

Infotrend's Unified Storage for Conducting Research HPC in Academia Sinica

Organization

Academia Sinica, Taiwan (R.O.C.)

Challenges

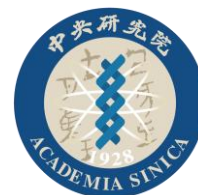
- Poor performance of the existing IT infrastructure
- Not enough capacity to store growing research data
- Complex deployment and management of the storage environment
- Not enough rack space for new storage systems

Solution

EonStor GS 3000 Gen2 unified SAN/NAS storage fully loaded with 60 pcs of 12TB NL-SAS drives and connected via 4*16Gb FC host interface:

- High performance for research HPC workloads
- High capacity to store growing data of science studies
- The best price/performance for system scaling up
- Easy system management and hardware maintenance
- High-density compact design to fit into limited rack space
- Good customer support

"Capacity requirement for researchers' data grows very fast. And Infotrend provides the best price/performance for scaling up," said IT specialist of Academia Sinica.



Academia Sinica, the most preeminent academic institution of the Republic of China (Taiwan), was founded in 1928 to promote and undertake scholarly research in the sciences and humanities. It conducts researches in various fields, including mathematical, physical, and life sciences. The research data for these scientific projects requires massive storage capacity and high storage performance for processing HPC workloads.

Challenges and Requirements:

- Poor performance of the existing storage environment causing delays in conducting HPC when analysing research data
- Fastly growing research data required additional capacity
- Complex deployment and management of the existing storage environment
- IT server room provided limited rack space to install new system

Solution: EonStor GS 3000 Gen2

Academia Sinica chose Infotrend's unified SAN/NAS EonStor GS 3000 Gen2 storage to provide a basis for numeric prediction system for research needs. The set of research software does a computer model simulation and prediction of the collected data. The observation models are based on massive amounts of new observations from field sensors and rely heavily on the provided computing resources. GS 3000 Gen2 (60 pcs x 12TB NL-SAS fully loaded) perfectly fits for this demanding application by providing 4,000MB/s Write speed for ingesting research data and 8,000MB/s Read speed for conducting research high-performance computing. IT personnel easily installed GS in the limited rack space and connected to the network via 4*16Gb FC host interface. To eliminate management burden, GS provides an intuitive browser-based GUI EonOne.

Why Infotrend

- High performance of the unified SAN/NAS storage GS 3000 Gen2 to handle research HPC calculations
- The best price/performance ratio for system scaling up
- High capacity to store continuously increasing amounts of research data
- Easy system management and hardware maintenance
- High-density compact design allowed to fit into limited rack space in the IT server room of the research center
- Infotrend's good customer service and support

About Academia Sinica

Academia Sinica is the National Academy of Taiwan (R.O.C.) that conducts research activities in a wide variety of disciplines, ranging from mathematical and physical sciences, to life sciences, and to humanities and social sciences. For more information, please visit: <https://www.sinica.edu.tw/en>