

## Customer References 2019



## SPIEGEL-Verlag Rudolf Augstein GmbH

Media, Hamburg, Germany

#### Company

 SPIEGEL-Verlag was established in 1947 and has its headquarters in Hamburg. In 2014 the Spiegel Group had a revenue of 285 million Euro and counted 1.100 employees. The news and business magazine DER SPIEGEL is one of Europe's highest reputed journalistic products with 800.000 copies weekly

#### Challenge

- High Performance, round-the-clock availability of archive and production data
- Maintenance and renewal problems with existing storage virtualization software vendor
- Opportunity to provide server/storage for short-term projects in an efficient way

#### DataCore Solution

SANsymphony in a stretched cluster configuration on redundant Fujitsu Primergy servers with internal SSD and external SAS and SATA disk storage systems; 300TB storage capacity

#### **Customer Benefits**

- High Availability, CDP (Continuous Data Protection) and Snapshots
- Multi-Vendor-Support
- Performance benefits through SSD integration and Auto-Tiering

"With DataCore we have every opportunity to set up our storage infrastructure flexible, regardless if we will expand our SAN, implement a Virtual SAN or migrate our data center in the future. We can react vendor independent according to our current needs." Robert Kiehne, Gruppenleiter IT Systemmanagement

### DER SPIEGEL

Das deutsche Nachrichten-Magazin







• The ExCeL is the UK's Largest Conference Venue with over 3 million visitors a year hosting hundreds of conferences, trade shows and world class events

# EXCEL

#### Challenge

As a leading UK public venue, located close to London City Airport, The ExCeL required a mechanism to
cost effectively develop their VM enterprise clusters using a shared backend, that offered High
Availability so that if a hazard hits, they could weather any outage



#### **DataCore Solution**

DataCore's SANsymphony software platform assures The ExCeL is 'Always-on'

#### **Customer Benefits**

Delivering enduring value over multiple generations; providing continuous Availability to Applications and Data, over a Ten Year Span. Scaling, growing and provisioning is achieved on demand

"The ExCel hosts events continually throughout the year, so downtime has never been an option. We run two physically separated data centres for business continuity and disaster recovery and for the past ten years have successfully relied on DataCore's SANsymphony solution running in a replicated dual node configuration to present all data to our VMware enterprise cluster. Protecting our apps remains the most important function for IT." Paul Tuckey, IT Manager, ExCel London



# OSI Food Solutions Germany GmbH Food Industry, Günzburg, Germany

#### **Company**

 US-based OSI Group is an international network of companies and production plants in the food industry, counting over 20.000 employees worldwide in 50 locations and 18 countries. OSI Food Solutions Germany GmbH has around 250 employees and is a meat processing company



#### Challenge

Failsafe, cost effective shared storage for VMware vSphere, Citrix XenApp, SQL and the ERP system Microsoft Dynamics NAV (Navision)

#### **DataCore Solution**

Since 2007 mirrored SANsymphony configuration in a 8 Gbit FC environment on two generations of HP servers and 3 storage generations of HP and HDS systems; today 2x24TB on HDS HUS130

#### **Customer Benefits**

- One Software platform for several Server & Storage Generations
- Ease of management by integration of DataCore in VMware vCenter
- Central SDS platform for synchronous mirroring with Autofailover, Auto-Tiering, Thin Provisioning, Caching-Technology, Reporting and Analysing Tools. Downtime significantly reduced



"We now use DataCore SANsymphony for years and are completely satisfied with it. With our mid-sized company structures, an easy-to-use solution with good price-performance ratio is important to us. This is exactly what DataCore is doing."

Wolfgang Allgäuer, IT-Manager Infrastructure





Marlow Foods, owner of the Quorn brand, offers quality food products, 600 employees

#### Challenge

- 99.999% storage reliability & performance for VMware vSphere, SAP, ERP & Tier-1 Apps
- Integration of SAS & SSD

#### **DataCore Solution**

- SANsymphony on 2x Dell T710 servers; synchronous mirrored SAN pool
- DataCore Auto-Tiering with 3 tiers including SAS & SSD

#### **Customer Benefits**

- Performance improved 500%; data mining response improved from 20 min to 20 sec
- 0% Storage-related downtime running DataCore for >2 years
- Storage-related spending reduced by > 25%





"DataCore's SANsymphony-V now reliably underpins the entire estate. From a transformation perspective we have new levels of availability and enhanced decision making for both IT and the users."

Fred Holmes, Head of IT at Quorn Foods



 RW SPAIN is a subsidiary of the North American RWGarcía group, has inaugurated a new factory in Valladolid for the production of healthy snacks using organic products. This new factory needed new IT infrastructure to run their main applications

#### Challenge

- New high availability infrastructure for their most important applications
- Simplification of the new solutions on the administration and operation side
- Easy to deploy, implementation time significantly reduced
- Reduce costs

#### **DataCore Solution**

DataCore HVSAN + 2 x LENOVO X3650M5 servers

#### **Customer Benefits**

 High Availability and High performance for their coporate applications (ORACLE BBDD and ERP Spyro), and cost reduction versus traditional storage replication solutions









MAN Truck & Bus Italy is the importer of Italian MAN Truck & Bus AG, part of the MAN Group and
one of the leading international manufacturers of industrial vehicles and supplier of innovative
transport solutions; 34 000 employees

#### Challenge

- Consolidation of the existing, heterogeneous environment
- Business continuity and cost reduction

#### **DataCore Solution**

- SANsymphony on two servers
- Synchronous mirroring and transparent failover on each side

#### **Customer Benefits**

- Existing investments can be integrated in the new environment
- · Performance improvement and greater scalability



"DataCore's SANsymphony is a very practical solution which I can recommend to other companies. As DataCore is not tied to a particular manufacturer in terms of hardware we can consider further extensions of our environment freely and choose the best deals."

