

Telescience Update

Pragma 34

Yoshiyuki Kido

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Update from Participants

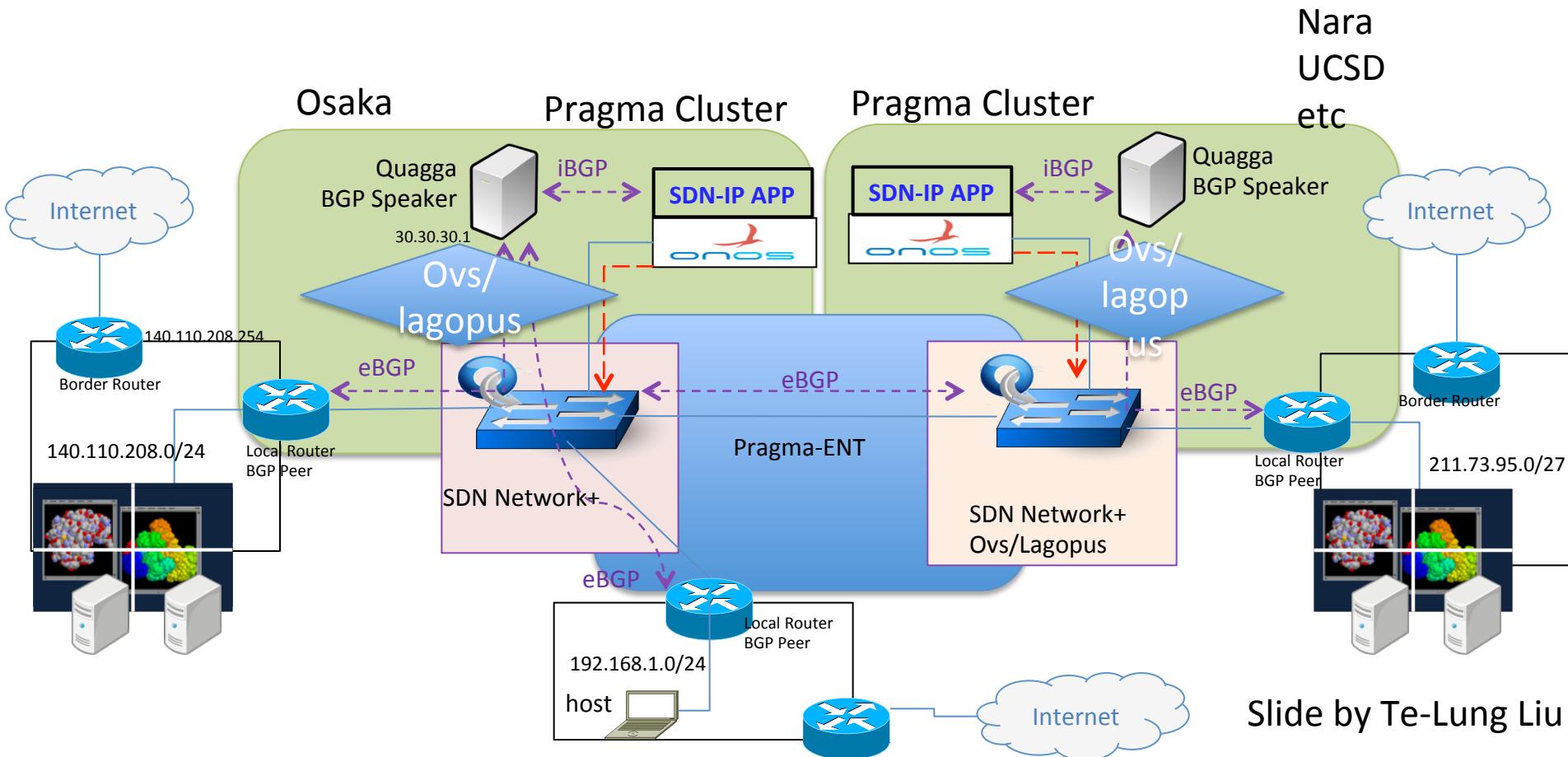
- Fang Pang Lin (NCHC)
- Chiao-Ning Chuang(National Chiao Tung University), “Video Prediction”
- Whey-Fone Tsai, “The Big Data Industry of Offshore Wind Energy in Taiwan: Development and Applications”
- Jason Haga, “Voice command and Linked application on SAGE2”
- Te-Lung Liu and Grace Lee, “SDN-IP update”
- Juan Sebastian Aguirre Zarraonandia, “Application aware traffic engineering via SDN-IP”
- Cloud Tseng(NTU), “UAV applications for smart agriculture”
- J. Rubrico, et al “ALaM: A labelling machine”

