided a second layer of Simon encryption and the WAN latency emulation. The test results confirmed that the dual encryption did not impact the throughput of replication traffic.

GET STARTED

Nutanix and Vcinity are committed to our customers' success. We offer a wide range of services, around design, deployment, and optimization, as well as custom services tailored to customers' needs. Contact sales@vcinity.io for more information about Vcinity offerings.

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