Alessandro Zamboni IT Manager at MAN Truck & Bus



## JadeWeserPort Realisierungs GmbH

Logistics, Wilhelmshaven, Germany

#### **Company**

• JadeWeserPort is Germany's largest harbour project, opened 2012, located at Wilhelmshaven at the North Sea coast. The port area consists of the container handling zone, a logistics zone and major railway installations. Capacity is 2,7 MIO TEU (twenty-foot equivalent container units)

#### Challenge

· Migration of the complete data center into the new area

#### **DataCore Solution**

- SANsymphony-V10 on HP Proliant in a FC fabric; EMC VNX storage for Vmware ESX hosts
- · Building up redundancy in old & new data center
- Physical migration

#### **Customer Benefits**

- Performance improvement thanks to DataCore caching
- No latency between two data center sites
- Continuous Data Protection (CDP)
- Hardware and vendor independence for future servers





"DataCore improves the storage performance and secures high availability for our business critical data. With SANsymphony-V10 we also won flexibility for our IT infrastructure. Long term we benefit from economical advantages and reduced costs."

Jens Rohlandt, Head of IT



• TUI Cruises was founded in April 2008. The company is a joint venture between TUI AG from Hanover & Royal Caribbean Cruises Ltd., the world's second largest cruise company



#### Challenge

 The customer required a high level of availability and security when implementing the server and storage infrastructure on the newly built Mein Schiff 3, Mein Schiff 4, Mein Schiff 5 and Mein Schiff 6 as well as replacing the IT systems on the two earlier ships

#### **DataCore Solution**

 The entire IT infrastructure is designed redundantly & is synchronously mirrored using DataCore software

#### **Customer Benefits**

- SANsymphony synchronously mirrors data, regardless of the manufacturer, model or technology of
  the connected storage hardware in order to ensure a high level of availability for systems on the
  ships. New and existing storage hardware can be easily integrated & its lifespan is extended
- SANsymphony offers fully developed storage services used for data management & backup
- Well-engineered caching technology optimizes the performance of the underlying hardware



"Once you're at sea, the IT systems need to be absolutely reliable. That's why we only work with providers and products that we trust 100%. That includes DataCore and SANsymphony." Niels Heider. BSH IT Solutions



## Streck Transportgesellschaft mbH

Speditions- und Logistikunternehmen, Lörrach, Germany

#### Company

Die Streck Transportgesellschaft mbH ist ein deutsches und international tätiges Speditions- und Logistikunternehmen mit Hauptsitz in Lörrach, Baden-Württemberg. Das Unternehmen verfügt über 19 Standorte in Deutschland und der Schweiz und zählt rund 1200 Mitarbeiter

#### Challenge

Die Entscheidung zur Einführung einer neuen, zentralen ERP-Lösung, hier die branchenoptimierte Cargo Suite auf Basis von Microsoft Dynamics AX, brachte verschiedene strategische Überlegungen mit sich.

#### **DataCore Solution**

Insgesamt wurden 4 DataCore Knoten auf Typ HPE ProLiant DL380 Servern eingerichtet. Zwei dieser gespiegelten Knoten mit der Software-Defined StorageSoftware SANsymphony stehen als zentrale SAN-Plattform für die Hyper-V-Hosts als redundantes Paar zur Verfügung.

#### **Customer Benefits**

- Die Performance hat sich um das 8-Fache verbessert
- Der Zeitaufwand für Administrationsaufgaben hat sich um etwa 50% verringert

Hardwareunabhängigkeit und Einsatz preisgünstiger Speicherkomponenten "Durch die gute Planung und den konsequent redundanten Aufbau konnte die Installation und Inbetriebnahme ohne nennenswerte Ausfallzeiten im Geschäftsbetrieb vonstattengehen. Mit dem Ablauf und dem Ergebnis sind wir sehr zufrieden: Performance, Performance, Performance!" Eric Kratzin, stellvertretender Leiter des Rechenzentrums bei Streck





## **Elddis Caravan & Motorhomes**

### Motorvehicle Manufacture, UK

#### **Company**

Elddis is the UK's leading manufacturer of contemporary caravans and motorhomes

#### Challenge

- Performance problems on this existing VMware ESX virtualised environment
- Virtual machine and application sprawl
- On the ERP side, Epicor Unidata was also struggling to deliver timely access to information
- The combined resource demands of all Elddis' critical business apps was negatively impacting productivity

#### **DataCore Solution**

• On-premise performance enhancement using DataCore SANsymphony Auto Storage Tiering to deliver an altogether more responsive, agile IT environment

#### **Customer Benefits**

Storage performance issues were fixed by eliminating competition for traditional spinning disk resources
across all Tier 1 applications, and the host upgrade eradicates memory over-commitment to provide
breathing space for Windows Server 2012 R2 upgrades and deployment of new business





"Planned rebuilds of the internal stock and error identification systems used to take up to 4 hours. This now takes 17 minutes. And with email and other applications, we have noticed a vast speed increase - users who had become used to the blue circle while views rebuilt can now switch through screens instantly. And the facility to accelerate application data access with flash has allowed our CAD department to be given greater access speeds for designing in 3D." Darren Nesbitt, IT Controller



• Founded in 1964, the German Gutta Werke GmbH develops, manufactures and distributes plastic materials and components for roofing materials, protective walls, construction and garden products



#### Challenge

Improved productivity, performance, high availability and data protection after VMware implementation

#### **DataCore Solution**

SANsymphony-V on Dell servers and MD1200 and MD1220 disk shelves; 32 terabytes of SATA, SAS and SSD; auto-tiering seamless migration of virtual machines with Citrix Terminal Server, Active Directory, NetScaler, EDI archive, file services, Notes etc. Data backup with Veeam backup solution

#### **Customer Benefits**

- High Availability: 7 years without storage-related failure
- Hardware independence: expansion and replacement during operation
- Performance improvements through SSD integration and auto-tiering
- Easy administration & priced much more attractive than hardware-based concepts

"We chose DataCore and have not regretted that choice. In addition to the platform and hardware independence, the price-performance ratio advantage convinced us. The DataCore solution in total costs much less than the two large SAN systems we had and more than fulfill the same function. DataCore gives us flexibility and stability - it is predictable and runs like clockwork."