Telescience Discussions

- How to connect TD to pragma-ENT and SDN-IP
 - SDN-IP network are up and running (Thanks to NCHC and NICT team)
 - If they become stable, we can use this network as a back door and connect to the Internet as a default route.
 - Then, we can connect Tiled Display.
 - NCHC and Osaka, NICT will connect first.
 - SND-IP is a part of pragma-ENT
 - If SDN-IP on NFV/Pragma Cluster is up, we can deploy it at some of the pragma cluster site.
 - Look for a new architecture for IoT integrating with SDN technology
- Discussion about “World bay”
 - Development vs Preservation
 - IoT + social and economical data
 - Slow development
 - Index for smart bay
 - Airbox in the bay

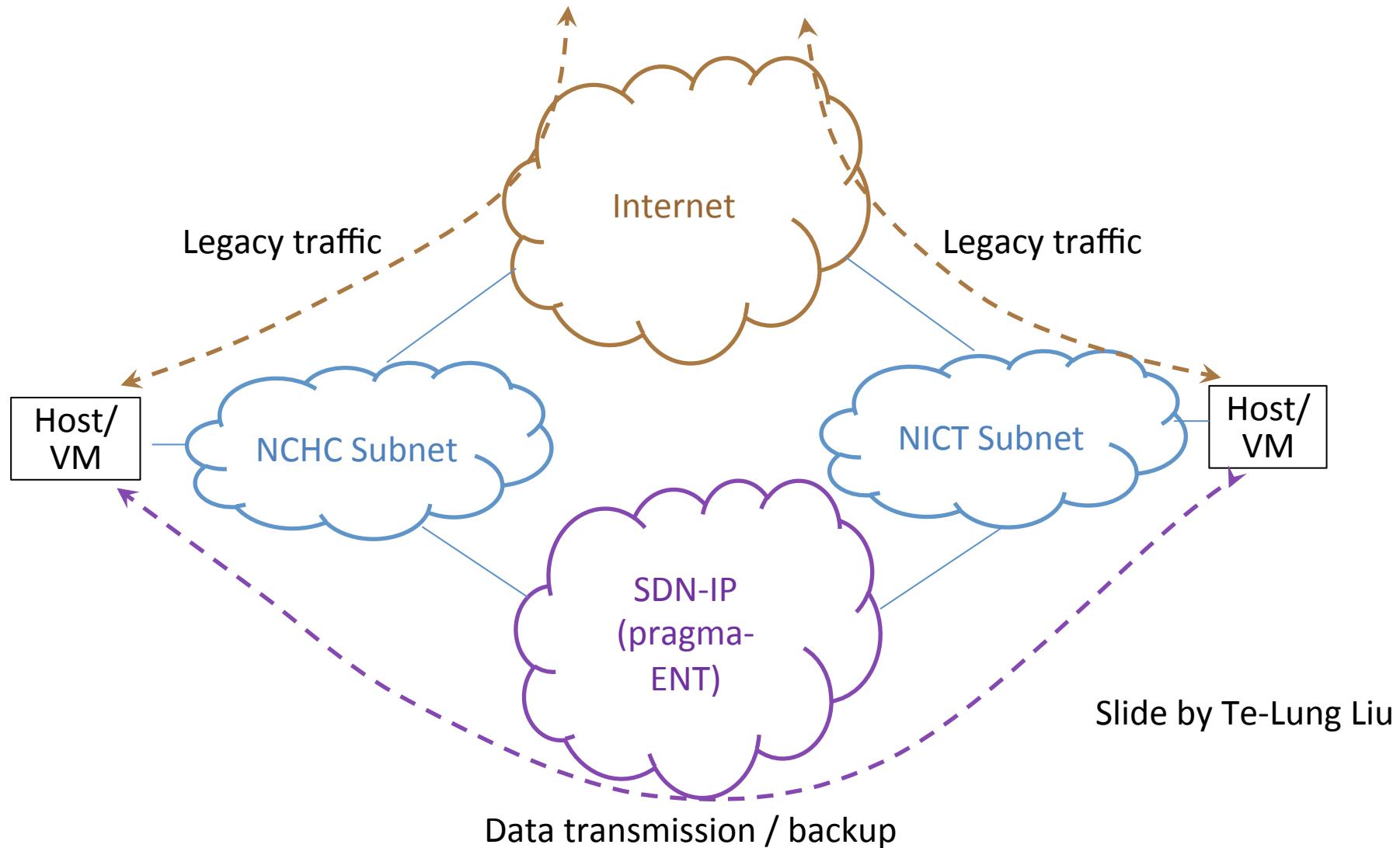
NFV environment on Pragma-ENT

Case 1: SDN-IP

