HYPERCONVERGENCE – CHANGING THE ECONOMICS OF THE DATACENTER

Research Note

Not since the time PC servers began to replace mini- and mainframe servers has the economics of the datacenter had such a tectonic shift. PC servers changed the dynamics by allowing the distribution of applications of the datacenter on inexpensive servers. It also allowed these applications to be geo-located closer to users.

But almost as soon as this trend took hold, the reverse started to happen! The sprawl of servers made consolidation, accelerated through virtualization. So, now, we have gone full circle. The datacenter is centralizing again.

This time, things are different. While virtualization can reduce the cost of capital expenditures, the focus is no longer on capital expenses (CapEx). It is on operating expenses (OpEx). The cost of maintaining servers, networks, storage, etc. can consume as much as 80% of the total cost of ownership (TCO).

To improve the cost of IT, technology leaders are now looking to hyperconverged infrastructure (HCI) to drive down *both* CapEx and OpEx.

HCI provide the compute, network, storage and server virtualization capabilities in a compact package. Essentially what took multiple administrators, and expensive and complex software to manage is now presented in a tightly coupled (improving simplicity and reliability)system with a single pane of glass. The result – a simpler architecture. This simpler architecture is less costly to manage and support.

This change is very important.

As mentioned earlier, the objective for IT leaders is to drive down TCO. The only way to drive down TCO is to improve reliability, compatibility and make the infrastructure simpler overall.

HCI provides the ability for enterprises to scale their datacenters based on performance and capacity needs. As demand for either (or both) factors increases, enterprises can make the investment at that time, and the whole infrastructure is still managed through the single pane of glass.

This scalability means that enterprises can grow on-premise infrastructure just like cloud based infrastructure – a.k.a. Infrastructure-as-a-Service (IaaS).

Take for example Gridstore's *Cloud in a Box*. The combination of HCI from Gridstore, and Windows Azure Pack provides a multi-tenant, self-service private cloud interface that works with Windows Server and System Center, to deliver self-service provisioning, easy movement of workloads to the cloud, and infrastructure management. Augment the scalability of Gridstore's architecture and what you end up with is cloud economics for the on-premise datacenter.

Neuralytix research shows that this the direction that enterprise users want to head. Not only do these architectures reduce upfront CapEx, it also reduces the complexity and by extension, OpEx. These benefits would be good enough for most. But architectures such as Gridstore's *Cloud in a Box* means that those enterprises who maintain a datacenter will be able to get the utility pricing as the cloud, and the flexibility and scalability of the cloud.

HCI has changed the economics of the datacenter, yet again!

This monthly series is sponsored by Gridstore. All opinions expressed are those of Neuralytix and our analysts.

CONTACT US

To learn more about Neuralytix and our other solutions, contact your local representative – or visit Neuralytix.com.

Paperless Productivity
1402 Third Ave.
Suite 812
Seattle, WA 98122
Tel 1.888.838.0042
info@PaperlessProductivity.com

www.PaperlessProductivity.com