Arnd Seigel, IT Manager Gutta Werke GmbH



• Over 40 years of experience in manufacturing PVC frames destined to european customers, 14 branches, more than 1,400 employees in Europe

#### Challenge

• With the consolidation of heterogenious resources in 2 central data center sites, higher reliability, performance and availability was needed to ensure business continuity and disaster recovery

#### **DataCore Solution**

 2 DataCore nodes synchronously mirrored on HP servers, provisioning 2x10 TB highly available virtual storage capacity for ca 120 virtual machines running ERP, CRM, security, management, production data, etc

#### **Customer Benefits**

- · Integration of two different generation SAN that previosuly did not communicate with each other
- Transparent management
- Cost savings (no need to buy further HW)
- Business continuity in data migration
- Performance increase

Porte, finestre e persiane

FINSTRAL®



"DataCore SSV gave us high performance and very stable system, especially appreciated by technicians, who consider the ideal system that requires less effort-SSV is an excellent solution that does not require significant management actions and created dialogue between different systems, seamlessly and transparently at very competitive cost." Andrea Brancaleoni - Technical Manager S.I. Finstral



 Imperial Tobacco Poland SA is part of the Imperial Tobacco Group, one of the largest tobacco companies in the country with approximately 1400 employees

#### Challenge

Business continuity and uninterrupted access to production and quality management information

#### **DataCore Solution**

 2 SANsymphony nodes with attached disk arrays in seperate server rooms connected via Fibre Channel for synchronuous mirroring

#### **Customer Benefits**

- High availability for SAP and QAD systems
- Non-disruptive implementation and data migration
- Eliminated single points of failure in the storage infrastructure
- Use of already acquired storage hardware





"Our manufacturing process is subject to strict controls and among other reasons it is important to ensure continuity of the production line. DataCore Software ensures that we achieved greater data security and improved the efficiency of the IT infrastructure" Marcin Rucinski, System administrator, Imperial Tobacco Poland



## Svenska Cellulosa Aktiebolaget SCA

Manufacturing, Stockholm, Sweden

#### **Company**

 SCA is a leading global hygiene and forest products company. The Group develops and produces sustainable personal care, tissue and forest products. SCA is currently represented with appr. 600 employees in Poland for production, sales and marketing of hygiene products



#### Challenge

 High availability of flexible and scalable disk space at the lowest total cost of ownership (TCO) in a production management system with dozens of virtual Hyper-V servers

#### **DataCore Solution**

2 SANsymphony nodes on Lenovo System x3500 servers with integrated 10 TB (12 disks of 900 GB each) in a 10 Gbs Ethernet environment



#### **Customer Benefits**

- Simple cost-effective entry into storage virtualisation
- Higher performance
- · Fault-tolerant environment with full redundancy and auto failover
- Opportunity to include SSD or flash in future

"The uniqueness of our solution lies in the fact that we wanted to build a highly available environment without the need for external storage arrays...We are very satisfied with DataCore SANsymphony. We managed to create a highly available environment, while also increasing its performance." Marcin Korpacki, Head of IT, SCA Hygiene Products



 Lubelski Węgiel Bogdanka S.A. is the most modern & one of the biggest coal mines in Poland, a leader in energetic coal production. In 2013, the amount of coal it produced was 8,35 million tons



#### Challenge

 With main focus on high data availability, Bogdanka's rapid growth demanded a more flexible, automated, and effective IT environment

#### **DataCore Solution**

• Implementation of a virtual infrastructure with VMware vSphere and DataCore SANsymphony in two data centers with backup based on the newly-built architecture

#### **Customer Benefits**

- Increased efficiency, flexibility and reliability of IT environment; resource consolidation; business continuity
- Savings thanks to lower hardware, power and cooling expenses
- IT infrastructure can be expanded in the future with minimal time, financial and human resources



"We couldn't afford to spend a lot of time on restoring the IT equipment's functionality after a breakdown, as that would negatively affect the continuity of our business and customer service. This is why we decided to migrate our IT infrastructure to a virtual environment based on VMware vSphere and the storage virtualization with DateCore SANsymphony software."



# Offshore Group Newcastle Limited Oil & Gas, Tyneside, UK

#### Company

OGN Group is a main contractor to the oil & gas and renewable energy sectors providing engineering, procurement and construction contracting services

#### Challenge

- Business growth with prestigious contract wins and a switch to 24 hour operations, led to increased IT pressures
- Expansion of the company's SAP Enterprise Resource Planning platform alongside Microsoft Exchange, SQL databases and file servers was squeezing the storage infrastructure to such an extent that bottlenecks were becoming more commonplace

#### **DataCore Solution**

OGN were already running metro-cluster synchronously mirrored storage, with the stretch cluster running on a pair of DataCore SANsymphony nodes. To deal with the unprecedented growth of the environment, a straightforward turbo charge of the Head Office virtual estate was implemented

#### **Customer Benefits**

The resultant additional 1400GB of low latency storage harnessed DataCore's Auto Tiering feature to automatically maintain the production working data set across all key virtual machines on flash

"By utilising 'off-the-shelf' components in a creative solution, we were able to dramatically increase performance of our systems across the board. Crucially, the performance uplift was sufficient to enable us to defer adoption of costly 'in memory' ERP appliances, at least until that technology becomes suitably mature." Jonathan Taylor, OGN's Corporate Head of IT





• LERG S.A. Pustków is a leading manufacturer within the chemical industry in Poland. The company's focus is the production and the export of resins for a wide range of applications in various industries

#### Challenge

- Modernisation of existent infrastructure to gain more performance, reliability and grow capacity
- Virtualization with VMware in a clustered configuration for core application servers
- Setting up a second data centre as backup and recovery site

#### **DataCore Solution**

- Hyper-converged solution with DataCore Virtual SAN on HP Proliant server, internal HDD and SSD
- Synchronous Mirroring all data between the sites ensuring business continuity
- · Automated high availability concept in a stretched cluster

#### **Customer Benefits**

- Improved availability & maintenance
- Hardware independence in future







 Abra S.A. is part of Steinhoff International. Abra is the biggest non-manufacturing chain of furniture stores in Poland with 88 furniture stores & more than 700 employees in stores, warehouses, & offices

# sklepy meblowe

#### Challenge

- No high availability between different EMC systems in different locations
- Inefficient use of the "standby" datacenter, inefficient use of FC, SATA and SSD resources

#### **DataCore Solution**

- Implementation of SANsymphony on Dell PowerEdge into the existing SAN infrastructure
- Addition of low cost SSD and auto tiering

