DataCore™ HCI-Flex Appliance

The Simplicity of HCI with the Flexibility of Software-Defined Storage

SOLUTION BENEFITS

• **Unparalleled Flexibility**
  Leverage internal and external storage regardless of vendor or underlying technology

• **Faster Time to Value**
  Accelerate deployment with simple, automated deployment in both ESXi and Hyper-V environments

• **Simplified Management**
  Console is fully integrated with vCenter deployment and ESXi management

• **Performance that Scales**
  Scale up and out up to 64 nodes

• **Cost-Optimized High Availability**
  Achieve true high availability with only 2 nodes using synchronous mirroring

• **Increased Storage Efficiency**
  Optimize diverse IT environments with storage pooling, auto-tiering, and data migration

• **The Power of Predictive Analytics**
  The HCI-Flex appliance includes DataCore™ Insight Services (DIS), a powerful cloud-based predictive analytics service

COMPLEMENT AND MODERNIZE YOUR EXISTING INFRASTRUCTURE

The DataCore HCI-Flex appliance offers the flexibility of software-defined storage in a simple to use, deploy and manage hyperconverged solution. Deployed in under an hour, the HCI-Flex appliance can pool and manage not only internal storage, but external block storage systems as well, regardless of vendor or underlying technology. The flexibility of the appliance delivers the significant benefits of software-defined storage and enables users to scale performance and capacity either up or out, based on business needs. The HCI-Flex appliance includes DataCore Insight Services (DIS), a powerful, cloud-based predictive analytics service.

“The DataCore ONE approach offers a unified model for primary and secondary storage that looks to balance price, performance and system management with the scale-out simplicity of modular, HCI-based storage.”

451 Research Impact Report - “DataCore ONE brings new appliances and analytical insights to its high-performance SDS platform” - July 12th 2019
HCl-FLEX APPLIANCE SOLVES MANY COMMON IT PROBLEMS

The HCI-Flex appliance brings together two best-of-breed entities, a highly reliable server foundation and the DataCore software-defined storage expertise to create a flexible HCI appliance that can be used to solve many of the most troublesome business and technology problems.

LIMITED RESOURCES

For organizations with limited budget, storage management expertise, and space, the HCI-Flex appliance provides a cost-effective solution with an intuitive storage management console that makes it easy to implement, deploy, operate and maintain. The DataCore HCI-Flex appliance can be deployed in less than an hour into new or existing environments thus accelerating time to value so IT can focus resources on more business-critical projects.

APPLICATION PERFORMANCE & AVAILABILITY

For organizations trying to manage increasing expectations that technology becomes a center for business growth and profit, the HCI-Flex appliance empowers IT with data analytics and insights, significantly reduces downtime and dramatically increases application performance. DataCore Software-Defined Storage, the foundation of the HCI-Flex appliance, has been shown to increase application performance by up to 3X while decreasing storage related downtime by as much as 50%. 1,2

CHANGE MANAGEMENT

For organizations seeking to reduce their dependency on multiple disaggregate management systems as well as complicated routes to maintenance and support, the DataCore HCI-Flex appliance provides proactive insights and trend data so capacity planning and remediation are simplified. The end result is a significant reduction in latency and downtime due to complications associated with change management, data migration and accidental misconfiguration.

1 https://www.techvalidate.com/tvid/9E7-A4D-A83
2 https://www.techvalidate.com/tvid/5DA-70D-643
HCl-FLEX APPLIANCE IS A GREAT CHOICE FOR MANY USE CASES

REMOTE OFFICE/Branch Office
The HCI-Flex appliance is an ideal choice for remote locations and branch offices. Simple, intuitive deployment enables fast and easy setup in locations with limited or no dedicated IT resources. Once installed, the appliance can connect to a datacenter-based DataCore installation providing common data services and management across locations. This consistency of services streamlines and simplifies critical infrastructure management functions such as performance optimization, replication, failover and recovery.

VDI
Optimized for high-density VDI deployments, the HCI-Flex appliance substantially reduces cost per virtual desktop and delivers a seamless end user experience while minimizing infrastructure footprint and total cost of ownership.

EDGE COMPUTING
The volume and velocity of data is increasing at an overwhelming rate. Many businesses are adopting edge computing as a way to provide faster access to latency-sensitive applications and optimize network bandwidth. When deployed as an edge computing platform the HCI-Flex appliance can increase the speed of applications by up to 3X while preventing storage-related downtime. When connected to a DataCore installation located in the datacenter, the same benefits of data service consistency discussed above apply to the edge computing scenario.
BUILT ON THE SOLID FOUNDATION OF DATACORE SOFTWARE-DEFINED STORAGE

