

OF@TEIN+:

Open/Federated Playgrounds for Future Networks

Building and operating Open and Federated Future Internet
(SDN/NFV/Cloud-integrated) Testbed

This proposal is prepared in response to Asi@Connect WP4 (Future Internet)





Co-PI (Corresponding): Teck Chaw LING,

tchaw@um.edu.my, Tel: +603-79676362

Associate Professor, Faculty of Computer Science and Information Technology,
University of Malaya, Malaysia

APAN Network Research Workshop Co-Chair

MYREN Network and Distributed WG Chair

and

Co-PI: JongWon Kim,

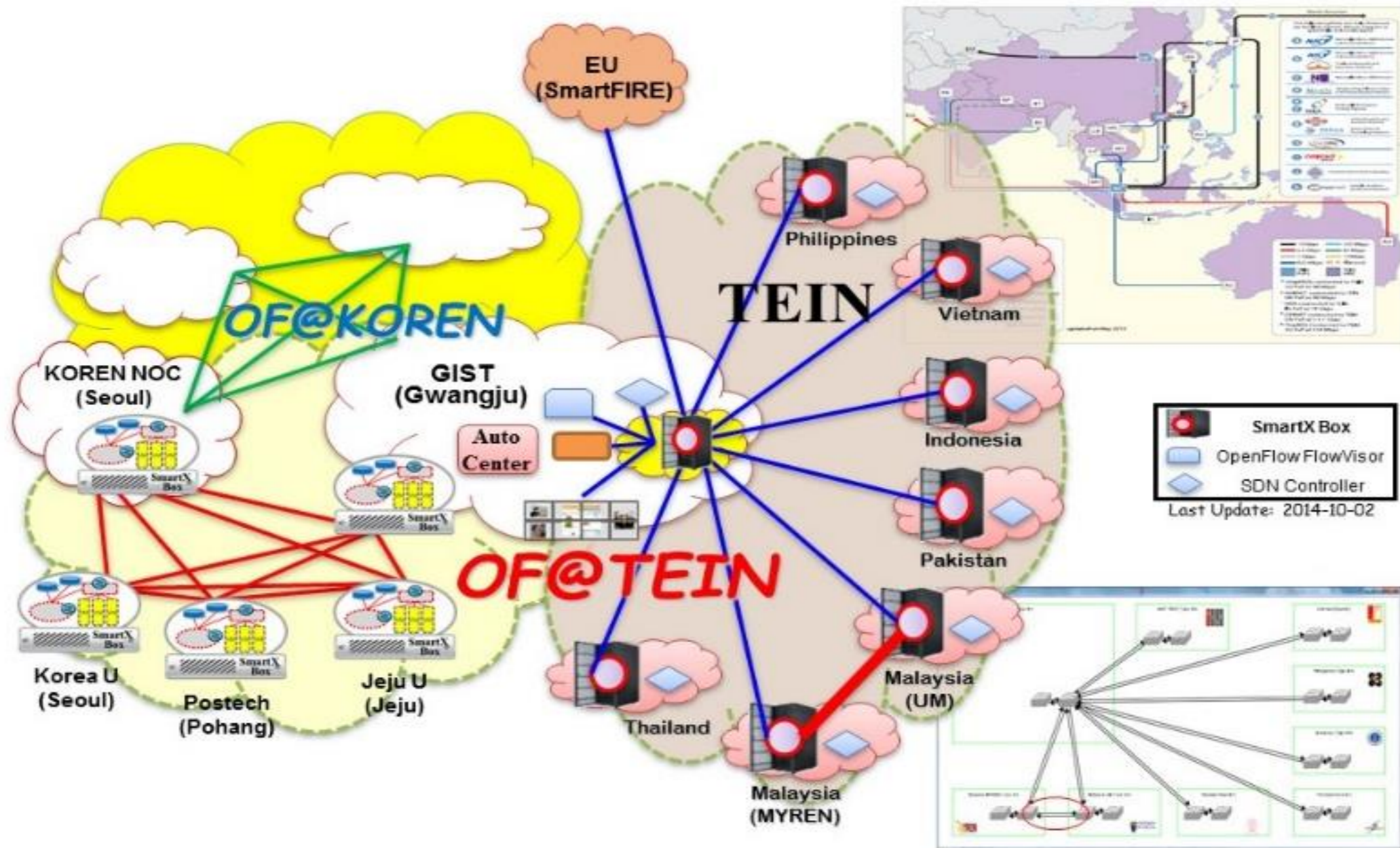
jongwon@gist.ac.kr, Tel: +82-10-7930-2837