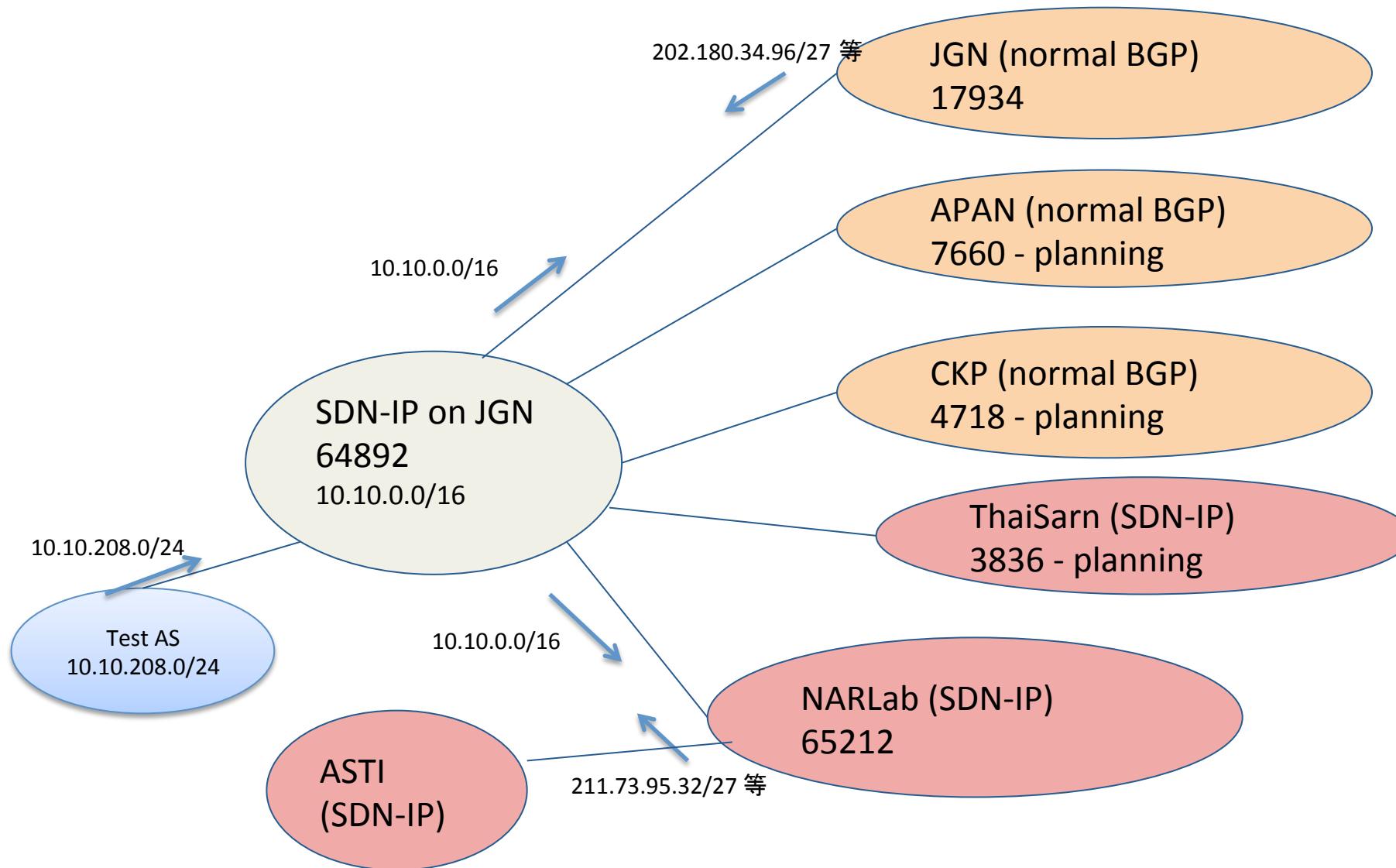


Slide by Te-Lung Liu

Application aware traffic engineering on SDN-IP

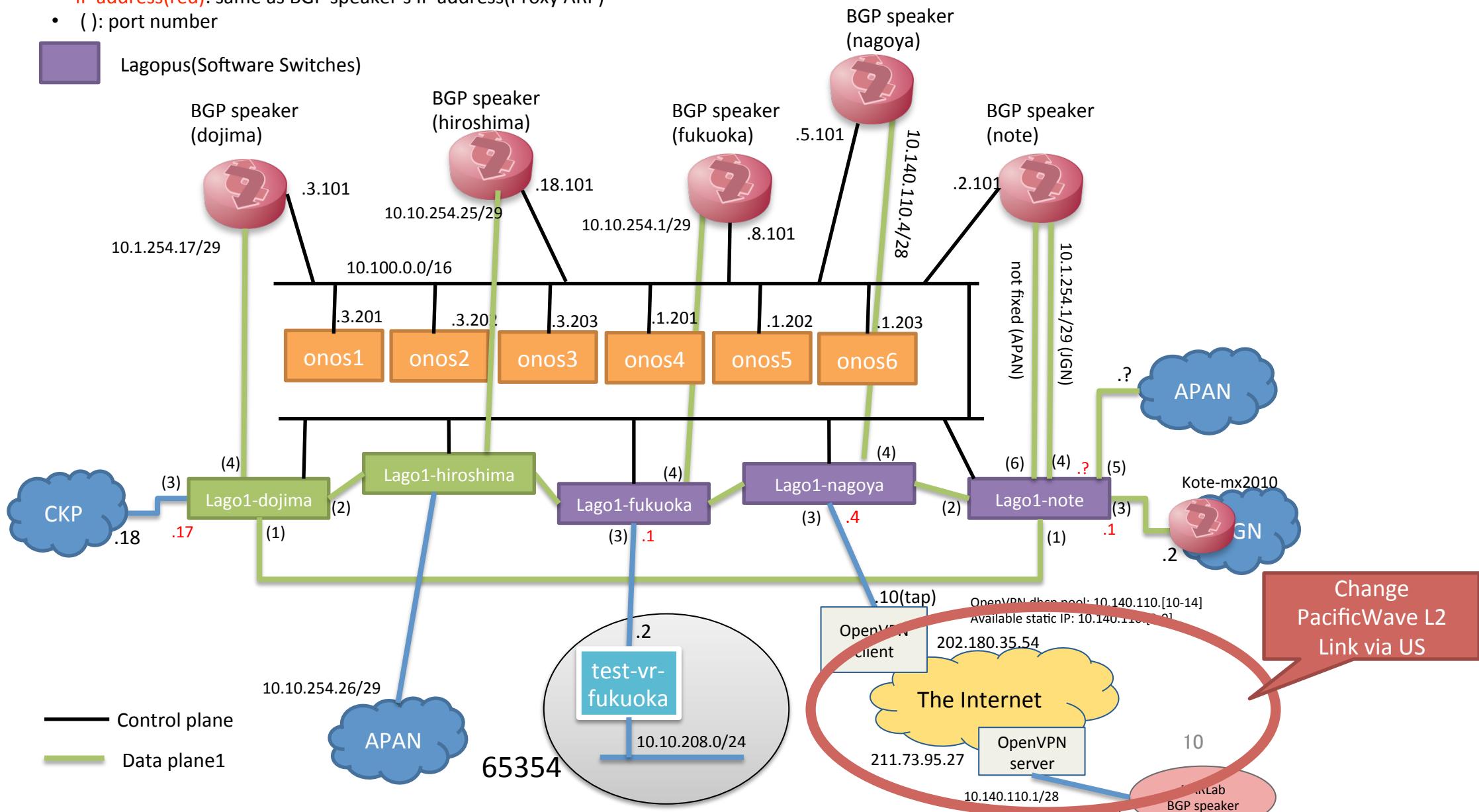


SDN-IP collaboration overview

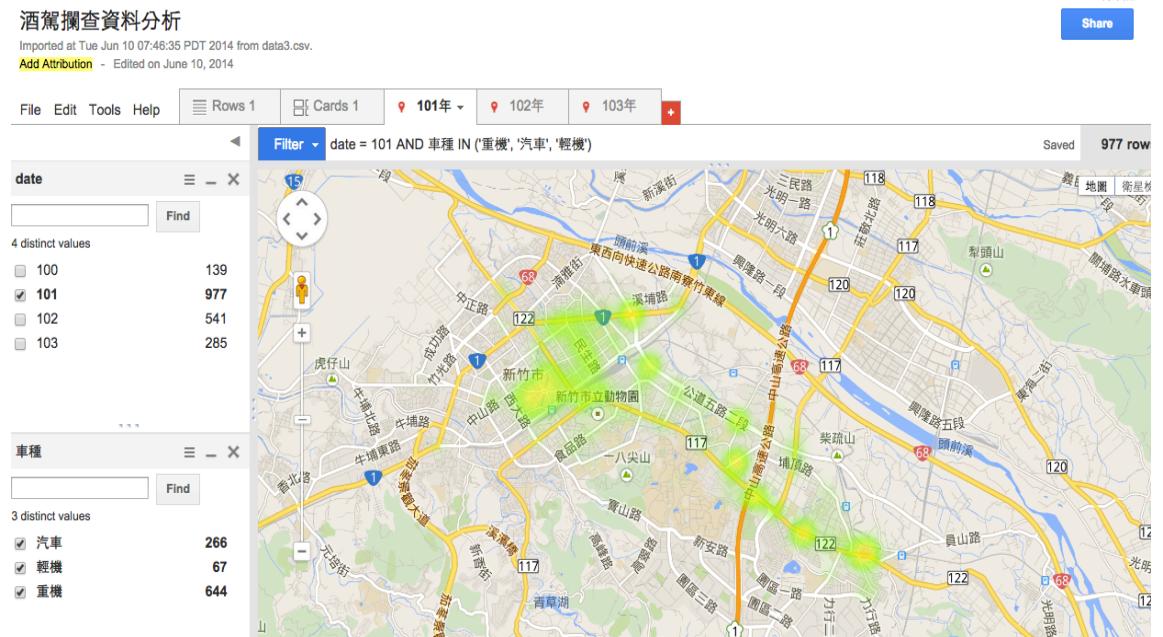
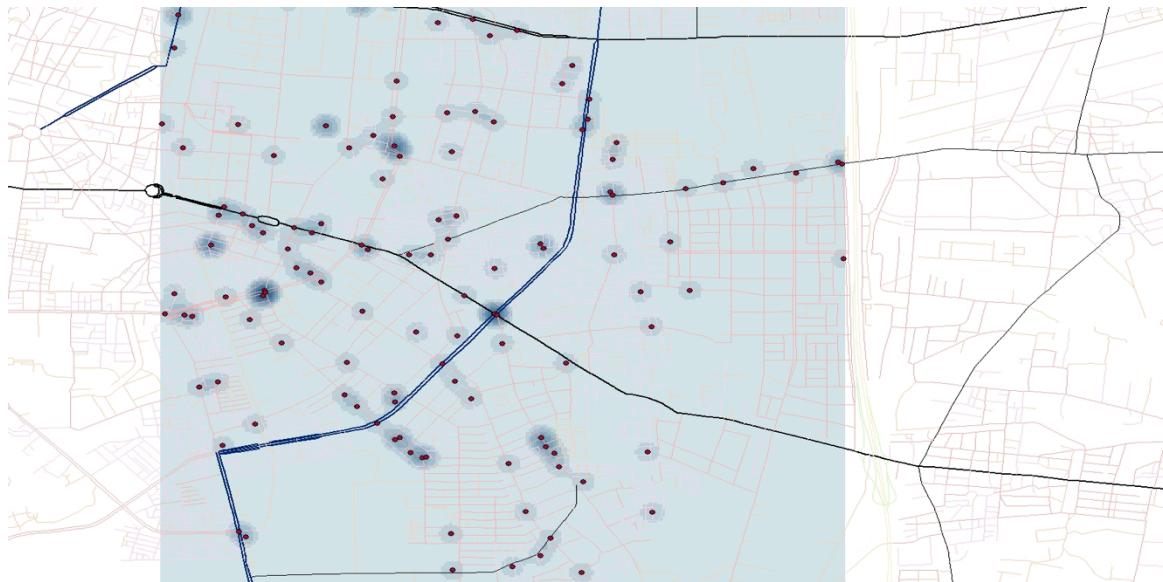