#### **Customer Benefits**

- High availability with synchronuous mirroring and auto failover between heterogenious resources
- High efficiency with two active-active data centers
- Higher performance & free choice of hardware in the existing SAN



"The implementation of Datacore's SANsymphony software resulted in a considerably better efficiency of the IT systems. The availability of the entire infrastructure was also increased. The failure of arrays, or even of the entire data center, does not affect neither the systems nor the users. Moreover, it is a very flexible and scalable solution, characterized by maintenance costs so low that they are simply unrivaled." Grzegorz Krzypkowski, IT Infrastructure Manager



 JULABO GmbH develops complex temperature control solutions. JULABO devices equipped with the latest control technology are being used wherever a high degree of temperature accuracy or a rapid reaction to temperature changes is required



#### Challenge

 Centralisation and being able to rapidly and efficiently implement market requirements for IT projects. High availability and data security



 Virtualisation of all storage capacities and automatic provisioning, synchronous mirroring between the computer centre sections, central administration tools for monitoring and interruption-free data migration



#### **Customer Benefits**

- Time input for routine administrative tasks was reduced by 90%
- Planned downtime (data migrations, upgrades, updates) was reduced by over 95%
- DataCore has managed to convert 50% unused storage space into free storage capacity

"The complete infrastructure project for the network, servers and storage using DataCore SANsymphony was carried out at the same cost that would have covered only the storage solution with NetApp or other hardware providers."

Jürgen Jonescheit CIO, Julabo GmbH



Jena-Optronik is one of the leading suppliers for space industry & a market leader for state-of-theart 3D-lidar systems, Rendezvous & Docking Sensors, multispectral space research & position control sensors

#### Challenge

- Building up a disk-based archiving solution with online access & 20 years+ data retention time
- Integration with existing infrastructure with DataCore SANsymphony

#### **DataCore Solution**

- DataCore SANsymphony BULK Server on HPE Proliant hardware
- D2600 disk shelfs with 6 TB HDDs; up to 100 TB capacity

#### **Customer Benefits**

- Use of low-cost storage hardware enabling HW independence for the next 20 years
- Unified and central management for the entire storage environment
- Easy integration of new storage (HW) technologies
- Calculable and low expansion costs

"The hardware independence of the DataCore solution is the key to a future-proof flexible infrastructure and the cost for expansions is calculable. We can integrate new storage technologies and are prepared for the next 20 years."

Reiner Pohl. Head of IT at Jena-Optronik







 Evergreen Garden Care Ltd is a leading garden care company established 12 months ago as a new international company based in the UK, with interests across 8 countries in Europe and Australia and recognised household brands such as MiracleGro, RoundUp and Weedol in their portfolio



#### Challenge

 Organising a new supporting infrastructure for critical business systems that stretches across 10,000 miles without any negative impact to Evergreen's constant sales trading or application usage for the 800 employees, can only be described as a mammoth IT challenge

#### **DataCore Solution**

A three tiered, continuously available solution with DataCore's SANsymphony, Tier 1 – NVMe read intensive, ultra fast response, enterprise class SSDs. Then came Tier 2, generously served Flash and lastly, Tier 3 SAS drives for the less frequently accessed data



#### **Customer Benefits**

- Optimised and ready for SAP HANA Tailored DataCentre integration
- 3 tiered continuously available solution, Tier 1 NVMe > Tier 3 SAS, boosted by parallel caching
- Vastly exceeded performance requirements, from Australia to Europe

"With divestment timescales as tight as we faced, we needed a tried and tested system that would work first time and would gain the necessary SAP accreditations. We found that in DataCore." Steve Williams, Interim CIO, Evergreen Garden Care Ltd



• Grupo Antolin is one of the leading global automotive interior manufacturers and has four Business Units: Overheads & Trunk Trim, Doors & Hard Trim, Lighting and Cockpits & Consoles



 To simplify its global infrastructures, which are centrally managed from the Burgos plant, among other things

#### **DataCore Solution**

- Migrate to a storage virtualisation environment of over 800 terabytes of data, distributed in 36 offices (with two nodes each)
- A fully redundant, hyper-converged solution, using two DELL PowerEdge R730xd servers and DataCore's SANsymphony. DataCore's storage virtualisation software can be used to create a Virtual SAN with the internal server drives and with visibility for both systems

#### **Customer Benefits**

- 5x increased Performance
- 100% reduction of inactive Storage Data







"DataCore has helped us simplify and further standardise our plant infrastructures, while increasing the performance and availability levels." Eneko Ferrero Martín, Head of the IT Infrastructure at Grupo Antolin



• Die Heinrich Eibach GmbH genießt weltweit den Ruf als ein führender Hersteller von hochwertigen Federungs- und Fahrwerkssystemen sowie technischen Spezialfedern für anspruchsvolle Anwendungen



#### Challenge

• Die IT-Verfügbarkeit durch den Aufbau eines weiteren Rechenzentrums zu erhöhen sowie die Performance aktuellen Anforderungen anzupassen

#### **DataCore Solution**

 DataCore SANsymphony läuft auf zwei HPE DL 380 Gen 10-Servern, die in den Rechenzentrumsabschnitten verteilt sind und mit synchroner Spiegelung für die Ausfallsicherheit

#### **Customer Benefits**

- Migration war im laufenden Betrieb möglich
- Steigerung der IT-Geschwindigkeit beim Anwender deutlich spürbar
- · Einsparung von Speicherkosten durch intelligente Datenhaltung und
- Reduzierung der Kosten durch planbare und ungeplante Wartungsfenster



"DataCore wurde uns im Auswahlprozess von mehreren Anbietern empfohlen. Letztlich haben uns aber die positiven Erfahrungen und professionellen Services von Hees Bürowelt überzeugt. Wichtig war uns beim Projekt, eine zukunftssichere Investition zu tätigen, weil die Speicheranforderungen in Zeiten der Digitalisierung schwer vorherzusagen sind. DataCore versetzt uns jetzt und in Zukunft in die Lage, größtmögliche Flexibilität zu gewährleisten." Marianne Schröder, IT-Leiterin, Heinrich Eibach GmbH



 Kirklees College is one of the UK's largest further education establishments with over 20,000 students