Professor, School of Information & Communications, GIST, Gwangju, KOREA

APAN Technology Area Director (2014~) & APAN Cloud WG Co-Chair (2014~)



Background



FROM OF@TEIN TO OF@TEIN+



Primary goals of OF@TEIN+:

1. Gather and Learn Together: Expanding the OF@TEIN Community and Sharing the Knowledge about Open and Federated (i.e., shared) SDN/NFV/Cloud-integrated Playground amongst the Members.
2. Build and Upgrade Together: Deployment and Upgrade of Open/Federated Playground with Distributed SmartX Box Playground Resources and Centralized Data Lake/Analytics Hardware.
3. Operate and Automate Together: Collaborate among Leading Members to enable Automated DevOps-style Operation of Playground Resources and Platforms.
4. Play and Visualize Together: Collaborate with All Members in Experimenting (i.e., Playing) and Visualizing “Plays over Playground”.
5. Investigate and Enrich Together: Investigate selected building-block topics on Future Network technology and attempt to enhance the playground capability/agility by applying the investigation outcomes.

Team members

- Aung Htein Maw, PhD (UCSY, Myanmar)
- Bayani Benjamin Lara (ASTI, Philippines)
- Bo Shik Shin (KOREN-NOC, Korea)
- Chaodit Aswakul, PhD (Chulalongkorn University, Thailand)
- Chu-Sing Yang, PhD (National Cheng Kung University, Taiwan)
- Chun-Yong Chong (Monash Malaysia, Malaysia)
- Đinh Văn Dũng, PhD (VNU, Vietnam)
- Eueung Mulyana, PhD (ITB, Indonesia)
- Jiann-Liang Chen, PhD (NTUST, Taiwan)
- Khamxay Leevangtou (NUOL, Laos)
- Li-Der Chou, PhD (NCU, Taiwan)
- Muhammad Tayyab Chaudhry, PhD (CIIT, Lahore, Pakistan)
- Nguyen Huu Thanh, PhD (HUST, Vietnam)
- Panjai Tantatsanawong, PhD (UNINET, Thailand)
- Paventhan Arumugam, PhD (ERNET, India)
- Philip Ho (HKU, HK)
- Su Thawda Win, PhD (UCSM, Myanmar)
- Sunyoung Han, PhD (Konkuk U, Korea)
- Te-Lung Liu, PhD (NCHC, Taiwan)
- Wangcheol Song, PhD (Jeju University, Korea)

Goals



3. Operate and Automate Together:

- i. Establishment of operational mailing-list and operational ticketing systems
- ii. Establishment of Initial DataLake for site-to-site Inter-Connection troubleshooting
- iii. Establishment of High-availability DataLake (**up to 2 sites**) for joint operation troubleshooting (underlay and overlay playground)

4. Play and Visualize Together:

- i. Developers (**up to 22 groups**) from all the community members to propose their experiments or to develop visualizations
- ii. Students (**up to 6**) for actively proposing new solutions to be deployed in the playground

5. Investigate and Enrich Together:

- i. Enhancing SDX-based deployment: Solutions/designs/plans (**up to 2**) to be deployed
- ii. Initial deployment of SOC: Deployment sites (**up to 3 sites**) for initial security collection

Questions ?



Contact:

**ASSOCIATE PROFESSOR
DR LING TECK CHAW
TCHAW@UM.EDU.MY**

