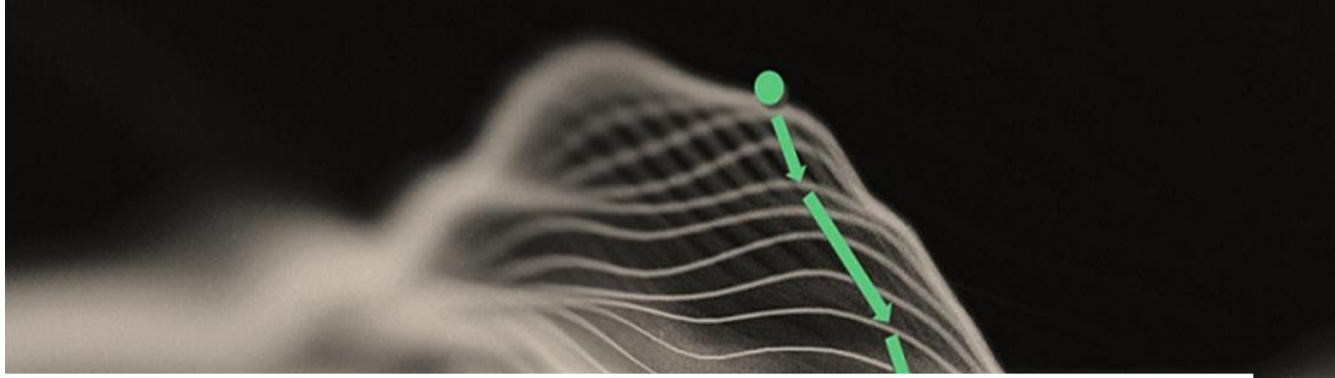
2nd EUJAPAN DIGITAL WEEK 2026



EU-Japan Digital Week 2026 Hackathon on Interoperability of Digital Public Infrastructure

March 3, 2026

Organiser: Dr. Franck Le Gall, EGM, INPACE, France

Co-organiser: Prof. Noboru Koshizuka, The University of Tokyo, Japan

UTokyo

https://inpacehub.eu/ja/eu-japan-digital-week-2026/

UTokyo + DSA Team (Local Host)

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Hiroshi Mano (DSA)

01

Logistic Information

Hackathon Venue: Hongo Campus, The University of Tokyo

The University of Tokyo: Today

10 faculties, 15 graduate schools, and 11 affiliated research institutes

29,213 Students (Graduate and Undergraduate)

11,724 Professors and Staffs

290,866,000,000 JPY Budget (≒ 1,6000,000,000 Euro)

325,819 km² (0.1% of Japan's Land Area)

13 Nobel Prizes (No. 1 in Japan)

16 Prime Ministers (No. 1 in Japan)

March 20, 21, Face-to-Face Working

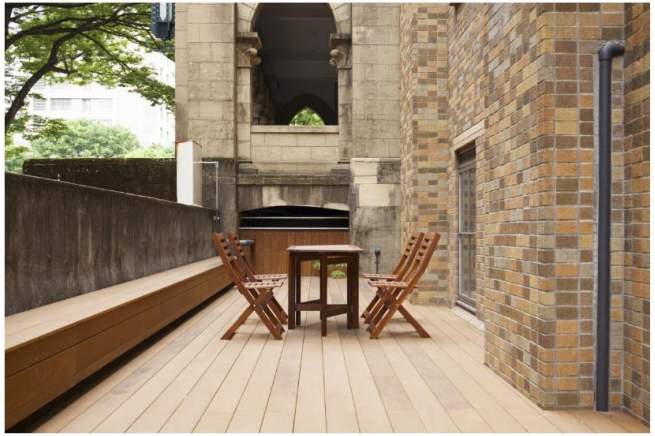
東京大学情報学環オープンスタジオ
The Open Studio at the University of Tokyo

〒113-0033
東京都文京区本郷7-3-1
東京大学 本郷キャンパス 情報学環本館地下1階

B1F iii Main Building,
The University of Tokyo
7-3-1 Hongo, Bunkyo-ku, Tokyo
113-0033 JAPAN

Online Participation (MS Teams)
tbd.

