Okinawa Open Laboratory

Direction of Operations

March 31st, 2017

Okinawa Open Laboratory
Trend of ICT Technologies and Their Usage Areas
### Advancement and Diversification of Technologies and Expansion of Usage Areas

<table>
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<tr>
<th>Various</th>
<th>Medical Healthcare</th>
<th>Tourism Entertainment</th>
<th>Smart City</th>
<th>Mobility</th>
<th>Education</th>
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<td>• Application</td>
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<td>• Usecase</td>
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<td>• Solution</td>
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#### Possibility to utilize Advanced ICT

Reduce limitation of distance and time, Expand possibility of human, Creation better life and entertainment

#### Advanced ICT

- **IoT**
- **Big Data**
- **AI Machine Learning**
- **Robot**
- **Security**

#### Need to transport huge data, computing resources

Enhance, flexibilize and automate functions to collect, store, process data

#### ICT Infrastructure technology

**Expectation for ICT Infrastructure**

- **Enhance Network Function (SDN/NFV)**
- **Cloud Computing (OpenStack)**

#### OOL’s target area

Computer in Network

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Direction of OOL’s Operations
Direction of R&D Activities

Tackle the following activities for further acceleration of practical application and dissemination of next generation ICT platform technologies.

- Need to transport huge data, computing resources
- Enhance, flexibilize and automate functions to collect, store, process data
- Reduce limitation of distance and time, Expand possibility of human, Creation better life and entertainment
- Various • Application • Usecase • Solution
- Possibility to utilize Advanced ICT

PoC of use cases utilizing Okinawa’s advantages in location & environment

“Virtualization X Advancement” of ICT platform technologies

OOL’s target area

Various Application Usecase Solution

Medical Healthcare Tourism Entertainment Smart City Mobility Education

IoT Big Data AI Machine Robot Security

Cloud Computing (OpenStack) Computer in Network

Enhance Network Function (SDN/NFV)

Enhance, flexibilize and automate functions to collect, store, process data

ICT Infrastructure technology

Expectation for ICT Infrastructure

Direction of R&D Activities

Tackle the following activities for further acceleration of practical application and dissemination of next generation ICT platform technologies

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Promotion of “Virtualization X Advancement”

Contribute to practical application and dissemination of ICT platform technologies by promoting virtualization and advancement and creating synergy between them.

Virtualization x Advancement

- SDx technology for Anywhere
- SDN/NFV + Cloud (Integration)

Verify → Apply → Disseminate

AI, IoT, Security, ...

SDx

SDx X Any
Promotion of PoC

Promote PoC utilizing Okinawa’s advantages in location and Environment by collaboration with various people and organizations

Collaboration not only with members, but also with non-members as required
Seek for more utilization of OOL’s accumulated contents with considering future operations

- Consider to monetize the human resource development activities
  - Seek for possibility to provide OOL’s contents to educational institute’s programs with a fee
- Consider to collaborate with “the development program of next generation network engineers to support IoT platform” which is under discussion by the Ministry of Internal Affairs and Communications in Japan
- Promote the human resource development activities utilizing OOL’s contents as an effective measure of international exchanges of technologies and human resources
  - Utilize and deploy the outcome of international exchange meetings in Malaysia in March 2017
Try to enhance the value of OOD by creating synergy between OOD in Okinawa and mini OOD in Asia as a world unique place for international exchanges of technologies and people.

Internationalization

Create synergy by combination of OOD in Okinawa and Asia

Openness & Diversity
- Exchange/fusion of various technologies
- Pursue the use case
- Exchange of people to promote new technologies and use cases
International Exchange Activities

Establishing multi-layered relationship with Malaysia following Taiwan, various activities will be deployed after International Exchange Meeting in Malaysia on March 7th - 8th 2017 as a trigger.

- Personal Exchange → Internship Program
- Joint Research → OF-Patch, Network Test Automation, ...
- Human Resource Development → Dispatch Instructors, Share Contents, ...
- Joint Event → International Exchange Meeting
END