#### Challenge

 Provide a flexible, always-on, scalable infrastructure that keeps the college ahead of governmental directions including the forthcoming FELTAG recommendations, adherence to which secures ongoing governmental funding

#### **DataCore Solution**

 DataCore has provided the college's secure, optimised backbone for over 10 years. The true software defined storage approach allows the college to change storage on the fly, simply by changing the LUNs required

#### **Customer Benefits**

- Running DataCore securely & flexibly for >10 years through successive college mergers & expansion
- Provides Disaster Recovery 10km away and no outages for maintenance
- Auto tiering has dramatically lowered the cost per TB of storage





"All solutions offer resilience, but there are few that bring total piece of mind. Once it's in place, it's a transparent software layer. We wouldn't face the future without it." Jonathan Wilkinson, Head of IT, Kirklees College



Bradford Grammar School stands as one of the top co-educational independent selective schools in the UK,
 with 1100 students in junior and senior schools ably supported by 250 staff

#### Challenge

A compulsory upgrade to a StarWind Virtual SAN solution should have been seamless, but instead the
install grinded to a halt. The same fault happened every time the system was re-started, accompanied by
data corruption. Over the next 12 months fixes were promised, but none materialised

#### **DataCore Solution**

SANsymphony solution complete with High Availability, Synchronous mirroring & Auto-tiering

#### **Customer Benefits**

- Disaster Recovery is now assured, with replication occurring to an offsite hosted node
- For random writes DataCore's Random Write Accelerator feature now effectively takes these highly random workloads and sequentialises them to achieve greater performance
- The backup window has decreased significantly & internet access performs better





"The install of SANsymphony has literally been the difference between night and day." Simon recollects: "We had been limping along with a single SAN, so it was a pleasure to be able to turn everything on at once and see it powering through. Applications, software performance, database performance, opening files, saving files and replication - it all worked, and at speed. We haven't looked back."

Simon Thompson, Network Manager



The University of Birmingham is a public research university located in Birmingham. The student population including 38,000 students & 6,500 staff which is the fourth largest in the UK

#### Challenge

When the main cable that connects the University to the Power Grid was stolen, the large campus became vulnerable as various core infrastructure elements fell outside of UPS protection. The storage required a complex manual failover process

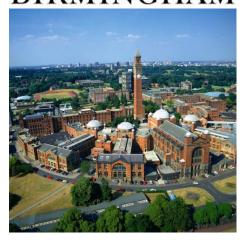
#### **DataCore Solution**

- Implementation of SANsymphony included the repurposing of the existing storage from our HP EVA arrays and adding to two DataCore nodes to make it instantly highly available
- SANsymphony underpins our top 20 services as well as 500+ other production VMs

#### **Customer Benefits**

- Cost justification compared to EMC/HP & priced per TB, far cheaper
- Possibility to migrated from T1 storage arrays to mid-tier arrays with SSD, SAS and NL
- Improved Performance, utilization and planned maintenance
- No hardware vendor tie-in & Zero Touch failover and failback

### UNIVERSITYOF **BIRMINGHAM**



"It just worked!!! Using DataCore SANsymphony has made our lives so much easier. I don't think we could ask for more in a solution" Spencer Webb, Senior Storage and Virtualisation Specialist



 Uplands Community College is a secondary school in Wadhurst, East Sussex, England serving pupils between the ages of 11 and 18

#### Challenge

 A stalled VDI adoption, due to the heavy demands VDI places on storage hardware, started to impact each day with regular performance bottlenecks especially at morning login which materialised in a 5 minutes wait for log-on as the ageing hardware struggled to cope

#### **DataCore Solution**

 The College upgrade to the latest version of SANsymphony merging the colleges' two separate SANs into one highly available, easily maintained, highly performant pool. This was achieved by slotting in low cost, high performance Flash storage that could be added into a standard server

#### **Customer Benefits**

- No longer were users stalled by long and unpredictable waits in peak times
- Desktops remain highly available, assured and highly performing
- Back in the server room, IT has easier VDI management. They are able to recreate all the desktops across 100 virtual machines in under 20 minutes by simple point and click

UPLANDS
COMMUNITY COLLEGE

"Since using DataCore, our storage-related spending has been reduced by over 50%, and we provide a first rate user experience which we now have achieved - with a few tweaks along the way." Neil Harris, ICT Support Manager, Uplands Community College



 Ecole Polytechnique is a leading French institute which combines top-level research, academics, and innovation at the cutting-edge of science and technology. On campus, about 5000 people need to connect to the school network.

#### Challenge

- Eliminate the "Split Brain" risk and virtualize all network services
- System maintenance and updates were time consuming and very challenging
- No high availability for critical applications

#### **DataCore Solution**

 The architecture now includes 2 physical machines (HP DL380 GP) with 2 SANsymphony nodes, located in two different rooms separated by 700m & connected by 2 optical fibers

#### **Customer Benefits**

 Security of the system at each level and high availability at the network level are the major enhancements. The IT team is now also saving a lot of time when deploying a new VM





"We have also been able to validate the quality of the DataCore Support Service, who is already intervened for one adjustment when proceeding to the configuration of the final phase of the installation. Our architecture was directly connected to the web interface of the Support Service and we were able to follow easily every exchange between the integrator PCI and the DataCore Team." M. Pasquiet, Manager of the network and telecom at Ecole Polytechnique



 Bologna, the capital of an important region of northern Italy, has about 400 000 residents. The Municipality of Bologna has about 4300 employees and about 3500 workstations. It has 50 offices throughout the area including museums, Administrative Offices, Libraries, over 200 schools being also part of the infrastructure of the City

#### Challenge

Cost saving, business continuity, performance increase

#### **DataCore Solution**

With SSV 10 we are able to obtain a high reliability on 60 Oracle instances, 10TB of mail, 200 virtual machines. This was previously an unprecedented challenge. Today the City has virtualized with DataCore, IBM storage, NetApp, Nexsan, flash disks HGST with four Tier levels on the two metropolitan nodes

#### **Customer Benefits**

Flexibility and performance increase, cost saving





"DataCore SANsymphony brilliantly solved our needs, we avoided expensive hardware investments, getting more flexibility and excellent performances" Stefano Mineo, Infrastructure Services Unit Director



• A large local municipal administration serving a community of more than 150,000 residents, and a requirement of servicing 2000 clients with 170 centralized servers.