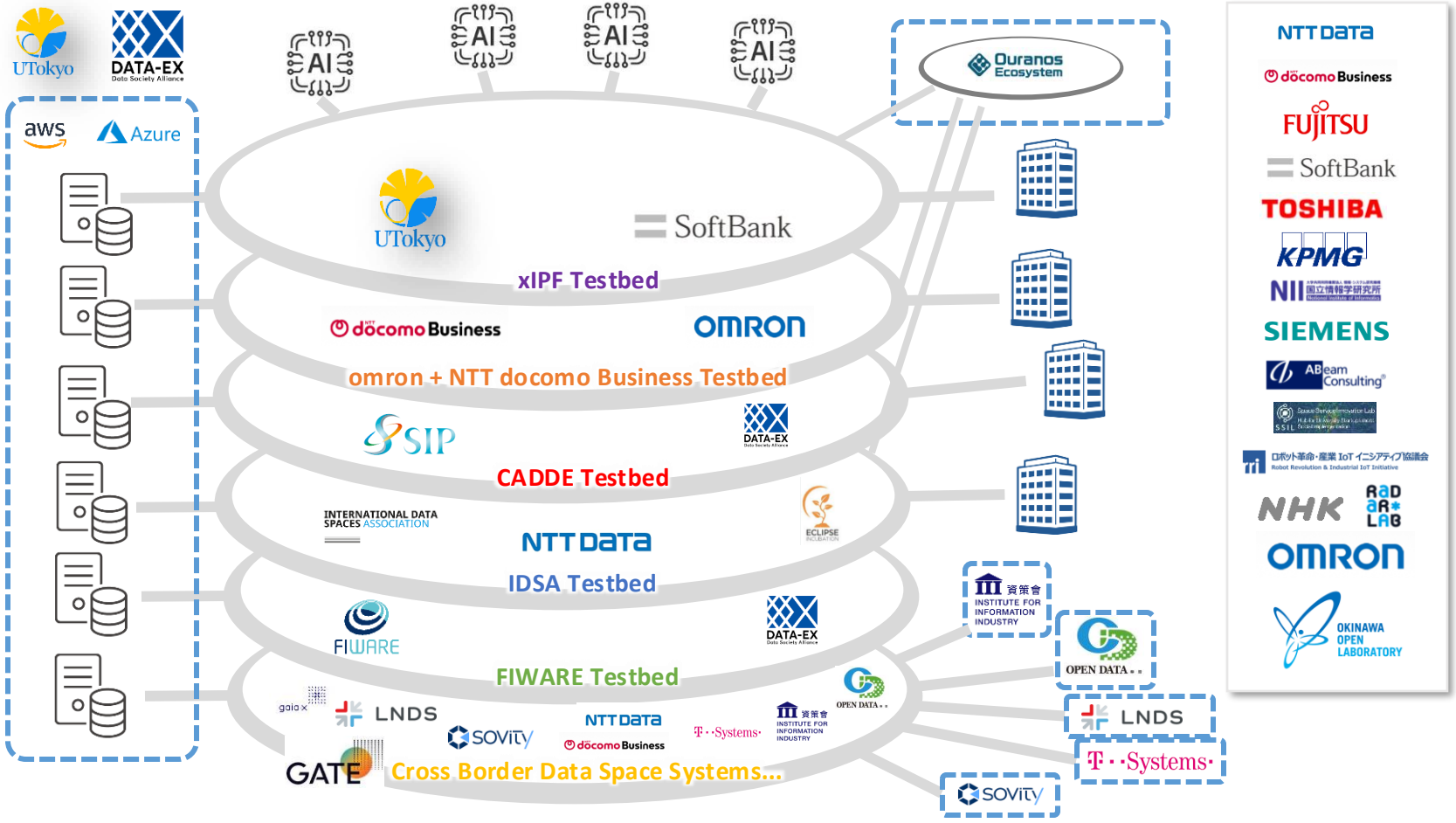
東京大学情報学環オープンスタジオ/The Open Studio at the University of Tokyo