OPTIMIZED PERFORMANCE

- **Parallel I/O** - Process I/O in parallel vs serially for increased application performance up to 10X
- **Caching** - Accelerates disk I/O response and uses CPU cache/RAM as “mega cache”
- **Random Write Accelerator** - Eliminates random write performance penalty and provides SSD-like performance from HDDs
- **Auto-Tiering** - Automatically sets tier assignments based on policies, with support for up to 15 storage tiers
- **Load Balancing** - Auto balances I/Os across devices and bypasses failed/offline channels
- **Quality of Service (QOS)** - Limits I/O traffic from lower tier workloads and enables critical apps to run faster

ALWAYS-ON AVAILABILITY

- **Replication & Site Recovery** - Bi-directional asynchronous replication for disaster recovery and rapid restoration
- **Continuous Data Protection** - Restore to any point in time without application interruption
- **Encryption** - XTS-AES 256-bit encryption for data-at-rest that is storage-device independent
- **Synchronous Mirroring** - Maintains data in two places eliminating storage as a single point of failure
- **Snapshots** - Recover rapidly at disk speeds while eliminating extended backup windows

INCREASED STORAGE EFFICIENCY

- **Storage Pooling** - Splits tiers based on price/perf/capacity and eliminates stranded disk space
- **Deduplication/Compression** - Replaces duplicates with pointers to single, compressed instances
- **Data Migration** - Clears and reclaims space with zero downtime migrations
- **Thin Provisioning** - Occupies only space being written to and dynamically allocates more space as needed

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GANESHPURAM™ CUSTOMER REVIEW

DataCore SDS – Incredible Performance, Uptime and Flexibility in an Easy-to-Manage Solution

5/5 Stars

How would you describe DataCore SDS to a friend or colleague?

“Best software SAN solution in the world. Can manage anything that you throw at it. Outperforms any SAN appliance that I have worked with.”

In a few sentences, describe the biggest benefits you have seen since implementing DataCore storage virtualization software:

“Ease of management and no down time.”

Source: Ganeshpuram, Engineer, Claire’s, Incorporated

Published: May 16, 2021 7192-294-680-888
THE POWER OF DATACORE INSIGHT SERVICES

1. OPEN INSIGHTS DASHBOARD
   View the collective number of health & optimization insights across your server group at-a-glance.
   - Critical & informational
   - Clickable

2. PRIORITIZED ACTIONABLE INSIGHTS
   Real-time, prioritized task list to help storage administrators focus on what’s important. DIS insights are all actionable, delivered in an easy to use format, with clickable buttons to immediately take prescriptive remediation steps.
   - Ordered by severity level
   - Clickable remediation steps

3. HEALTH & OPTIMIZATION STATUS
   DIS monitors your environment all day, every day from the cloud generating predictive insights to avoid downtime and ensure optimal configuration. The health & optimization status of your entire DataCore server group are provided at-a-glance so administrators know immediately upon login where to focus their attention.
   - Overall status
   - Clickable improvement recommendations

4. CAPACITY & PERFORMANCE TRENDS
   View historical capacity and performance trends over time to assist in workload planning. Proactively add capacity or migrate workloads based on predictive insights before performance is impacted or downtime occurs.
   - Real time & historical
   - Predictive capacity end date
THE VALUE OF FLEXIBILITY

The DataCore HCI-Flex appliance provides the ease of deployment, simplicity, and agility of hyperconvergence, along with a key differentiator: flexibility. With the HCI-Flex appliance you can efficiently manage internal storage while connecting to and utilizing external storage as well. This enables you to combine both internal and external capacity into a single pool and use auto-tiering across SSD, HDD and secondary storage to optimize performance while reducing overall costs. Scaling compute and storage independently eliminates potential overprovisioned compute and wasted capacity that result from limited, node-based growth. The HCI-Flex appliance can scale out up to 64 nodes giving you the freedom to allocate your storage to applications based on business needs.

THE AUTHORITY ON SOFTWARE-DEFINED STORAGE

As a pioneer of SDS and storage virtualization, **DataCore holds 22 patents and is trusted by over 10,000 customers worldwide**. With deep industry expertise, continuous innovation and a proven history of modernizing SDS for the software-defined datacenter, DataCore is the Authority on Software-Defined Storage™.

AWARD-WINNING GLOBAL SUPPORT TEAM

Distributed across three major service hubs strategically located in Europe, North America and Asia, the award-winning DataCore Support Centers are staffed 100% with Level 3 Service Engineers. When you contact DataCore Technical Support, the first responder is an experienced professional who owns your issue from inception to resolution regardless of the vendor. DataCore cares about its customers not which vendor’s problem it is. We believe world-class support is the backbone of our customer relationships.

**ALWAYS ON SUPPORT**

24/7 – 365 DAYS

**AWARD-WINNING TECHNICAL SUPPORT**

**CUSTOMER FOCUSED**

DATACORE cSat 99.6%

2016-2019

Discover the Ultimate Flexibility of DataCore Software

DataCore software-defined & hyperconverged storage solutions reduce costs, eliminate vendor lock-in, and deliver ultimate flexibility in how organizations manage, build and modernize their storage infrastructures.

See why over 10,000 customers recognize DataCore Software as the most flexible software-defined storage platform and visit www.datacore.com.