



Utilizing Wireless (Millimeter Wave) Backhaul to Provide the Optimal Solution for Customer Needs

### **OVERVIEW**

NTT Broadband Platform, Inc. (NTTBP, President: Hiroshi Nakamura) is a pioneer in building public wireless LANs in Japan. Since its establishment as a leading Wi-Fi company, we have accumulated high-level wireless technology. The company provides Free Wi-Fi to various places such as airports, train stations, public facilities, stadiums, convenience stores, shopping malls, tourist facilities, etc.

In addition, the number of foreign tourists visiting Japan is increasing year by year. As a result, there is an increasing demand for Free Wi-Fi, a communication environment that anyone can easily use even at Japanese tourist facilities. To meet these needs, the company is working to provide Free Wi-Fi even at tourist facilities where it is difficult to establish a communication environment.

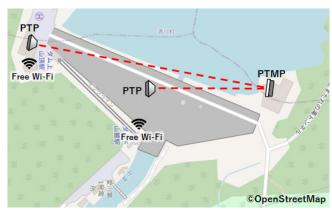
## THE CHALLENGES

Miyagase Dam, a popular tourist spot in the Tokyo metropolitan area, has the function of a natural park because it is surrounded by a blessed natural environment. And this area is also within a day trip from Tokyo and Yokohama, so many people visit throughout the year.

Miyagase Dam is a huge structure with a height of 156m and a width of 400m, and facilities for enjoying the view of the dam are scattered in the tourist spots. The dam

operator "Ministry of Land, Infrastructure, Transport and Tourism Kanto Regional Development Bureau Sagami River Wide Area Dam Management Office" plans to provide Free Wi-Fi to tourists gathering at the facility and NTTBP has built a communication equipment.

One of the facilities that the dam management office requested to make into a Wi-Fi area was an exhibition hall.



**Deployed Sites** 

It is 400m line-of-sight distance between the office where the optical network unit was installed and the exhibition hall, making it difficult to lay a wired LAN. In addition, the facilities under the dam needed a network route. Therefore, NTTBP examined the development of a wireless backhaul using millimeter waves (60GHz) with the cooperation of BeMap Inc., which sells IgniteNet products in Japan.

#### THE SOLUTION

NTTBP has adopted millimeter-wave communication as the optimal backhaul to build a network that meets the needs in an environment where it is difficult to lay a wired LAN. They installed the MetroLinq<sup>TM</sup> 2.5G point-to-multipoint(PTMP) on the roof of the office building, and the 35cm-diameter MetroLinq<sup>TM</sup> 2.5G point-to-point(PTP) in two places, the exhibition hall and the center of the top of the dam.As a



MetroLing™ 2.5G 60 PTMP

result, the communication line of the office building was extended, and Free Wi-Fi was provided at the upper part of the dam from the office building to the exhibition hall and at the facilities under the dam.



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### THE CONCLUSION

NTTBP has succeeded in building a high-performance network in a short time by using millimeter wave communication by MetroLinq<sup>TM</sup>. As in this case, it is possible to utilize millimeter wave and meet various requirements. It can be said that the company can make optimal proposals by utilizing millimeter waves even for facilities where it was difficult to provide services due to the construction of wired networks.

# **DEPLOYED PRODUCTS**

- MetroLing™ 2.5G 60 PTP
- MetroLing™ 2.5G 60 PTMP

