



# Architecting Efficient and Scalable Disaster Recovery with Pivot3 HCI

Organizations have become deeply dependent on their IT infrastructure and critical data for both day-to-day operations and business success. At the same time, risks affecting business continuity have increased, due to Internet-based attacks, natural disasters, geo-political insecurity, or failure of some critical aspect of increasingly complex IT infrastructure. Recent studies show that more than 60 percent of companies do not have a Disaster Recovery (DR) plan and 40 percent of those who do believe it would not be very effective in case of a serious disaster.

Traditional approaches to disaster recovery that involve offsite tape-based backups are both ineffective and unrealistic. Given the increasingly digital nature of business, more data is being generated than ever before. Tape-based methods can't keep up, and organizations can't accept prolonged downtimes. Newer approaches that automatically replicate data to an offsite datacenter and orchestrate failover and failback are more appropriate for the needs of today's organizations. However, with the use of legacy storage technologies, this can become too complex and costly for many organizations, resulting in inadequate disaster recovery processes.

## Simplifying Disaster Recovery with Hyperconverged Infrastructure

Hyperconverged Infrastructure (HCI) is rapidly gaining traction as a new way of deploying IT infrastructure. HCI collapses the traditional siloes of three tier infrastructure by combining compute, storage and virtualization in modular building blocks based on industry-standard hardware.

HCI eliminates infrastructure complexities and simplifies management and scaling. This modern approach to building scalable infrastructure is ideal for architecting DR infrastructure. It reduces time-to-value, simplifies deployments and management, lowers the total cost, and overcomes many of the limitations inherent in traditional infrastructure approaches. However, careful attention to footprint, total cost and scalability is critical in order to ensure long term success of these deployments.

### KEY ADVANTAGES



**Reduced Footprint and Best TCO**  
Efficient vSTAC operating system and patented erasure coding delivers market-leading efficiency and TCO



**Architectural Flexibility**  
Rack and blade deployment options with capacity-only expansions



**Predictable Scalability**  
Linear, non-disruptive scale-out architecture ensures long-term viability



**Rich Partner Ecosystem**  
Customers can deploy a solution to meet their exact needs

vmware Zerto

COMMAVAULT

VEEAM



## Pivot3 HCI: Smart and Efficient Infrastructure for DR

Pivot3 HCI solutions offer market-leading performance, scale and efficiency while reducing total infrastructure footprint and IT complexity. With flexible deployment options, broad partner network and simplified management capabilities, Pivot3 lets you architect a solution to fit your exact DR requirements.

### **Best Efficiencies – Half the Footprint**

Pivot3 HCI, with its patented Scalar Erasure Coding (EC), substantially reduces capacity overhead by enabling up to 94 percent usable capacity. With EC, Pivot3 clusters can sustain node and drive failures with minimal performance impact. Additionally, vSTAC - the Pivot3 HCI operating environment - takes up less than 10 percent of compute resources, enabling exceptional efficiency and potentially doubling the VM density per node. With these capabilities, you end up deploying up to 50 percent less infrastructure compared to other HCI alternatives.

### **Flexibility to Deploy on Your Terms**

Pivot3 solutions are available in flexible deployment options that include all-flash and hybrid configurations, rack or blade mount nodes, and storage- or compute-only expansions. This allows you to architect your DR infrastructure to meet your exact needs. You can choose a combination of blade and rack nodes to optimize cost and footprint. Additionally, with flexible compute- and storage-only nodes, you can customize the compute-to-storage ratio to your exact needs while optimizing acquisition and licensing costs.

### **Predictable Non-disruptive Scalability**

Pivot3 HCI solutions are based on a distributed scale-out architecture that ensures linear predictable scalability, not only for capacity, but also for IO performance and available bandwidth. As you add more nodes to an existing Pivot3 cluster, the data is automatically and non-disruptively re-balanced on the expanded storage pool. All volumes and data sets are distributed across all available drives and nodes, so adding more nodes adds effective IO capacity. Each node brings 2 X 10Gbps network connections, so the effective throughput scales as you scale the cluster. All of this equates to simple, non-disruptive, predictable scalability for IT organizations in their DR environment as data needs grow and more applications are migrated under the DR umbrella.

### **Best of Breed Ecosystem**

Pivot3 collaborates closely with technology partners that include VMware, Zerto, Veeam and CommVault to ensure the joint solutions are validated and optimized to work together. Customers can choose a replication and DR solution that best meets their needs in terms of features and functionality as well as their RPO and RTO objectives.

## About Pivot3

Pivot3 improves the simplicity and economics of the enterprise datacenter with industry-leading hyperconverged infrastructure technology. By collapsing storage, compute and networking on commodity hardware, Pivot3 provides a software-defined solution that enables customers to scale to massive volumes and gain twice the performance of competing solutions, all at drastically reduced infrastructure requirements. Pivot3 has over 2,200 customers around the world and has deployed more than 16,000 hyperconverged infrastructures in multiple industries such as healthcare, government, transportation, security, entertainment, education, gaming and retail.

**For more information, visit [Pivot3.com](http://Pivot3.com)**