#### Challenge

- Improve application data availability and security.
- Reduce time taken for backup and increase utilization of storage.
- Extend capacity cost efficiently and investment protected/future proofed.

#### **DataCore Solution**

 SANsymphony based architecture on the 4th generation of storage servers with storage hardware form 8 different vendors from the year 2000 until today

#### **Customer Benefits**

- Vendor & platform independence.
- Unified central platform with mirroring, storage classes, CDP.
- Flexible, easy management, capacity expansion and data migration.
- Higher productivity and efficient storage management

"It turned out that SANsymphony is the high performance, high availability and future proof solution that we hoped for. The advantage of DataCore's software approach is that when hardware is replaced the intelligence remains in the SAN. That saved us enormous efforts on data management for many years. Our SAN environment grows efficiently with the software: Evolution instead of migration." IT Manager, Manfred Leutz



Cholet is a very dynamic town with an important industrial background & with more than 56000 inhabitants. Apart from traditional administrative services like civil documents, its IT systems manage various other services, such as educational institutions & access to public spaces

#### Challenge

 Customer was searching for a solution which would enable them to replicate data from an IBM N3600 storage array to a new remote datacenter

#### **DataCore Solution**

- The customer purchased an HP P2000 array to replicate 4TB of data using DataCore Software
- Customer also purchased SSD disks, 2 EMC arrays with 7TB and utilized the DataCore Auto-Tiering feature to enhance overall system performance

#### **Customer Benefits**

- Return on previous hardware investments
- 50% cost savings
- Totally redundant system via synchronous mirroring
- No data loss



"One of the most important advantages of the new system is to consolidate all data in one and the same global infrastructure, centrally managed via DataCore Software, and to be able to integrate new storage devices from any manufacturer at any time, according to the increasing needs of the town hall." Jean-Philippe Lannaud, System and Storage Engineer, Town Hall of Cholet



Habo Kommun is a municipality in Jönköping County, Southern Sweden, with more than 11,000 inhabitants. The municipality was formed in 1974 when Fågelsås was amalgamated with "old" Habo

#### Challenge

- · Environment constantly expanding and storage systems reaching end of life
- Renew their storage architecture while providing high availability, flexibility & better performance

#### **DataCore Solution**

- SANsymphony installed on two Dell PowerEdge R720xd servers, located in separated rooms
- Thin Provisioning, Auto-Tiering, asynchronous replication, snapshots, CDP, Random Write Acceleration, data migration, proactive and adaptive monitoring

#### **Customer Benefits**

- Multi-site business continuity with Higher reliability/availability
- More than 5x performance improvements from cache and parallel I/O capabilities
- Decreased the amount of time spent on routine tasks by 50%
- Cut planned downtime on data migrations, upgrades and technology refreshes by more than 30%

"Although our immediate requirement was to provide automatic resilience that could work seamlessly in our existing VMware and storage environment, we also had other key considerations. The solution had to be easy and fast to implement, and as always, it had to be cost effective. With DataCore we found the fitting High availability solution offered the flexibility to even use the existing storage as backend" Ashur Jawadi, CIO Habo Kommun







## The Royal Institute of International Affairs

Global Think Tank, London, UK

#### Company

 Leading Global Think Tank on current and political affairs providing independent analysis, research and Informed debate. Chatham House carries out independent and rigorous analysis of critical global, regional and country-specific challenges and opportunities

### CHATHAM HOUSE

The Royal Institute of International Affairs

#### Challenge

- Provide worldwide High Availability and access to applications 24x7 to Fellows and Research Staff
- · High profile organisation that requires watertight Disaster Recovery contingency
- · Utilise existing hardware in existing estate
- Address ailing performance and I/O bottlenecks

#### **DataCore Solution**

SANsymphony based architecture in a mirrored synchronous format provided the Institute with a centrally managed virtual storage pool from which to draw disk

#### **Customer Benefits**

- Alleviated Institutes' demon performance spikes for application delivery & system response time
- Unified central platform with mirroring, snapshot, storage classes, CDP
- · Flexible, easy capacity expansion and data migration

"Without the necessity of an entire rip out and replace, critical performance and considerable availability gains have been achieved."
Paul Curtin, Finance & Operations Director, Royal Institute of International Affairs





 Services provided include waste collection, recycling, incineration & the safe management disposal of clinical & hazardous waste products. The company employs over 700 staff & has an annual turnover of around £100m, making it the UK's largest privately owned waste management company

#### Challenge

 Data sets of 250TB burgeoning 20% year over year that required a detailed data management strategy facilitated through software-defined storage to provide performance, durability & high availability

#### **DataCore Solution**

DataCore's SANsymphony software solution

#### **Customer Benefits**

Management capabilities achieved in real time, offering a granular view and management capabilities across Grundon's entire storage estate of seven major data centres. SANsymphony automatically and systematically tiers data and apportions the most suitable storage according to real-time usage.

"Having used DataCore's SANsymphony solution across five years, we have established a stable, optimised infrastructure that responds to the challenges of our virtualisation journey. Our primary objective - to have full control of the storage layer to power the entire estate - has materialised and we now have the required flexibility, stability, performance and manageability to assure us for vears to come." Ross Drake. Head of ICT, Grundon







## **GRAEBENER Maschinentechnik GmbH**

Mechanical Engineering, Netphen, Germany

#### **Company**

• Graebener Maschinentechnik is a part of Graebener Group, an association of companies with technological competence in the fields of electronics, hydraulics as well as metal milling, cutting and forming technology; more than 300 employees



#### Challenge

High availability & Disaster Recovery for Citrix XenServer und XenApp

#### **DataCore Solution**

- SANsymphony on 2 HP Proliant servers in two datacenter rooms in a FC infrastructure
- 8 Terabyte SAS, SATA and SSD storage
- Synchronous mirroring with autofailover
- DataCore Auto-Tiering

#### **Customer Benefits**

- Business continuity in case of fire or disaster
- Disaster recovery plan between two seperated locations
- Higher capacity & higher performance for CAD and terminal services



