

DDN SUCCESS STORY | BYTESNET

Bytesnet Delivers Customized and Differentiated Storage and Compute Solutions for Data-Intensive and Security-Conscious Customers with DDN

Bytesnet Connects People and Data 24/7 in Carrier Neutral Data Centers Designed for the Highest Levels of Performance and Reliability.

Data Center Services Solutions

USE CASE

- Datacenter value-add service provider
- Security and data sovereignty requirements
- Challenging data-intensive workloads



Businessline Manager HPC & Data Analytics

Leo de Vries

BYTESNET

► BYTESNET

Originally founded as an internet exchange twenty years ago, today Bytesnet has evolved into a partner who provides co-location, networking, and value-added services to governmental, public and private organizations in the Netherlands.



In addition to meeting the security and data sovereignty requirements of these entities, Bytesnet is one of the few Dutch owned data center services providers that satisfies the stringent requirements to work with governmental organizations or those in the public and private domains.

They also differentiate themselves by being willing to take on challenging data-intensive workloads to fuel innovation in fields like Information and Communications Technology (ICT), Health Care, Scientific Research, and Water and Electricity systems.



Bytesnet (a 100% Dutch service provider) was able to offer integrated ‘pay per use’ services for compute, storage, backup and archive, and this is where Bytesnet could differentiate its services and evolve to a value-added services business model.

~ Leo de Vries

Businessline Manager HPC & Data Analytics | Bytesnet



► THE CHALLENGE

Research organizations, whether government or commercial, need to address their unique and increasing compute and data challenges with flexible business models, which are not often addressed by public cloud.



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For example, in the Netherlands, government and research organizations are well connected to data centers and other facilities associated with universities.

However, facilities are often inflexible and high cost, and organizations find themselves waiting months for access to the resources needed to conduct data-intensive research that requires significant performance and capacity.

BYTESNET SAW THIS AS AN OPPORTUNITY TO OFFER SERVICES THAT COULD SCALE AS NEEDED TO MEET RESEARCHERS' NEEDS WHILE ALSO DELIVERING A PAY-PER-USE MODEL THAT SHIFTS COSTS FROM CAPEX TO OPEX.

“We saw an opportunity to give customers a new way to consume resources that would allow them to avoid CAPEX investments while also providing traceability,” explains Leo de Vries, Businessline Manager HPC & Data Analytics. “This would enable customers to see what each user is consuming and understand their true costs. This is something that no one was offering to these customers, and where Bytesnet could differentiate our services and evolve to a value-added services business model.”



Bytesnet maintains a long-term relationship with one leading medical center that wanted to leverage a value-added services and consumption model to take advantage of the cost and performance benefits.

The medical center provides a full spectrum of clinical services and includes several specialist units with strong reputations among university hospitals. Prior to offering the services, however, Bytesnet evaluated several storage solutions to identify the ideal partner to deliver on this new value proposition for its customers.

As it investigated potential solutions, Bytesnet researched each solution's ability to handle hundreds of petabytes and data processing capabilities such as transferring data between multiple decentralized locations across Europe. Unfortunately, most solutions were difficult and expensive, while others were not able to clearly articulate a roadmap that would ensure alignment with Bytesnet's strategic vision.

▶ THE SOLUTION

DDN quickly emerged as the partner with the broadest portfolio and expertise who could demonstrate the performance and scale to meet the demands of government, research and commercial organizations, while also aligning with a vision for the future that matches Bytesnet's stated goal of providing sustainable Big Data processing as a service.



DDN's ability to solve for new use cases helps us develop a strategic environment for customers to meet them where they are today, as well as get them where they want to go in the future.

~ **Leo de Vries**

Businessline Manager HPC & Data Analytics | Bytesnet



DDN was also able to provide confidence in the solution based upon a huge number of successful installations across the globe.

With DDN, Bytesnet was able to grow from a single customer solution to a viable business line that is anticipated to contribute significant growth for the business.

"Our existing customers are very important to us and we want to be proactive in developing solutions to meet the complex needs of these environments from both a technology perspective as well as our ability to create greater cost and operational efficiencies," says de Vries. While large research departments tend to purchase their own hardware and stand-up environments to address specific needs, this can require significant upfront investments that do not make long-term sense and add significant management overhead on top of existing IT infrastructure.

BYTESNET CAN NOW OFFER A MORE COST-EFFECTIVE ALTERNATIVE WITH A CENTRALIZED INFRASTRUCTURE COMPOSED OF CPUS, GPUS AND STORAGE.

After beginning with primary storage and backup storage in its Rotterdam data center, Bytesnet has moved to archiving as well, and anticipates that replication storage will also be needed by some of its customers.



▶ THE BENEFITS

DDN’s broad solution portfolio – from high performance computing and AI to backup, archiving and data movement – ensure that Bytesnet will be able to address the diverse storage needs of its customers.

The ability to deploy one versatile platform, DDN DataFlow, to manage all data movement challenges allows Bytesnet to offer and operate high-performance data workflows at-scale, ensuring that Bytesnet can meet the requirements of even the most demanding projects.

And, with DDN’s parallel file system, Bytesnet can leverage the performance demanded by the newest CPUs and GPUs, such as NVIDIA, to accelerate processing, creating an ideal fit for research and commerce.

With Bytesnet and DDN, researchers and commercial groups can be freed to perform research rather than managing infrastructure and systems.

Today they can partner with Bytesnet for a complete solution that delivers one-stop-shop services designed to facilitate complex, data-intensive projects and faster time to results.

BUSINESS BENEFITS

- Deliver faster time to results for customers
- A unique ability to host data-intensive applications as part of services offered
- Flexible scalability to optimize technical and economic benefits
- Simplified adoption with data migration and configuration tools

▶ LOOKING AHEAD

As Bytesnet continues to expand its business and grow its data center footprint, the addition of new sites will require moving data, which DataFlow readily addresses with the fast, flexible and reliable movement of data operations.

DDN will play an integral role in Bytesnet’s efforts to continuously improve how its customers’ data is stored and distributed and cost-effectively supporting research that relies on processing massive amounts of data and high performance computing workloads.

“DDN has demonstrated true partnership and a commitment to helping us develop and scale our business,” notes Jan-Joris van Dijk, Managing Director for Bytesnet. “We are on this journey together to redefine the value we deliver to our customers and evolve our business model.”



DataDirect Networks (DDN) is the world’s leading big data storage supplier to data-intensive, global organizations.

DDN has designed, developed, deployed, and optimized systems, software, and solutions that enable enterprises, service providers, research facilities, and government agencies to generate more value from their data and information, on premise and in the cloud.

REACH OUT!