EQUUS
COMPUTE SOLUTIONS

Solution Brief

# Open Convergence for Infrastructure Agility and Efficiency

**Infrastructure friction is a barrier to business innovation, trapping IT resources within silos, slowing SLAs, and putting application and data access at risk. Open convergence delivers data center agility without infrastructure lock-in, so IT can operate with complete efficiency.**

Data center managers are looking to bring IT costs down while expanding capacity and simplifying management. Converged infrastructure answered the call for consolidation but didn't adequately address infrastructure complexity. While convergence brought compute and storage together for efficiency, scaling capacity had to be done in tandem with no option to incrementally scale storage independent of compute. The result was more hardware friction that added cost to the business.

## Split Provisioning, Flash Performance

A new breed of open convergence brings infrastructure together in a novel way, delivering more agility in how converged capacity is scaled—and how backup and recovery are achieved. Unlike conventional convergence in which storage and compute come together on a single node, open convergence features an autonomous data node that can be scaled independently of compute. The result is Dissagregated Hyper-Converged (DHCI) where storage can be added as needed, and applications can access capacity from any storage node.

This two-tiered converged infrastructure is centrally managed through a single pane of glass for efficiency and delivers a 67% faster deployment for new storage and an 85% shorter data recovery window.[1]

Infrastructure problems solved by open convergence include:

- **Hardware sprawl:** Flexible use of storage capacity boosts efficiency with less hardware
- **Workload immobility:** Data is available to power workloads on-premises or in the cloud
- **Siloed data management:** Unified management of storage from a central location ends complexity

## Datrium Open Converged Infrastructure

- **Converged primary storage, backup, disaster recovery, and security**
- **Data tier autonomous from compute tier**
- **Software-defined management**
- **High-performance flash capacity**
- **Stateless servers powered by Intel® Xeon® Scalable processors**

## Use Cases

- **Primary Storage:** Flash storage volumes integrated with backup and recovery, restore, and disaster recovery eliminate manual storage management.
- **Cloud Computing:** Integrated cloud management software ensures application and data mobility between public, private, and hybrid clouds with a single user interface for global visibility and control.

## Open Convergence at a Glance

**COMPUTE NODE**

- CPU
- VMs
- Flash SSD

**STORAGE NODE**

- Primary storage
- Backup storage

Open convergence can deliver five to ten times better performance and a 50% lower cost for protection.[2]

## Speed ROI of Open Convergence With Datrium by Equus

Equus brings together servers powered by Intel® Xeon® Scalable processors with Datrium storage nodes and management software. The result is a seamless solution that integrates easily into any environment, with Equus servers custom configured for high-speed, reliable performance to run virtualized and containerized workloads in the data center or the cloud.

## ROI of Datrium Open Convergence[3]

**617%**

Return on investment over three years

**54%**

Reduced operations costs

**47%**

Increase in IT staff efficiency

## Solution Overview

**Equus Purpose-Built Servers**

- Stateless for tier 1 resilience
- Scale up to 128 compute nodes
- Up to 32 TB flash storage per compute node

**Datrium Data Nodes**

- Always-on data efficiency (global dedupe, compression, erasure coding)
- Fully redundant and able to withstand double disk failure
- Scale up to 10 nodes 1.7 PB of usable storage

**DVX Software**

- Cloud data management and scaling for local, remote, and cloud backup

**ControlShift**

- Disaster recovery orchestration to automate primary, backup, disaster recovery, encryption, and mobility tasks

**Automatrix™ Management Platform**

- Automates and standardizes routine tasks in data lifecycle management across multiple clouds

## About Equus Compute Solutions

Equus is a leader in server and storage technology, with 25 years of experience customizing white box servers and storage solutions to enable flexible, software-defined infrastructures.[4] Equus is one of the top custom computer system integrators in the U.S. and has delivered more than 3.5 million custom-configured computing solutions. As an IT solutions provider for Datrium and Intel®, Equus provides Datrium-ready servers, powered by Intel® Xeon® Scalable processors validated to ensure the high performance of converged infrastructures with custom storage in a single solution.

**To learn more about open convergence, email us at Datriumsolutions@equuscs.com.**

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[1] Datrium, "Datrium Eliminates Storage Management and Backup to Increase Productivity of App Users and Efficiency of IT Staff," Oct. 2018.
[2] Datrium, "Datrium ROI Advantage," accessed June 2019.
[3] Datrium by Equus, "Datrium Customers Report Impressive Results" web page, accessed June 2019.
[4] Equus, "Equus Computer Systems" web page, accessed June 2019.