"We are extremely pleased with the SANsymphony platform in conjunction with Citrix: The solution is solid and fast, and we had no failure in two years. Thus, DataCore is part of a strategic solution for productive operations as well as for business continuity for our company in case of disaster. It provides high availability for a price-performance ratio, which is affordable even for a mid-sized business like Gräbener." Fabian Kapp, IT-Manager, GRAEBENER Maschinentechnik GmbH & Co. KG



 AIC GmbH provides services for general planning, structural engineering, physical and technical construction and building; 120 employees

# Challenge

- Elimination of functional limitations of existing SAN solution
- More effective utilization of existing storage capacity & increase capacity and efficiency of the storage system.
- Dynamic expansion of the storage architecture to meet future requirements without downtime

#### **DataCore Solution**

- SANsymphony for effective storage virtualization with synchronous mirroring, auto-tiering, thin provisioning, high-speed caching technology, Random Write Accelerator & asynchronous replication
- Microsoft Windows Server 2012 R2 Hyper-V & Performance Optimized Intel-based Servers & QLogic SANbox

#### **Customer Benefits**

- Functional limitations of previous SAN eliminated
- Accurate, scalable performance through DataCore storage tiering and high-speed caching
- Dynamic expansion without any downtime

"With DataCore we achieved a noticeable performance improvement of our file services. Also the performance of the virtual systems was improved significantly. By using DataCore and Hyper-V the management and expansion of the overall system is much easier and without any downtime." Hanno Förster, Head of IT, AIC Ingenieurgesellschaft für Bauplanung Chemnitz GmbH





 VMhosts is a technology focused company delivering high performing solutions to support customers' business operations in the UK and across Europe

# Challenge

 Their challenge is to meet and exceed Service Level Agreements (SLAs) both for downtime, performance and ease of management on behalf of their customers whilst ensuring all services remain competitively priced

#### **DataCore Solution**

New Vesper All Flash appliance combining the power of two world leaders into one plug & play box Intel's® latest server technology hardware overlaid with DataCore's™ Software-Defined Storage (SDS) layer

#### **Customer Benefits**

- Blistering performance for increased customer productivity & continuous availability
- An all-in-one solution that flexes and scales for hassle free managed service provision





"Our go-to technology provider, Vesper, suggested that we stretch test their new Vesper Intel based appliance overlaid with DataCore's Software Defined Storage (SDS) to give us the flex we need, now and in the foreseeable future."

Michael Custance, Senior Virtualisation Consultant at VMhosts



 LAN Service has more than 20 years experience as a System Integrator, designing and managing highly complex IT platforms. Looking to the future, LAN Service decided to develop into a Cloud Service Provider



### Challenge

• Due to the consolidation of heterogeneous resources at 2 datacenter sites, higher reliability, performance and availability were needed to ensure business continuity and disaster recovery

#### **DataCore Solution**

• 2 DataCore nodes synchronously mirrored, managing 48TB of storage & managing a mix of SAS Drives & Solid State disks, supporting approximately 120 virtual machines running ERP, CRM, production data, etc

#### **Customer Benefits**

- Freedom to purchase from any hardware vendor provided significant cost savings
- Fast and Reliable Data Migration
- Simplified Management
- Significant performance improvements
- Fully Redundant Solution

"Our Data Center, now fully redundant, is now ready for the future. We have seen a significant increase in performance compared to an investment much lower than what we would have to deal with for the purchase of new hardware. As DataCore offers us the possibility to use any hardware, it is the ideal solution for us." Andrea Guerrera, LAN Service General Manager



 exaSys offers a wide range of IT services, including secure hosting services from a secure Swiss data center located in the greater Zurich area. The company was founded in 2009 as a subsidiary of HiHo GmbH and transferred to the holding company TGS Group in 2011. exaSys is 100% self-financed



# Challenge

 The "Individual Cloud" and "Storage as a Service" offerings demand a highly flexible, performant and failsafe storage architecture. Cost efficiency of the infrastructure is crucial for competitive pricing of the services

### **DataCore Solution**

• 4 x SANsymphony on Supermicro server hardware, integration of existing HP SAN Storage, integration of 40TB multi-vendor Storage (SATA, SAS, SSD), 10 ESX servers for several hundred VMs

#### **Customer Benefits**

- Flexibitly for providing attractive "Pay as you Serve"-hosting offerings at different price/performance
- DataCore automated Storage Tiering for efficient use of resources
- Scalability and hardware independence for future growth

"For many companies the investment uncertainty is the huge hurdle with Storage, as the business processes are changing dynamically, but the data needs to be available, secure and performant at any time. Based on DataCore we are able to offer our Storage as a Service with great success in Switzerland. We are really delighted with the solution." René Hildenbrand, CEO exaSys



 Braathe Gruppen is one of Norway's most established cloud providers, offering cloud based services since 1997

# Challenge

- Performance issues in iSCSI environment
- Replacement of not supported SANrad virtualization appliances

### **DataCore Solution**

- SANsymphony-V on 2 x Lenovo x3650 servers, located in separated data centers & connected via FC
- 100 TB SAS disk capacity per site for 16 hosts (Vmware, Hyper-V) and 600 VMs

#### **Customer Benefits**

- · Without any storage-related planned or unplanned downtime for 5+ years: 100% availability
- 2 storage hardware refresh cycles using DataCore software
- Realized a positive ROI within the first year with performance improvement x5
- Amount of time spent on routine storage tasks has decreased by 50%
- Cut planned downtime on data migrations, upgrades and technology refreshes by more than 30%

"We are very satisfied with DataCore SDS solution that complements the virtual server environment with VMware and Hyper-V perfectly. SANsymphony gives us the storage flexibility to set up performant & highly available customer environments quickly, run stable & be easy to handle. DataCore helps us to cover the various needs of our clients in a cost-efficient manner." Håkon Svendsen, CTO of Braathe





Kliniken an der Paar, with hospitals in Aichach and Friedberg (Bavaria), has approximately 550
employees and offers 300 beds that generate a yearly revenue of around 42 Mio EURO. Main
sectors are Internal Medicine, Accident and Orthopaedic Surgery and Visceral Surgery



• Flexibility for continued data growth in the healthcare sector; high availability for administrative and medical systems; modernization of the IT environment within limited budgets