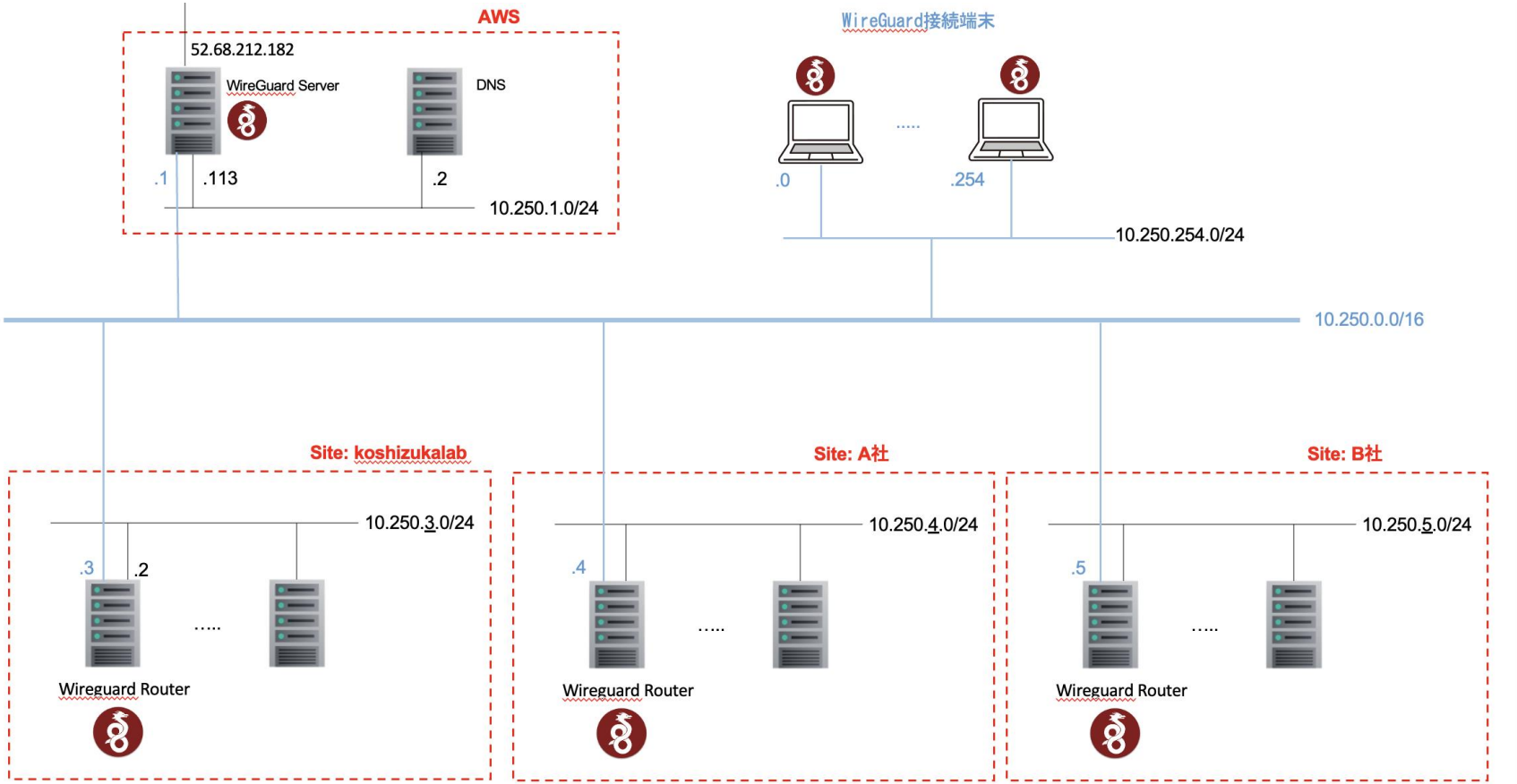
02

Technical Information on International Testbed of Dataspace Technology (ITDT), the University of Tokyo

Concept: International Testbed of Dataspaces Technology, UTokyo



ITDT VPN Architecture (1)

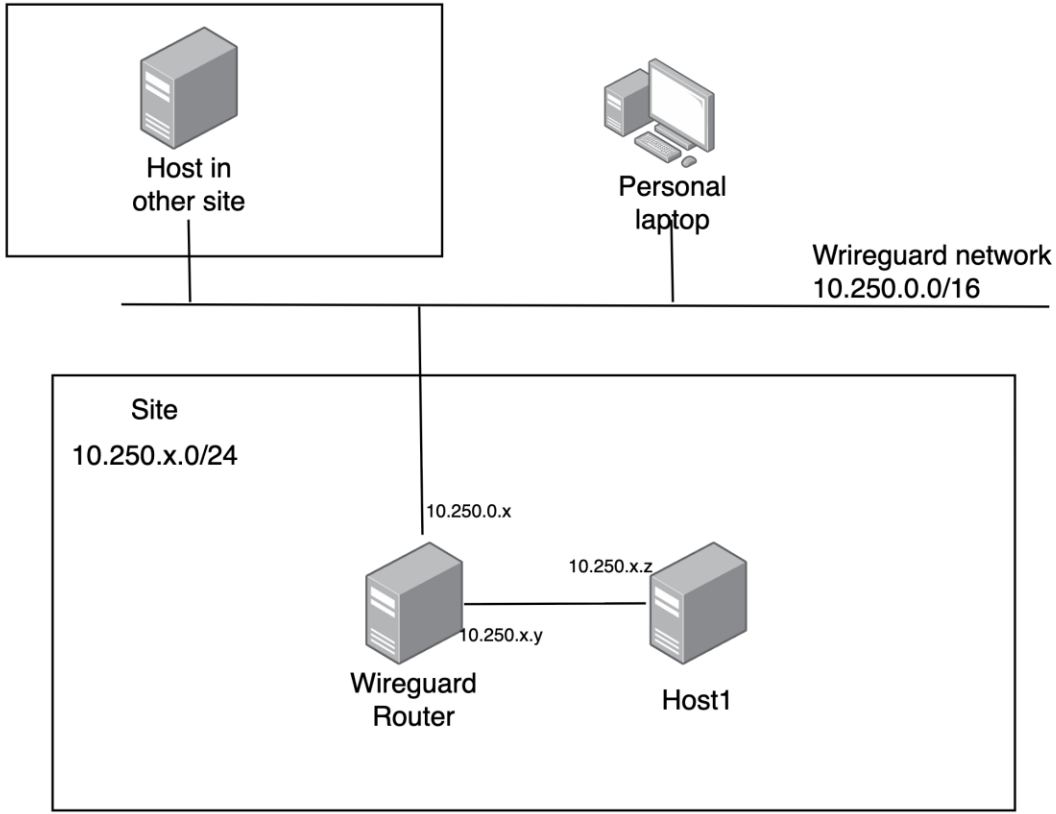


ITDT VPN Architecture (2)

- Class B private VPN with full 32-bit IPv4 addressing
- Custom DNS control within the overlay network
- WireGuard support across Windows, macOS, Android, and iOS
- Device-based and site-based connectivity

