Overview of R&D

Okinawa Open Laboratory conducts research on ICT (Information and Communication Technology) platform that combines communication technology and information technology, and data utilization research that collects, accumulates, and utilizes various data on the ICT platform.

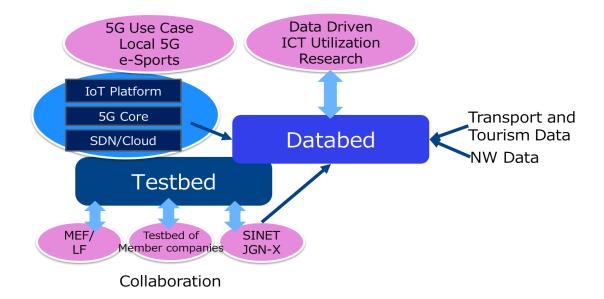
ICT Platform Technology Research

Okinawa Open Laboratory is promoting research and development, verification, and demonstration of ICT platform using Open Source Software (OSS). We have conducted R&D and verification demonstrations of ICT platform using Software-Defined Networking (SDN) and Network Functions Virtualization (NFV), which virtualize networks and enable software control, and virtual machines and container technologies that virtualize computer resources.

Since FY2018, we have been conducting research activities using OSS in new technological areas such as Internet of Things (IoT) and 5th Generation Mobile Communication System (5G) technology.

By publishing the results of research and verification obtained through these activities, we are promoting the practical application and dissemination of next-generation ICT platform technologies.

In addition, we have built a testbed, which is the platform of our verification and research activities, and provided it to our members. We have also built a databed as a basis for collecting, accumulating, and utilizing various data that exist in the real world, and are operating it as a platform for data utilization research.



Data Utilization Research

In the field of data collection, accumulation, and utilization technology, which will become even more important in the future, Okinawa Open Laboratory has built a databed that collects and accumulates real-world data, and is working to solve regional challenges by utilizing data in cooperation with companies, local governments, and communities in Okinawa Prefecture.

For example, we created a system that makes tourism and transport information open data and makes it easier to search for routes, leading to improvement of convenience not only for tourists but also for local people. In addition, based on this system, we are tackling various challenges related to tourism and transport.

In the future, we aim to become such a platform that naturally gathers data from various fields and becomes the basis for new value creation, using these examples as a catalyst.