#### **DataCore Solution**

 DataCore SANsymphony on 2 redundant HP servers provisioning 9 TB of highly available disk capacity for more than 100 virtual machines (VMware vSphere; Hyper-V for Citrix virtual desktops)

#### **Customer Benefits**

- Fully redundant, highly available and flexible virtual infrastructure
- Reduced energy costs by 12.000 EURO per year & storage related spending by over 50%
- Reduced Storage-related downtime by 90% with 2 years without planned or unplanned downtime
- Turned 50% stranded capacity into free space



Kliniken an der Paar



"DataCore gives us the necessary flexibility and makes us independent from performance and capacity limitations. Furthermore we benefit from big synergy effects through the virtualization of Storage and servers. The virtual infrastructure can be managed with low time effort and we have significant savings in energy consumption." Bernd Burkhart, IT Director



 ATEGRIS is a healthcare network that also serve as educational institutes for the Universities of Düsseldorf & Duisburg-Essen. Together they offer almost 30 specialised medical centres and 1100 beds

# Challenge

- · Disaster Recovery and High Availability with Transparent Auto-Failover for existing SAN hardware
- Capacity extension, greater system performance and excellent reliability
- Integration of existing storage infrastructure

#### **DataCore Solution**

- 2xDell PowerEdge R730 + SANsymphony, synchronous mirroring & auto-tiering
- 2x3,2TB Fusion-io PCle-Cards integrated into DataCore servers
- Extension with 2x Dell Powervault MD3620 for 45TB SAS and SATA per data center site

#### **Customer Benefits**

- · Fail-safe operation for more than one a year
- Cost effective SSD Integration with Automated Storage Tiering
- Reduced storage costs by 25% & Performance increased by 300%
- Routine management overhead reduced by 75% & unused capacity turned into free usable space

"The investment in the DataCore solution was definitely worth it because we are able to act in a very flexible manner, without dependencies, & our storage infrastructure can be adapted to our needs. With SANsymphony, we have a fail-safe and fast storage architecture & a comprehensive management that is a lot easier to handle." Tobias Puhe, IT Operating Manager





• Pont Saint Esprit Hospital is located in the Gard department in France and has multiple recent sites built to better serve the 70,000 people living around the hospital

# Challenge

 Move to storage virtualization to gain high availability and more performance for the critical applications used in the hospital

#### **DataCore Solution**

 DataCore was the best solution among the various evaluated offers with the best priceperformance ratio. They purchased 2 SANsymphony licenses with thin-provisioning included and added the "Optic Fiber" option. The hyper-converged architecture is now fully managed by DataCore and runs exclusively on Dell systems.

#### **Customer Benefits**

The infrastructure can now benefit from high availability and significantly increased performance
for all critical applications used by the hospital employees. On top of this, the IT team now enjoys
peace of mind thanks to the Auto-Tiering and Auto-Provisioning which allows resource optimization.





"With DataCore, we now have our IT systems fully secured and DataCore was the only one offering such solution with fiber and for our storage capacity." Benjamin Desbrun, IT Manager at Pont Saint Esprit Hospital



Fera Science Limited (Fera) is a national and international centre of excellence for interdisciplinary investigation and problem solving across plant health, crop protection, sustainable agriculture, food and feed quality and chemical safety in the environment



# Challenge

- Data Centre struggling to control Petabytes of Data
- Diverse and sprawling IT server and storage estate & issues with speed of access to applications

#### **DataCore Solution**

DataCore's software platform now running on a pair of Dell PowerEdge R910s, with dual Fibre Channel Brocade switches each side of the mirror for ultimate resiliency and true High Availability

**Customer Benefits** 

Storage pools are mirrored giving ongoing availability. Downtime is now an issue of the past



DataCore's Thin Provisioning & Continuous Data Protection (CDP) are both useful weapons in controlling and managing Fera's IT infrastructure



"Essentially DataCore gives us the freedom of procurement across the estate. That's a powerful statement. We can now research and select which disk chassis and vendors are most suited to Fera and select those which we know will have the best controllers and offer the highest density" Ben Jones, Data Centre Manager



The Adullam Foundation is a private, not-for-profit foundation with its head office in Basel; it operates a hospital for acute geriatrics and rehabilitation, as well as care homes for pensioners

# Challenge

With the introduction of a centralised hospital information system in 2013, the requirements for ICT infrastructure increased, accompanied by steep overall growth. The existing storage systems had reached their utmost limits with regards to performance and capacity, resulting in repeated downtime

#### DataCore Solution

SANsymphony V10 runing on HP servers using synchronous mirroring with automatic failover between the storage systems at the Basel site. The integrated replication option is to secure the second site at a later date as well.

### **Customer Benefits**

- DataCore has been in use for over 1 1/2 years without any unplanned downtime
- Performance has improved 10-fold

"We were convinced by the flexibility of the DataCore solution. With SANsymphony we can use any storage hardware, thereby also managing the transition to new hardware without interruption. Moreover, the price/performance ratio is excellent." Benjamin Borschberg ICT manager, Adullam Foundation



Spital · Pflegezentren





# Univeristätsklinikum Frankfurt am Main

Healthcare, Franfurt am Main, Germany

# **Company**

With its 32 specialist clinics as well as more than 20 research institutes, the University Hospital
Frankfurt is one of the leading university clinics in Germany. Every year, 51,000 inpatients and 227,000
outpatients receive the best possible medical care.



# Challenge

• In 2006, Frankfurt University Hospital undertook the broad-scale digitisation of image, lab & patient data.

#### **DataCore Solution**

 DataCore software-defined storage has been in use since 2006. The software offers a completely transparent, synchronous mirror, including auto-failover and auto-failback. Total storage capacity is 1.2 PB, of which 0.7 PB are virtualised.

#### **Customer Benefits**

- Excellent availability: System reliability between computer centres through auto-failover
- · Performance: through Flash integration and auto-tiering
- · Hardware autonomy: technological flexibility and investment security through extended system use



"Because the SANsymphony solution has proven its worth in connection with the PACS, we began migrating more systems to storage virtualisation. To date we have been satisfied with the results."

Hans-Jürgen Reinig, Gruppenleiter Virtualisierte Infrastrukturen, Uniklinikum Frankfurt am Main























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