*If you install **Wireguard** according to the following guideline, you can connect to the ITDT.*

https://****** (tbd)*****/

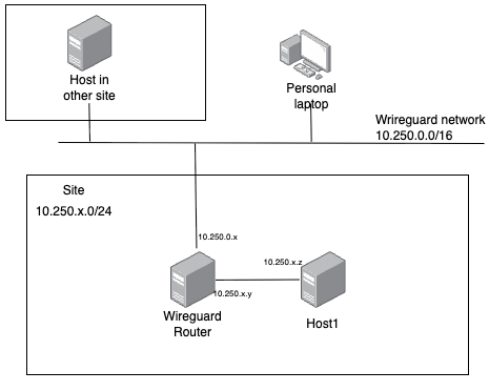


Testbed Network Connection Hands-on Guide v1.2.0

This document summarizes the steps for hands-on connection to the testbed WireGuard environment.

Objective

In this hands-on session, you will configure the WireGuard router and Host1, which are Ubuntu machines located at each company/organization's site to connect to the testbed network.



You will verify the proper setup by checking the following:

- Confirm communication with hosts from other sites (e.g. Koshizuka Lab's site)
- Set up a simple web server on Host1 and confirm it can be accessed from the personal laptop and other sites.

Prerequisites

(For an overview of the testbed network, refer to the `Testbed Network Overview.pdf`.)

Required Environment

- Hosts to be prepared
  At least two Ubuntu 22.04 hosts.
- Network Configuration
  Construct the subnet for each site and place the WireGuard router and other hosts within that network. You can check the assigned network address in the `Address` item under the `[Interface]` section of the WireGuard configuration file, where the filename starts with `[SITE]`. If the `Address` is `10.250.0.x/32`, the network address will be `10.250.x.0/24`.
  Additionally, UDP connections to `52.68.212.182:51820` must be allowed from the subnet.

Files Provided by Koshizuka Lab

- WireGuard configuration files
  - Two configuration files for terminal connection
    Files prefixed with `[LAPTOP]`
  - One configuration file for Site-to-Site connection
    File prefixed with `[SITE]`

Hands-on Procedure

In this hands-on session, the following steps will be taken:

- Configure the host as a WireGuard router
- Configure the host connected to the WireGuard router (Host1 in the diagram)
- Configure your local device (Persoal laptop in the diagram)

1. Configuring the WireGuard Router

Install the WireGuard client and configure it so that other hosts in the subnet (=site) can connect to the testbed network through this host.

1. Install the WireGuard client
   Follow the instructions on the official page to install WireGuard.

```
sudo apt update
sudo apt install wireguard
```

2. Check and Edit the WireGuard configuration file
   The WireGuard configuration file whose filename starts with `[SITE]` includes commands in the `PreUp`, `PostUp`, and `PostDown` sections. These commands are executed when the WireGuard client starts/stops and allows other terminals within the site to connect to the WireGuard network via the router. Modify the network interface name "eth0" as needed. The appropriate interface can be selected using the `ip a` command to list available interfaces, choosing the one connected to the desired network.

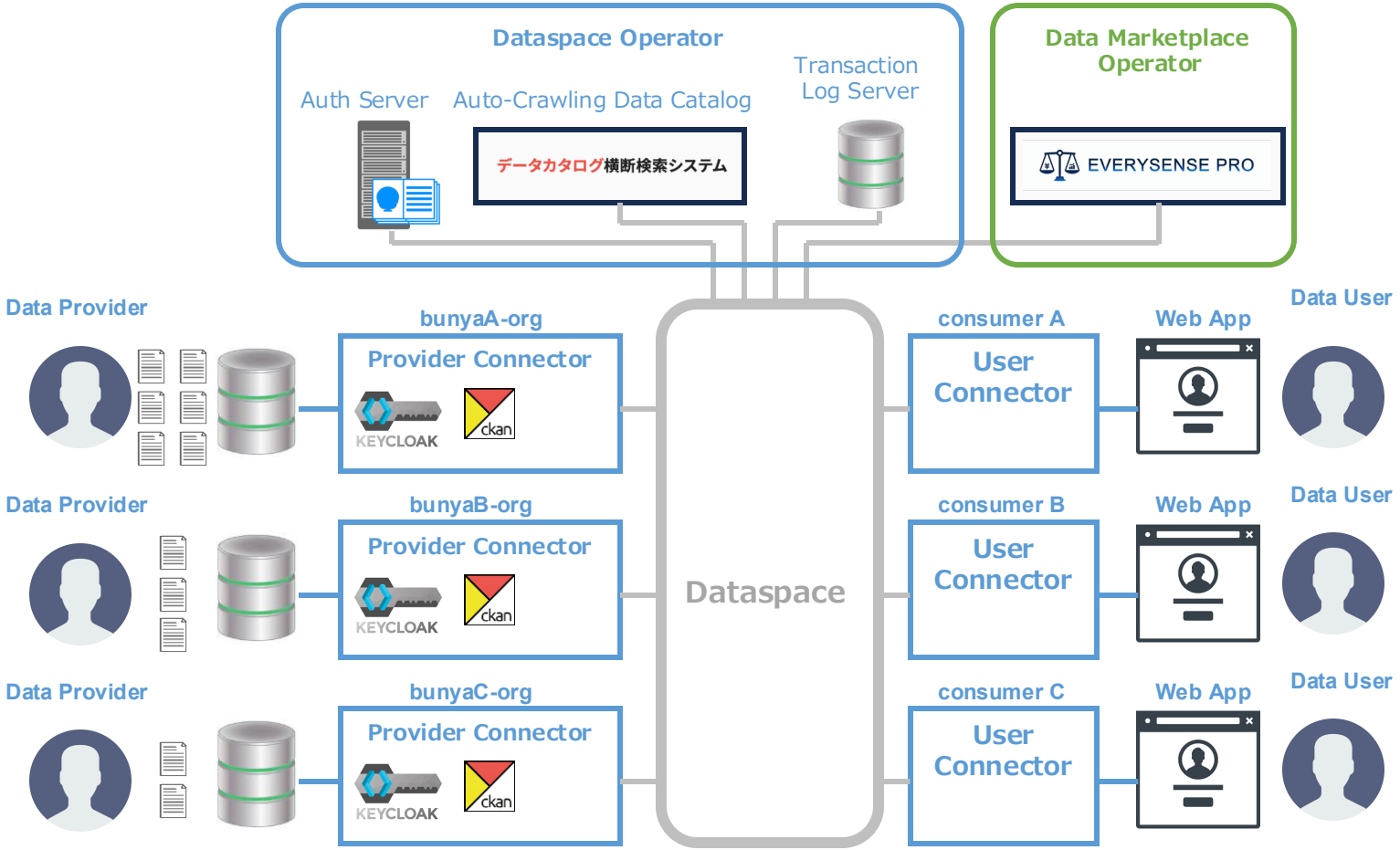
3. Configure the WireGuard client
   Create the file `/etc/wireguard/wg0.conf` and copy the content from the configuration file whose filename starts with `[SITE]`.

