



Braathe offers comprehensive Cloud Services based on a DataCore Software-defined Storage architecture

ABOUT BRAATHE GRUPPEN

Braathe Gruppen is one of Norway's -most established cloud providers, offering cloud based services since 1997 - even before cloud computing had become a widespread concept. The cloud computing services are hosted in Braathe's own Norwegian data centers and cover everything from computing services; basic infrastructure to servers and network configurations; backup systems and application provision. In addition, the company offers consultancy, operational resources and broadband services.

www.braathe.no

Norwegian Cloud Service Provider, Braathe Gruppen now uses DataCore SANsymphony-V to provision highly available and performant storage to support Microsoft Hyper-V and VMware machines. The flexibility of the software-defined environment helps the company to easily create and host customer specific systems at a lower cost for their customer base.

The Organisation

Braathe's slogan is "Worry free IT" - combining knowledge, experience and systems to solve IT challenges for its customers in a user friendly, secure and cost efficient manner. That also means they aim to integrate the best and most efficient technologies into their data centers. Customers expect to rent these IT services with optimal performance, security and 24x7 availability at a fixed monthly cost.

The challenge

A typical Braathe customer is a Norwegian small to mid-sized company with around one hundred users who wish to outsource the IT infrastructure at controllable costs in order to concentrate on their actual line of business. For that, Braathe need to build and host flexible customer specific services out of the cloud: web, mail and communication, device management, backup, virtual server and desktop infrastructures, cloud-based storage and others. Braathe adopted storage virtualization some years ago to act as the supporting infrastructure. Two SANrad virtualization appliances and Nexsan SATAbeast block storage systems enabled Braathe to build up a stretched out storage solution, with features like clustering, real-time replication and failover. However, the system was limited to iSCSI and with a growing business soon this limited potential business and performance became an issue. While there was already a fibre channel (FC) infrastructure in place for other systems, Braathe decided to migrate that environment to FC too and began to look for solutions to solve their performance issue. Several 'typical' hardware solutions like NetApp, HDS or EMC were taken into consideration, but as Håkon Svendsen, CTO of Braathe, describes, given there is enough in-house expertise, the company decided to do things in their own way with an alternative solution: *"DataCore's technical approach convinced us to go for a software-based solution with SANsymphony-V. It turned out to be the right decision at that time and it still is today", says Håkon*

Svendsen. DataCore promised and delivers a rich feature set, including simple data replication, high availability backed by a convincing price/performance model.

The solution

DataCore SANsymphony-V was installed on two IBM x3650 servers, located in separated data center rooms 300 meters apart and connected via FC switches from Brocade. The sites run their own fabric and are configured as a redundant stretched cluster. DataCore's main task is the synchronous mirroring of all data between the sites for continuous high availability. DataCore's caching is used to boost the performance of the underlying storage hardware, while Thin Provisioning is optimizing the disk utilization. The underlying storage is a mix of old and new. With the implementation of SANsymphony-V, Braathe installed two new Nexsan E-Series High Density Storage systems (Nexsan e18s). Later, the existing SATAbeast models were integrated into the DataCore environment. Overall, 100 TB SAS disk capacity per site is running in the DataCore environment, while the migration of more systems into the FC storage is occurring. DataCore provisions the performant and highly available virtual storage capacity to around 600 virtual machine clusters on 16 strong physical hosts. The virtual machines are created both with VMware and Microsoft Hyper-V, which makes it easy for Braathe to integrate customer systems from both platforms.

The benefits

Braathe uses that flexible virtualized infrastructure to run customer specific environments with applications like CRM, Dynamics, SAP, SQL data bases, Sharepoint, Citrix Terminal Services, servers for file sharing, web servers, etc. Microsoft is the dominant platform, but also Linux is being used. Only Exchange is running on separate physical systems still but these are earmarked for inclusion later on. DataCore's feature rich platform integrates enterprise-class storage technologies like auto-tiering, asynchronous replication, snapshots, CDP, Random Write Acceleration etc. As Braathe's business continues to grow and increase the demand in capacity, performance in the flexible and dynamic cloud service business will be delivered accordingly.

The benefits in overview:

- We've been running DataCore without any storage-related planned or unplanned downtime for 5+ years: 100% availability
- We have been able to defer 2 storage hardware refresh cycles using DataCore software
- We realized a positive ROI from our investment in DataCore within the first year
- Since we virtualized our storage with DataCore, performance has improved more than 5x
- Since virtualizing our storage with DataCore, the amount of time spent on routine storage tasks has decreased by 50%
- DataCore helped us cut planned downtime on data migrations, upgrades and technology refreshes by more than 30%

"We are very satisfied with DataCore Software-defined solution that complements the virtual server environment with VMware and Hyper-V perfectly. SANsymphony-V gives us the storage flexibility to set up performant and highly available customer environments quickly, run stable and 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

For additional information, please visit www.datacore.com or email info@datacore.com

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