

Case Study

# POINT Archival Gateway **Cristie GREEN-S3** Cloud



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With the GREEN-S3 Cloud, data management specialist Cristie offers its customers a cloud storage service that is consistently committed to a green IT concept and secure data storage at German locations. Cristie's climate-neutral data centers are located at the base of wind turbines and use electricity generated from renewable sources for the

operation and cooling of the storage hardware. In order to meet the high standards of sustainability and data security on the level of storage systems and storage media, Cristie chose tape integration with PoINT Archival Gateway. Cristie has thus added a highly energy efficient, flexible and cyber resilient storage class to the overall GREEN-S3 Cloud solution.

## Challenge

- S3 cloud storage in Germany
- Consistent implementation of a green IT approach with renewable energies and sustainable infrastructure
- Cyber resilience and protection against data loss due to ransomware
- Cost-efficient and secure storage class for backup and archiving

## Solution - PoINT Archival Gateway

- High-performance data storage via S3 directly to tape
- Automatic replication to a different location
- Legally compliant and cost-effective archiving
- Sustainable and resource-saving storage technology

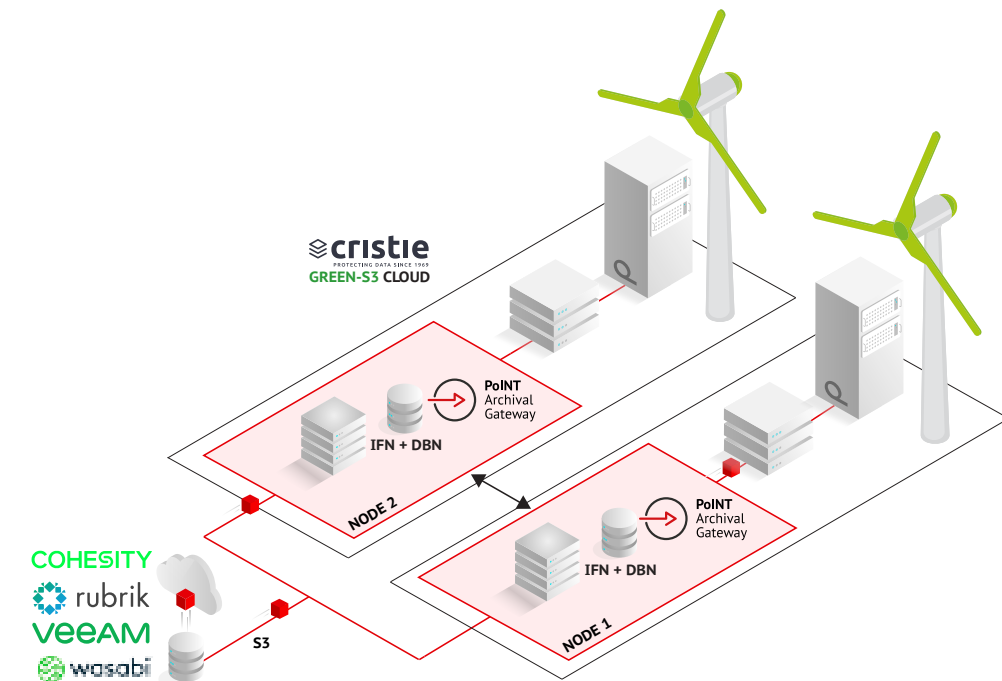
## Benefits

- Data protection through replication and air-gap
- Wide range of functionality for extensive cloud offering
- Consistently sustainable cloud service

## About Cristie Data GmbH

Cristie has been providing data availability solutions since 1969. Our focus since then has made us specialists in data security, backup & recovery, long term data retention &

archiving and primary storage. Our teams are recognized experts with top certifications and authorizations from our technology partners.



Cristie's GREEN-S3 Cloud provides sustainable and redundant data storage in Germany. WestfalenWIND operates the data centers for the cloud service under the windCORES brand inside its wind turbines in the Paderborn region. They thus use existing infrastructure and are powered directly by renewable energy. A high level of cyber security through location and technology redundancy is central to the GREEN-S3 Cloud.

The software-defined object storage PoINT Archival Gateway fits seamlessly into this concept. The solution is developed and supported in Germany, which ensures direct contact to the manufacturer. PoINT Archival Gateway allows not only the integration of tape as S3 storage class, but also the integration of an additional disk class. Thanks to this flexible technology mix, different use cases can be realized and data storage can be optimized both financially and ecologically. Finally, as an S3-to-Tape solution, PoINT Archival Gateway offers air-gapped offline storage, which ensures the required maximum level of data protection for backups and archive data.

Cristie uses the replication function of PoINT Archival Gateway to implement the 3-2-1-1 **backup** strategy. The

data is stored on hard disk for fast access, while a copy is automatically stored on tape. The data is replicated to another location - i.e. to a data center in another wind turbine - to separate the data copies. This technological and physical decoupling provides additional resiliency against cybercrime attacks or other data loss scenarios.

For **data archiving** in the GREEN-S3 Cloud, PoINT Archival Gateway provides an S3 Glacier storage class with tape. Based on lifecycle policies, PoINT Archival Gateway automatically moves inactive data from disk to tape and archives it in a legally compliant manner. This provides GREEN-S3 Cloud customers with S3 archive storage for cost and energy optimized data storage.

"By using PoINT Archival Gateway, we can offer our customers a wide range of services with the GREEN-S3 Cloud", says Marco Vögele, Partner Sales Manager at Cristie Data. "The S3 management software provides exactly the functionality we need to ensure our high security standards and at the same time to store our customers' valuable data in a particularly resource-efficient way".

## About windCORES

### windCORES - CO<sub>2</sub> neutral data centers in wind turbines

We turn wind turbines into CO<sub>2</sub> neutral data centers, which is unique in the world. We literally build data centers directly into the base of wind turbines. The concept was awarded the German Data Center Prize in 2019.

### CO<sub>2</sub> neutrality for IT

CO<sub>2</sub> emissions from data traffic are enormous: it is estimated that up to four percent of global greenhouse gas emissions are caused by the operation of the Internet and computers. And the trend is rising, driven by new technologies such as autonomous driving.

With data centers in wind turbines, windCORES offers a CO<sub>2</sub>-neutral solution for digital processes in companies.

Thanks to the dual use of wind turbines with our windCORES, there is also no need to seal off additional areas for the construction of IT infrastructure.

With our windCORES, over 400 grams of CO<sub>2</sub> can be saved per kWh of electricity, which translates to an annual CO<sub>2</sub> savings of approximately 14 tons for just one rack of servers with an average power consumption of 3 kW.

### We use what is already there:

A wind turbine is the perfect location for a data center. It offers plenty of space, has strong grid and data connections, and provides the clean power needed to run the data center. For sustainability, we simply put the consumer inside the generator. While conventional data centers will emit 420 grams of CO<sub>2</sub> per kWh of electricity in 2021, windCORES will emit only 10.75 grams.

## About PoINT

PoINT Software & Systems GmbH is specialized in the development and distribution of software products for storage, management and archiving of data. Our data & storage management solutions offer an easy and efficient integration of different storage technologies and systems in consideration of enterprise requirements. PoINT products allow optimized usage of storage systems and help to reduce costs and issues caused by data growth.

The software solutions fulfil compliance and archiving requirements and provide independence from storage technologies and vendors.

**Additional information and a trial version of the software are available at [www.point.de](http://www.point.de).**