4. Start the WireGuard client

```
sudo wg-quick up wg0
sudo systemctl enable wg-quick@wg0
```

   If you encounter the following error, run `sudo ln -s /usr/bin/resolvectl /usr/local/bin/resolvconf`

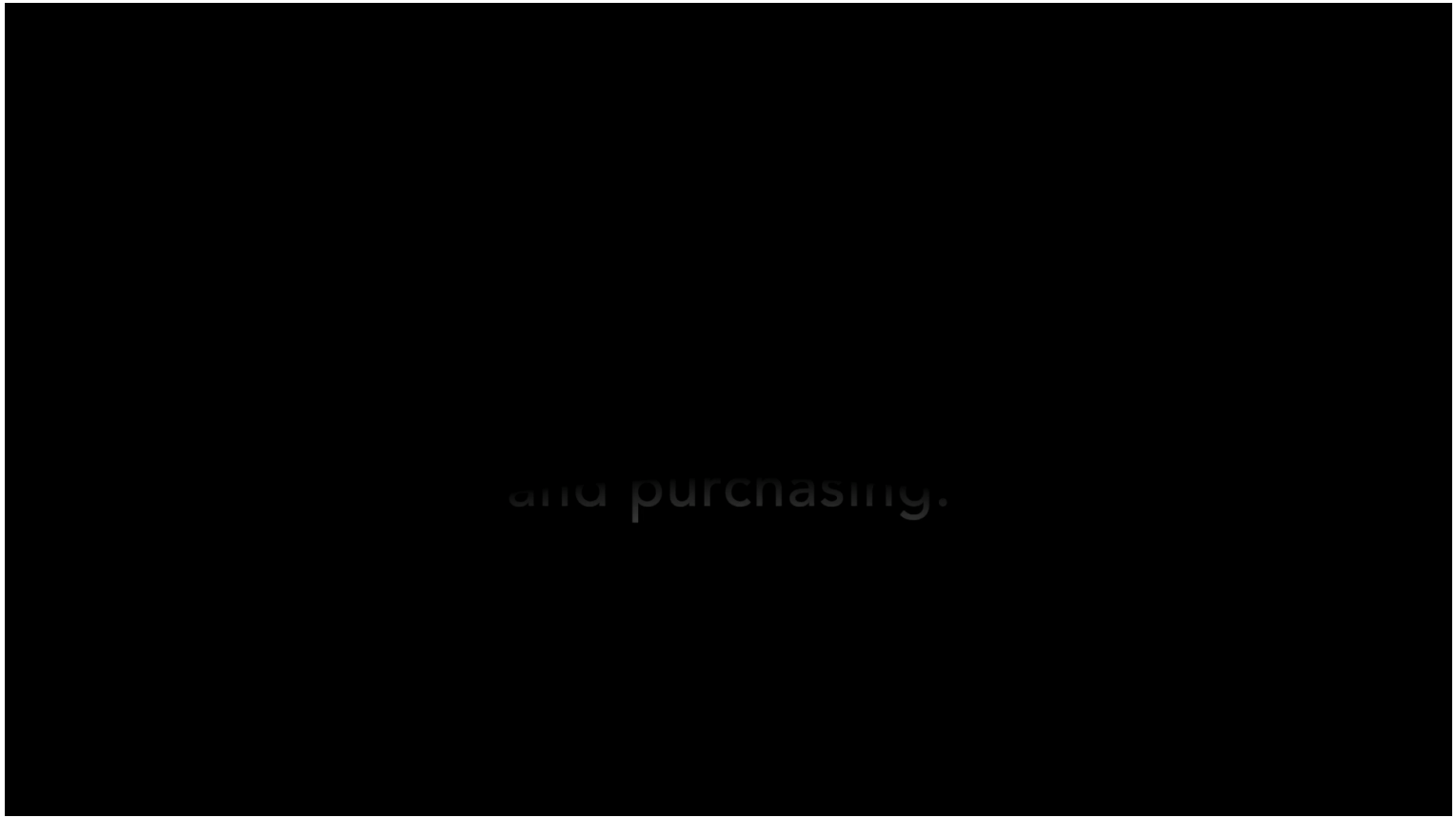
Ex. Dataspace Demo System of ITDT



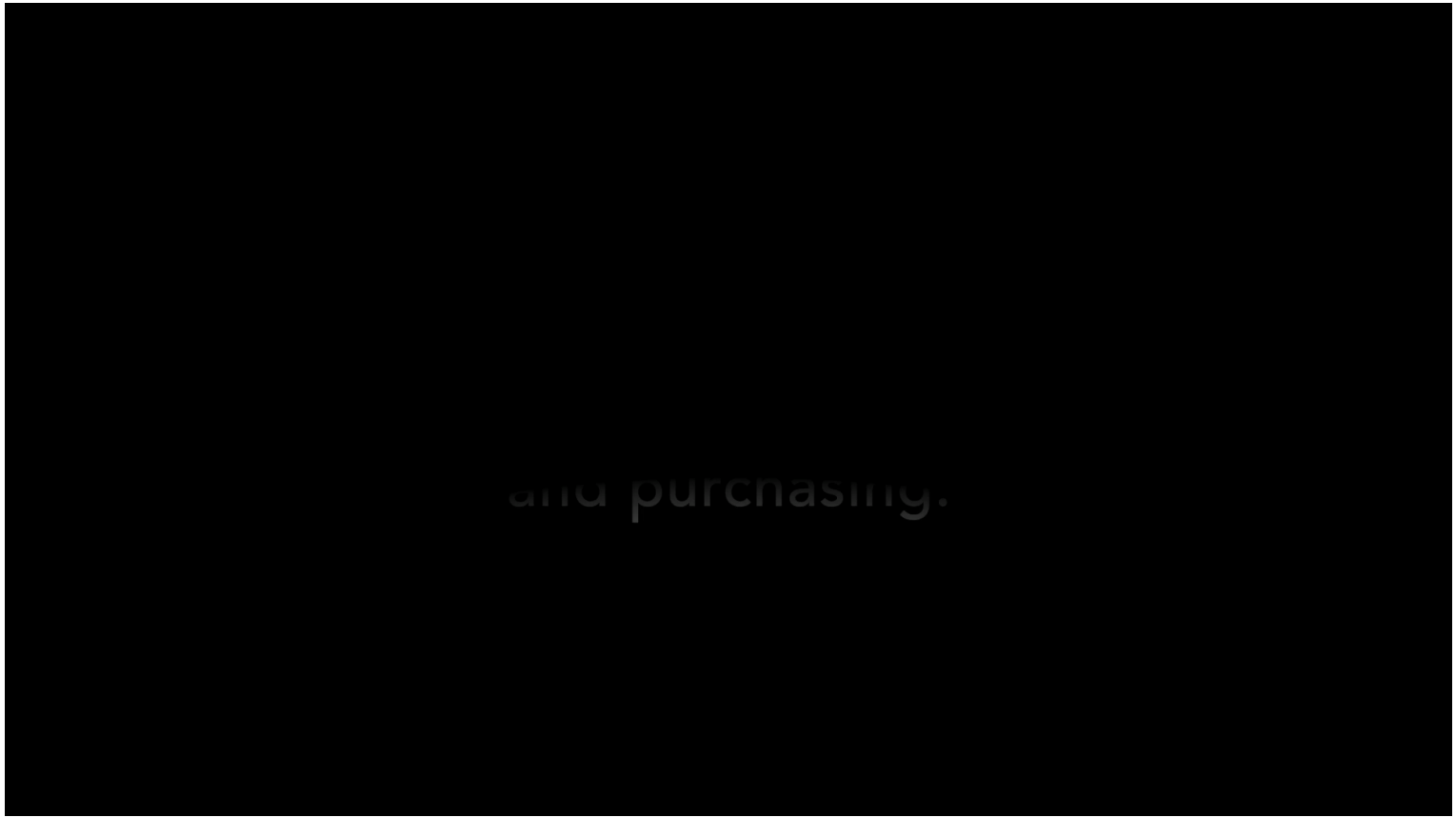
Ex. Dataspace Datasets of ITDT

提供者	タイトル（xckan_title）	データセットの説明	デモ役割
bunyaA-org	カタログ1-1	上巻_3-3-1_都道府県（21大都市再掲）別にみた人口動態総覧	取得可能（契約なし）
bunyaA-org	カタログ1-2	2_年齢（５歳階級），男女別人口－全国（大正９年～平成27年）	取得可能（契約なし）
bunyaA-org	カタログ1-3	海外在留邦人数調査統計_要約版_CSV	取得可能（契約なし）
bunyaA-org	シート20240307	サンプル	Permission Error
bunyaA-org	シート　ナンバー２	サンプル　２	Permission Error
bunyaA-org	試験運用操作マニュアル	操作マニュアル 1.1 証明書の格納【リソース】マニュアル【キーワード】インフラ	Permission Error
bunyaB-org	シート　サンプル　セカンド	サンプル	Not Found Error
bunyaB-org	カタログ2-1	突風事例一覧（CSVファイル）	取得可能（契約なし）
bunyaB-org	カタログ2-2	台風第10号による暴風、大雨等　　令和2年(2020年)9月4日～9月	取得可能（契約なし）
bunyaC-org	カタログ3-1（契約なし）	カタログ３－１（契約なし）	取得可能（契約なし）
bunyaC-org	カタログ3-1（契約あり）	カタログ３－１（契約あり）	データ・マーケットプレイスと連携（契約へ）

Ex. Dataspace Demo Video (Data Finding using Federated Data Catalog)



Ex. Dataspace Demo Video (Data Transfer in Dataspace)



UTokyo will provide the dataspace demo system based on CADDE

Step 1: Connect to ITDT VPN using Wireguard

Provided to all participants

UTokyo provides:
(1)Guidance document https://****** (tbd)*****/

You can connect your PC to the ITDT VPN

➡ Guidance: **March 10**, Webinar

Step 2: End User Experience of Experimental Sample Dataspaces

Provided to all participants

UTokyo provides:
