

RED RIVER VIEWPOINT

CONVERGED  
INFRASTRUCTURE:  
ONE SIZE *DOES NOT* FIT ALL



Red River

IT DECISIONS AREN'T BLACK AND WHITE. **THINK RED.**





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About Red River

As the fastest path to Cloud, converged infrastructure is all the rage, but what does it actually mean and what’s really involved in deploying a “Cloud-in-a-Box” solution? With this ViewPoint, Red River takes a step back from the hype. We’ll clearly explain why everyone is talking about converged infrastructure, unpack “Cloud-in-a-Box” solutions, detail the powerful benefits of FlexPod®, and discuss why it’s vital to have an experienced integrator on your side in order to capitalize on the capabilities of converged infrastructure.

### THE RACE FOR CLOUD LEADS TO CONVERGED INFRASTRUCTURE

The race for Cloud is leading many organizations directly to converged infrastructure, which makes sense. Enabling a private or hybrid Cloud is a multi-step process that begins with stabilizing and modernizing legacy IT environments, consolidating data and resources, as well as standardizing operations with virtualization in order to eliminate data center complexity and lower costs.

The fastest way to move to Cloud is via a unified, converged infrastructure, or single integrated platform (often a “Pod”) that combines compute, storage, network and virtualization components from the start.

Converged infrastructure takes much of the guesswork out of Cloud deployments with validated technologies while fostering flexibility with multi-vendor architecture. Instead of laboring over the build-out of separate storage, server and networking infrastructure, which can take weeks or months depending on service requirements, a converged infrastructure platform cuts through the complexity of piecemeal procurement and implementation. It allows organizations to reduce risk and speed Cloud deployments with a pre-built, pre-tested intelligent virtualized infrastructure, freeing resources from traditional manual provisioning processes, and eliminating the need to purchase and configure separate systems and components to enable Cloud computing.

### “CLOUD-IN-A-BOX” IS FAR FROM PLUG & PLAY

Converged infrastructure is often marketed as “Cloud-in-a-Box,” which sounds great, but is somewhat misleading. “Cloud-in-a-Box” solutions don’t deliver converged infrastructure in one small box. It’s more likely that your “Cloud-in-a-Box” solution will arrive in hundreds (yes, hundreds) of individual boxes, taking up significant space in your data center and requiring weeks of time to assemble and deploy.

“Cloud-in-a-Box” solutions and converged infrastructure must be right-sized to meet current performance requirements, yet remain flexible enough to address future demands without being rebuilt or replaced.

Far from a plug-and-play solution, converged infrastructure, even when packaged as “Cloud-in-a-Box,” requires experienced integrators to configure, customize and deploy it properly. Without a clear deployment strategy, virtualization expertise, as well as proven supply chain, logistics and integration capabilities, a “Cloud-in-a-Box” solution can potentially cause more problems than it solves, disrupting operations and failing to work with established infrastructure.

There is simply no one-size-fits all solution when it comes to Cloud or converged infrastructure. “Cloud-in-a-Box” solutions and converged infrastructure must be right-sized to meet current performance requirements, yet remain flexible enough to address future demands without being rebuilt or replaced. This requires technical expertise and a strong understanding of the individual components of which the converged infrastructure is comprised.

### **A CLOSER LOOK AT FLEXPOD®**

FlexPod® is the perfect example of a powerful converged infrastructure solution that combines NetApp’s and Cisco Systems’ unified compute, fabric and storage technologies with validated virtualization options from an array of proven providers, including VMware, Microsoft, Oracle, Citrix and RedHat.

In the hands of the right integrator, FlexPod’s integrated compute, network and storage components make it easy to enable virtualization today and move at your own pace toward a private cloud. Unlike traditional virtualized infrastructure solutions, which require separate systems and components to meet specific requirements, FlexPod’s unified architecture allows users to leverage a pre-validated platform to minimize business disruption, improve IT agility and reduce deployment time from months to weeks. FlexPod also leverages cutting-edge technologies and empowers new use cases that redefine the way IT delivers value:

- All Flash FAS availability lets you deploy the precise proportion of Flash to spinning media for your specific application or environment
- Software-defined innovations like Cisco® Application Centric Infrastructure use intelligent software to automate hardware resources across next-generation data centers
- FlexPod architectures reach up to 1 million IOPS with low latency for Oracle® RAC—meaning extreme performance configurations can now be a top priority

As FlexPod components are standardized, you can more accurately plan for power, floor space, and capacity needs. Moreover, FlexPod scales easily to meet the largest data center requirements without drastic disruption or costly fixed architecture changes. By working with a FlexPod expert, that can configure and right-size FlexPod from the start, your FlexPod can scale both vertically and horizontally to meet a variety of short-term project requirements and longer-term needs, including:

- Deploying dedicated applications to support Software as a Service and Cloud environments
- Serving as a launching point for virtualization solutions, such as Virtual Desktop Infrastructure (VDI)
- Enhancing IT agility to meet mission-critical goals
- Expanding storage and compute pool capacity
- Transitioning to a shared infrastructure with multiple applications
- Streamlining and aligning operations with ITIL-based standards
- Much more

Whether you are a medium-sized enterprise with moderate growth requirements or a larger enterprise with more mature IT processes, working with an experienced integrator is the best way to maximize the use and value of FlexPod.

## ENSURE SUCCESS WITH AN EXPERIENCED INTEGRATOR

Getting the most from FlexPod (or any converged infrastructure) requires an experienced integrator that understands your unique unified storage, networking and server requirements, along with the intricacies of virtualization.

### The Department of Veterans Affairs Relies on Red River for FlexPod Success

When the Department of Veterans Affairs (VA) recently needed help to expand capabilities and modernize their IT infrastructure, they relied on Red River to improve IT agility with FlexPod. Red River demonstrated how FlexPods could centralize IT management across nearly 200 remote locations, eliminate the headaches of piecemeal IT procurement, and allow them to virtualize critical applications and decommission outdated legacy hardware. Within just nine (9) months, Red River helped the VA integrate 193 FlexPods and save millions of dollars while expanding compute and storage capacity, and dramatically reducing their data center footprint. Red River assisted the VA every step of the way and today, the VA can easily provision network, storage and compute resources for a wide variety of mission-critical functions, while managing everything through a single, unified converged infrastructure.

With over 20 years of IT expertise, Red River has overseen over 200 successful FlexPod deployments and is an award-winning NetApp, Cisco and VMware Partner with the know-how, secure supply chain capabilities, strategic purchasing vehicles and professional services to ensure the successful integration of FlexPod into your IT environments. We unravel the complexities involved in properly deploying, right-sizing and integrating FlexPod into your established infrastructure. Our experts work with organizations to determine requirements, then architect specific solutions to address current needs that can also scale easily to meet future demands. Moreover, Red River provides expert Simplified Support via our New Hampshire-based Network Operations Center (NOC), which means there is just one phone number to call, regardless of whether you're having a storage, server or network issue. Visit [www.redriver.com](http://www.redriver.com) to learn more about how Red River can help you architect a plan to capitalize on and capture all of the benefits of converged infrastructure today.

## ABOUT RED RIVER

Red River is an IT hardware integrator committed to helping customers optimize business processes and maximize the value of IT investments. Widely regarded for our special focus on the U.S. government, Red River has developed a remarkable reputation for delivering IT products and hardware-related services to military and civilian agencies and the companies that serve them. Our core values of hard work and honesty fuel our central mission to make IT personal. Learn more at [www.redriver.com](http://www.redriver.com).



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