KISTERS AG develops software solutions that support the efficient management of resources in the energy, water and air quality markets. It also offers engineering services and environmental consultancy, as well as a range of 3D viewers, large format printers and scanners. Headquartered in Aachen, Germany, its customers include local and municipal utilities, energy producers, authorities and commercial companies.

The company needed a high-performance storage solution that could be deployed at speed and deliver the high levels of reliability, performance and quality of service required in order to support its expanding customer base.

The Challenge
The latest developments in the use of renewable energy sources for energy production are resulting in major challenges and changes for energy companies competing in this sector. Electricity, for example, is increasingly generated in a growing number of solar parks, wind turbines or smaller hydroelectric power plants. This requires a much higher degree of coordination and effective management of production facilities involved in the process than in the past. The flexible software from the KISTERS Cloud has been developed to meet these specific needs. However, one of the key factors behind the success of an efficient and effective cloud service is the data stored within it. In order to ensure that KISTERS is able to offer the flexibility and scalability that its customers require, KISTERS relies heavily on the reliability and performance of the storage solution that ensures that this data is protected at all times.

The Solution
KISTERS needed a highly reliable storage solution that offered “hard-hitting, simple operational processes that save both time and money and which are also hassle-free,” said Armin Förster, Senior Engineer Systems Administration at KISTERS.

Following wide-ranging research and evaluation of storage solutions, Infinidat emerged as the clear favourite.

Unlike other storage solutions, which require deep integration into existing IT infrastructure and systems, the InfiniBox operates independently as a self-contained system, which meant that changes to the existing infrastructure would not be necessary.

Implementation and maintenance of the InfiniBox has been designed with simplicity and manageability at its core. It is pre-configured and can be seamlessly integrated into existing architecture, which meant that the KISTERS IT team did not need any specialist training to configure the InfiniBox and training separate storage administrators was not necessary.

Commenting on the ease of implementation, Förster reported that: “Setting up the InfiniBox was extremely straightforward and was completed in only a few minutes. It was very quick!”

The InfiniBox now provides the KISTERS IT administrators with a choice about how to utilise the storage solution on a daily basis: either via the web-based graphical user interface or a command line. The KISTERS team opted for the latter.
option, InfiniShell under Linux. However, they can also use the Infinidat Host Power Tools for VMware software, as needed. As a REST API, this means that many tasks could be carried out using a single line of code or even calls from third-party systems.

The IT administrators at KISTERS can easily integrate monitoring tools and can use the InfiniBox graphical user interface to check the status of the storage environment at any time. The ability to carry out regular tasks such as data compression with greater ease has been particularly beneficial. Förster explains that his team is now able to reduce space requirements in an Oracle database by a factor of four, simply by selecting a box on the InfiniBox graphical user interface.Oracle administrators no longer have to worry about data compression because the compression process itself has no effect on the application. It takes place, seamlessly, in the background.

The Result

The InfiniBox provides KISTERS with a storage volume of 249 terabytes, with the option to extend to a maximum capacity of 499 terabytes. Infinidat’s flexible pricing and Capacity on Demand model means that KISTERS only pays for the actual capacity needed, ensuring that the company has the flexibility to react quickly to any peaks in customer demand. Following its deployment, the InfiniBox has delivered the high level of reliability required by the business. This has been possible not only because of the quality of the hard drives used. It is also because the InfiniBox incorporates a highly effective failsafe solution – InfiniRAID – which protects the system against problems that can be experienced by mass storage devices. Overall, three – instead of the usual one or two – controllers are deployed to ensure maximum reliability.

Infinidat has been able to offer terms of service that the IT experts at KISTERS have found extremely flexible. Infinidat automatically includes support from a technical consultant with the purchase of every InfiniBox. Free and uninterrupted updates to the latest InfiniBox software ensure that KISTERS has continuous access to the latest features and functionality and maximum performance, 365 days a year.

The business benefit for KISTERS is significant. “The quality of service guaranteed by Infinidat enables us to pass on the benefits of high performance directly to our customers,” said Bernd Kisters, Head of IT at KISTERS AG.

The consistent quality of service provided ensures that every customer receives the performance they need from KISTERS. Although internal or external users may generate high loads of demand on the InfiniBox, every customer can be assured that their application is running reliably and with the performance they expect to receive, 24x7.

Future Plans

KISTERS contributes to Infinidat’s programme for ongoing product development. This involves providing feedback about its evolving business and technical requirements, which can be incorporated into the InfiniBox system and shared with other customers in the future.

“Partnering with our customers in this way ensures that we can continue to provide product enhancements that meet actual market requirements,” added Christian Barmala, Systems Engineer at Infinidat.