

## CASE STUDY

## InfiniBox® delivers reliability, scalability, cost efficiencies, ease of use and management as the backbone for NTT Communications' customer service improvement

NTT Communications Corporation, established in 1999, provides a wide range of ICT services, such as network, cloud, data center, and AI solutions, built on its high-quality infrastructure and technologies as a telecommunications carrier. The company became a subsidiary of NTT DOCOMO on January 1, 2022 and took over DOCOMO's corporate business, which expanded the scope of its operations significantly to deliver value by creating communication methods that open up new possibilities globally.

The company does this by developing new work styles and supporting digital transformation in local communities through the use of cutting-edge technologies, such as 5G and IoT under the "docomo business" brand. The company currently employs approximately 9,300 people and has offices in more than 70 countries/regions, providing network services in 190 countries/regions.

NTT Communications has focused on the importance of real-time data analysis in the process of advancing and streamlining the maintenance and operation of the IT infrastructure solutions it provides to its customers

worldwide. It has been working on the development and operation of a data analysis platform for this purpose. By analyzing real-time log data, it is possible to improve productivity through operational reforms, such as visualization and automation, and to contribute to customer success by applying the results of data analysis to the service and sales fields. Infinidat's InfiniBox® plays a key role in this analysis-driven infrastructure as the enterprise storage solution for centrally storing service logs, security logs, and facility logs that are collected through various routes without any data loss.

"We wanted to build a high-performance, high-capacity storage system that could handle our growth in data utilization. InfiniBox was selected because it was highly rated for NTT's criteria: high reliability and availability realized through triple redundancy architecture; large capacity of 2 PB per rack; scalability, ease of use and management; and an exceptionally low maintenance cost. The maintenance cost, which is a major cost factor for long-term use, was more than 85% lower than other systems, which was very attractive."



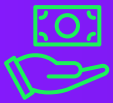
**Mr. Kazumasa Mori**  
Senior Manager, Customer Services - Managed & Security Services, Platform Service Division, NTT Communications



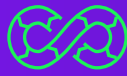
### THE CHALLENGE: HOW TO BUILD A STORAGE SYSTEM THAT IS FUTURE-PROOFED AND INCREASES CONFIDENCE

As NTT Communications expected log data utilization to grow within the company, it built an initial data platform for utilization. However, the demand for data analysis and visualization increased rapidly as the project gained internal recognition. The amount of log data accumulated increased with the shift from light Mobile Virtual Network Operator (MVNO) to full MVNO and the introduction of new technologies and solutions, such as Open Computer Network (OCN) ID Authentication, VoIP and NTT Communications' Internet service. As growth expanded, it was becoming increasingly difficult to manage requirements within the existing system, so the company began considering a system renewal in early 2019.

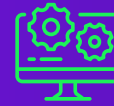
# Solution Advantages for NTT



**85% lower  
maintenance cost**



**No failures  
in 3 years**



**Intuitive management  
UI at first sight**

As NTT Communications explored possibilities for enhancing the existing system, Mr. Kazumasa Mori, Senior Manager, Customer Services - Managed & Security Services, Platform Service Division, and serving in the position as the project leader, said, “There was an option of changing the installation location, so I thought that, if we were going to build an entirely new system, it would be good to build a high-performance, high-capacity system from the start.”

## **THE SOLUTION: INFINIDAT HAS BROUGHT RELIABILITY, SCALABILITY, COST EFFICIENCIES, EASE OF USE AND MANAGEMENT**

High reliability was required for the storage of data for analysis, while flexibility was required for the increase in capacity because it was difficult to foresee the pace at which data will grow in the future. On top of real-time log data collected from around the world, the volume of data from projects developed in response to various requests from within the company regarding the use of log data was too large to be ignored. In addition, ease of operation and cost were also considered as requirements.

NTT considered several options, including the InfiniBox platform as well as a simple enhancement of the existing system. “InfiniBox was selected because it was highly rated for NTT’s criteria: high reliability and availability realized through triple redundancy architecture; large capacity of 2 PB per rack; scalability, ease of use and management; and an exceptionally low maintenance cost. The maintenance cost, which is a major cost factor for long-term use, was more than 85% lower than other systems, which was very attractive,” said Mr. Mori.

## **THE RESULTS: IN THE THREE YEARS OF OPERATION, NO FAILURES HAVE OCCURRED**

Infinidat’s InfiniBox was implemented in September 2020, with a contracted capacity of 2PB. Mr. Shuhei Hayakawa, Project Leader, Customer Services - Managed & Security Services, Platform Service Division, said, “We have had no failures during this period – it is incredible!”

In terms of operations, the storage monitoring tool, InfiniMetrics®, makes it easy to monitor operations. Mr. Hayakawa was assigned to this department and was given the task of enterprise storage management. Without any past experience, he had no trouble operating it because he could intuitively understand what to do just by looking at the dashboard of this software tool.

Initially introduced as storage for data analysis infrastructure, InfiniBox is used not only as storage for data but also as storage for virtualized VMware infrastructures because of its stability and reliability, including as the OS area of virtual servers used for batch processing of monitoring functions. As a result, the company created virtual machines in their free storage space and used it as OS space to run a variety of functions other than the big data storage that is the system’s primary purpose. It is also used as a storage solution for operational and administrative data because of its reliability and robustness.



## THE FUTURE: ANTICIPATED GROWTH OF DATA UTILIZATION AND ANALYSIS

Both the log data itself and the scope of its utilization will only increase. “Volume of data in the data analysis platform will grow as the number of projects we develop increases and as the volume of data within individual projects expands. In addition, as awareness of data utilization is raised throughout the company, an increase in demand is anticipated for a wider variety of data to be used to improve services and sales. The data required will not be limited to real-time logs, as is the case today. It may extend to, for example, contract data and operational data, and a combination of them to provide recommendations to customers. In this case, the volume of data to be stored could skyrocket,” Mr. Mori added.

---

“We have had no failures during this period – it is incredible!”



**Mr. Shuhei Hayakawa**  
Project Leader,  
Customer Services -  
Managed & Security  
Services, Platform  
Service Division,  
NTT Communications

To learn more about how Infinidat can help your organization scale to win, visit [Infinidat.com](https://www.infinidat.com).