Moving a provider from NSX-v to NSX-T

industry

Cloud Provider

location

USA

key challenges

- NSX-T knowledge
- Migration of currently used networking features
- Migration of customer workloads with a least disruption as possible

solution

A side-by-side migration with a new, NSX-T based, cluster to enable the migration of each customer individually. Additional in-use hosts can be moved to the new cluster as soon as the load on the original cluster decreases.

When VMware discontinued NSX-v and NSX-T was set as it's successor for network virtualization within the VMware software stack for the SDDC this affected also most cloud providers like this one.

our lead architect on the case

Matthias Eisner

Matthias Eisner, comdivisions lead architect for this customer, knows about the challenges: "NSX-T is not just a newer, or more advanced, version of NSX-v. It is a brand-new and different product. There is no one-click in place upgrade option. Of course, there are several tools supporting to plan a proper migration, and they improve over time, but still, each infrastructure needs to be analysed individually. The better the preparation, the less chance to stumble across unforeseeable coincidences."

the challenge

Customer workloads currently run on the existing, NSX-v based, infrastructure and all needed networking services are working fine. The internal team is familiar supporting their customers implementing new needed solutions. Furthermore, no new clusters will be implemented because there are currently enough hardware resources in place.

"Finding a partner understanding the cloud provider business on the one hand and having knowledge and experience in NSX-T migration projects on the other hand is the key to successfully finish those projects in time. On top, proper knowledge transfer is a nice to have." says the customer's leading cloud architect.

the solution

Having enough hardware resources enabled us to carve a few hosts out of the current clusters and build a new one for NSX-T, based on the newly created design. This allowed us to migrate to vSphere 7 in the same step. A side-by-side migration is more work, but reviewing each customer individually enabled us to minimize needed downtime for each customer.

Together we developed, based on the existing customers, multiple different migration scenarios for the workloads, fitting all needs in terms of features and downtime.

side-by-side migration

"We never considered building a new infrastructure based on different technology and move only the customer workloads over" says the service provider. This approach is interesting, because it allows to change different parts of the infrastructure at once. In this case, the SDN and virtualization stack, because the servers are reinstalled with ESXi version 7. VMware Cloud Director is able to leverage multiple physical deployment targets, which simplifies the workload migration process.

knowledge transfer

"Having a consutling partner being able to educate the internal IT department on the new technologies during the design, implementation, and initial migration phase was a huge benefit" says the lead cloud architect. "It minimized the time of colleagues not being available in the office".

summary

comdivision worked as a team with the cloud provider and was able to satisfy the company's needs in terms of migration scenario development, educational expectations, and designing a new infrastructure.

outlook

With the initial support, the cloud provider's team is now able to migrate the remaining customer workload as well as supporting their customers solving various networking challenges they are facing.

further details???

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