

THE POWER OF INNOVATIVE DATACENTER STACKS

With the industry drive towards cloud computing models there has been a lot of talk and announcements around ‘converged infrastructure’ ‘integrated stack’ solutions. An integrated stack is pre-packaged offering typically containing some amount of network, storage, and server infrastructure bundled with some level of virtualization, automation, and orchestration software. The purpose of these stacks is to simplify the infrastructure purchasing requirements, and accelerate the migration to virtualized or cloud computing models, accomplished by reducing risk and time to deployment. This simplification and acceleration is accomplished by heavy testing and certification by the vendor or vendors in order to ensure various levels of compatibility, stability and performance.

In broad strokes there are two types of integrated stack solution:

Single Vendor – All stack components are developed, manufactured and bundled by a single vendor.

Multi-Vendor – Products from two or more parent vendors are bundled together to create the stack.

Of these two approaches the true value and power typically comes from the multi-vendor approach or *Innovative Stack*, as long as some key processes are handled

correctly, specifically infrastructure pre-integration/delivery and support. With an innovative stack the certification and integration testing is done by the joint vendors allowing more time to be spent tailoring the solution to specific needs rather than ensuring component compatibility and design validity. The innovative stack provides a cookie cutter approach at the infrastructure level.

The reason the innovative stack holds the sway is the ability to package ‘best-of-breed’ technologies into a holistic top-tier package rather than relying solely on products and software from a single vendor of which some may fall lower in the rankings. The large data center hardware vendors all have several disparate product lines each of which are in various stages of advancement and adoption. While one or two of these product lines may be best-of-breed or close, you’d be hard-pressed to argue that any one vendor can provide the best: storage, server, and network hardware along with automation and orchestration software.

A prime example of this would be VMware, it’s difficult to argue that VMware is not the best-of-breed for server virtualization, with a robust feature set, outstanding history and approximately 90% market share they are typically the obvious choice for server virtualization. That being said VMware does not sell hardware which means if you’re virtualizing servers and want best of breed you’ll need two vendors right out of the gate. VMware also has an excellent desktop virtualization platform but in that arena Citrix could easily be argued best-of-breed and both have

pros/cons depending on the specific technical/business requirements. For desktop virtualization architecture it's not uncommon to have three best-of-breed vendors before even discussing storage or network hardware (Vendor X server, VMware Hypervisor, and Citrix desktop virtualization.)

With the innovative stack approach a collaborative multi-vendor team can analyze, assess, bundle, test, and certify an integration of best-of-breed hardware and software to provide the highest levels of performance, feature set and stability.

Once the architectures are defined if an appropriate support and delivery model is put in place jointly by the vendors a best-of-breed innovative stack can accelerate your successful adoption of converged infrastructure and cloud-model services. An excellent example of this type of multi-vendor certified Innovative Stack is the FlexPod for VMware by NetApp, Cisco, and VMware which is backed by a joint support model and delivery packaging through certified expert channel partners.

Source: <http://www.definethecloud.net/the-power-of-innovative-datacenter-stacks/>