(1)End point information (URL) of Web App for the dataspace access,
(2)User ID and password.

➡ Guidance: **March 20**, Hackathon

Scenario
Using the above information, you can download dataset via Web App of test dataspace.

Step 3: Development Test Using Experimental Sample Dataspaces

Available to interested parties only

UTokyo provides:
(1)End point information (URL) of a connector of the dataspace access
(2)APIs for downloading datasets from the dataspace

➡ Guidance: **March 20**, Hackathon

Scenario
You can write codes obtaining datasets from the dataspace by using the API

More open information in Japan useful for planning you idea

Suggested standards and Tools

- **CADDE (Cabinet Office SIP Project)**
  - ▶ https://github.com/CADDE-sip

- **Federated Data Catalog (227,704 data sets)… The largest data catalog in Japan**
  - ▶ https://search.ckan.jp/

  ! A part of CADDE software sets

- **Open Data Spaces (METI, IPA)**
  - ▶ https://www.ipa.go.jp/digital/opendataspaces/

Data Providing Sites

- **Japan Mobility Data Space (JMDS)**
  - ▶ https://mobility-data-space.jp/
- **Tokyo Data PlatForm (TDPF, Tokyo)**
  - ▶ https://www.tdpf-hp.metro.tokyo.lg.jp
- **NABRAS (Kochi Prefecture)**
  - ▶ https://kmi-nabras.pref.kochi.lg.jp/
- **Geospatial Information Center**
  - ▶ https://front.geospatial.jp/

03

Examples of Challenges

Challenge

Your Mission: Design solutions demonstrating innovative use of Dataspaces or interoperability between different dataspaces systems while ensuring:

- **Trust & Security**: Protect personal data and maintain cybersecurity standards
- **Human-Centric Design**: Keep citizens at the center of digital transformation
- **Technical Integration**: Bridge gaps between diverse APIs, data formats, and legacy systems
- **Regulatory Compliance**: Navigate varying legal frameworks across jurisdictions

***Real-World Impact**: Your solutions will support the EU's Digital Partnerships with Japan, Korea, Singapore, and India - helping 2 billion people access better cross-border digital services for healthcare, education, commerce, and governance.*

Hint !

*Design and/or clarify an international cross-border digital services in which **dataspaces** an **AI-Agents** are useful, and **trust** mechanisms are necessary, ...*

Interoperable Horizons: 7 Use Cases for EU-Japan Digital Cooperation

Healthcare Domain

EUDI Wallets

gaia-x

Cross-Border Emergency Healthcare Data Platform

A secure system utilizing EUDI Wallets and Gaia-X to grant foreign hospitals instant, consent-based access to a traveler's critical medical data like allergies and blood type.

Cross-Border Emergency Healthcare AI Agent

An AI assistant that uses FIWARE (NGSI-LD) to securely retrieve and translate home medical records, helping local doctors prevent drug contraindications during emergencies.

AgriFood Domain

FIWARE

GLEIF

International AgriFood Traceability & Certification Dataspace

A farm-to-table platform integrating FIWARE and GLEIF vLEI to verify international food certifications (Organic, Halal, Fairtrade) across the EU and Japan.

Culture Domain

W3C Verifiable Credentials

Cross-Border Cultural & Art Passport

A digital wallet using WSC Verifiable Credentials to provide students and artists with eligible discounts at museums and archives without revealing full personal identities.

FIWARE

Seamless Smart City & Mobility Access

Enables travelers to use local transit, EV charging, and bike-sharing services via their home country's digital ID, powered by FIWARE Smart City Data Models.

Education Domain

Adaptive Sovereign AI Tutor for Global Education

EUDI Wallets

An AI tutor that analyzes a student's home country learning history via EUDI Wallets to create personalized programs that bridge gaps with local curricula.

Research Domain

MOSIP

W3C Verifiable Credentials

Cross-Border Academic Research & Credential Dataspace

A federated space connecting global institutions like UTokyo and the University of Debreven, utilizing MOSIP and W3C Verifiable Credentials to reduce research credential verification time from 30 hours to just 2.8 seconds.

1. Cross-Border Emergency Healthcare Data Platform

Domain

- Healthcare

Concept

- A secure data linkage system allowing foreign hospitals to instantly and safely access a traveler's critical medical data (allergies, blood type, medications) with user consent.

Mission Alignment

- Protects highly sensitive personal health data (Trust & Security) while complying with strict frameworks like GDPR and APPI (Regulatory Compliance).

Technologies

- EUDI Wallets, Japanese My Number Card systems, Gaia-X Trust Framework, etc.

2. Cross-Border Emergency Healthcare AI Agent

Service domain

- healthcare domain

Concept

- The concept is an AI agent that assists local doctors during medical emergencies by securely accessing, translating, and analyzing a foreign patient's home medical records to prevent drug contraindications.

Mission alignment

- It ensures Trust & Security and Human-Centric Design by strictly using verified personal health data through explicit patient consent to eliminate AI hallucinations while saving lives.

Technologies

- FIWARE (NGSI-LD) and the Gaia-X Trust Framework for secure data retrieval, while utilizing EUDI Wallets and the Japanese My Number Card for patient consent authentication.

3. Seamless Smart City & Mobility Access

Domain

- Commerce / Governance

Concept

- A cross-border mobility system where travelers can seamlessly use local transit, EV charging, and sharing services in foreign smart cities using their home country's digital ID, without downloading new apps.

Mission Alignment

- Focuses heavily on Human-Centric Design while connecting deeply embedded municipal infrastructures (Technical Integration).

Technologies

- FIWARE Smart City Data Models (NGSI-LD), OpenID Connect, etc.

4. International AgriFood Traceability & Certification Dataspace

Domain

- Commerce / AgriFood

Concept

- A platform integrating agricultural data and international food certifications (e.g., Organic, Halal, Fairtrade) from farm to table.

Mission Alignment

- Enhances consumer trust and transparency (Trust & Security) by bridging diverse databases and certification bodies across the EU and Japan (Technical Integration).

Technologies

- FIWARE Smart Data Models (AgriFood domain), GLEIF vLEI for farm/corporate identity, etc.

5. Cross-Border Cultural & Art Passport

Domain

- Education / Culture

Concept

- A digital wallet solution granting students, researchers, and artists seamless access and eligible discounts to museums, archives, and cultural festivals across partner nations.

Mission Alignment

- Excels in implementing Selective Disclosure and Privacy by using attribute-based access control (e.g., proving "student status" without revealing a full name or address).

Technologies

- EUDI wallets, Japanese My Number Card systems, W3C Verifiable Credentials, etc

6. Adaptive Sovereign AI Tutor for Global Education

Service domain

- Education, International Students and Cross-border Workers.

Concept

- The concept is an AI tutor that dynamically reads a user's home country learning history and verifiable credentials to infer the gap with local curriculum requirements, providing a completely personalized learning program.

Mission alignment

- It achieves Trust & Security and Real-World Impact by using attribute-based access control (selective disclosure) to protect student privacy while providing immense social value through better access to global education.

Technologies

- W3C Verifiable Credentials, EUDI Wallets, and the Gaia-X trust framework to securely manage and verify personal educational data across borders

7. Cross-Border Academic Research & Credential Dataspace

Domain

- Education & Research

Concept

- A federated international dataspace connecting UTokyo, NII, Kansai University, the University of Debrecen, and other global institutions.
- Researchers authenticate using national digital IDs (EUDI, My Number, MOSIP) and present W3C Verifiable Credentials (degrees, researcher status) to securely access protected cross-border research datasets.
- AI can perform policy-compliant analysis without exposing sensitive data.

Mission Alignment

- Trust & Security: Instant credential verification (inspired by hackathon proof: 30h → 2.8s), Attribute-based access control (selective disclosure), Protection of personal and confidential research data
- Technical Integration: FIWARE NGSI-LD for standardized data exchange, Gaia-X Trust Framework for federated governance
- Real-World Impact: Implements G7 “Data Free Flow with Trust” in academia, enabling secure EU–Indo-Pacific collaboration in AI research, drug discovery, and climate science.

Technologies

- EUDI Wallet, My Number, MOSIP, W3C Verifiable Credentials, GLEIF, vLEI, FIWARE NGSI-LD, Gaia-X, UTokyo ITDT testbed