BGP peering w/o RR (ASN 64892)

- IP address(red): same as BGP speaker's IP address(Proxy ARP)
- (): port number



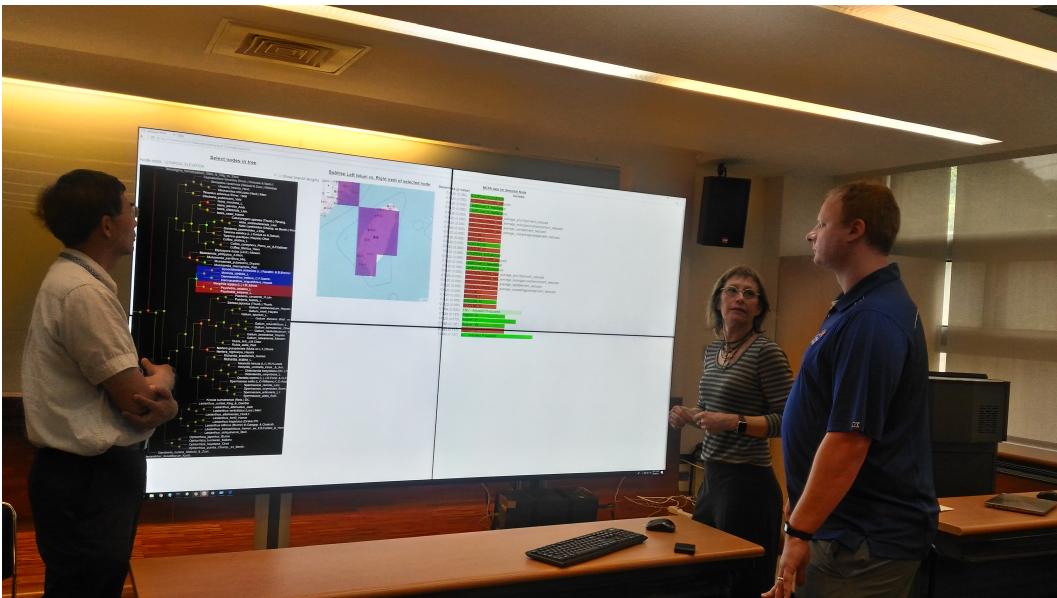
Flow Analysis on Traffic (incl. data of numerics & images)



Data Analysis of Traffic Accident & Druken driving
(Future collaboration with Hsinchu City)

Phang Pang Lin

AR/VR & Tiled Display Wall update



New TDW w/ SAGE2 @ National Museum
on Marine Sci & Tech (May, 2018)



New data sets of point clouds scanned from the ancient city of Pagan
(Myanmar) (Feb, 2018)



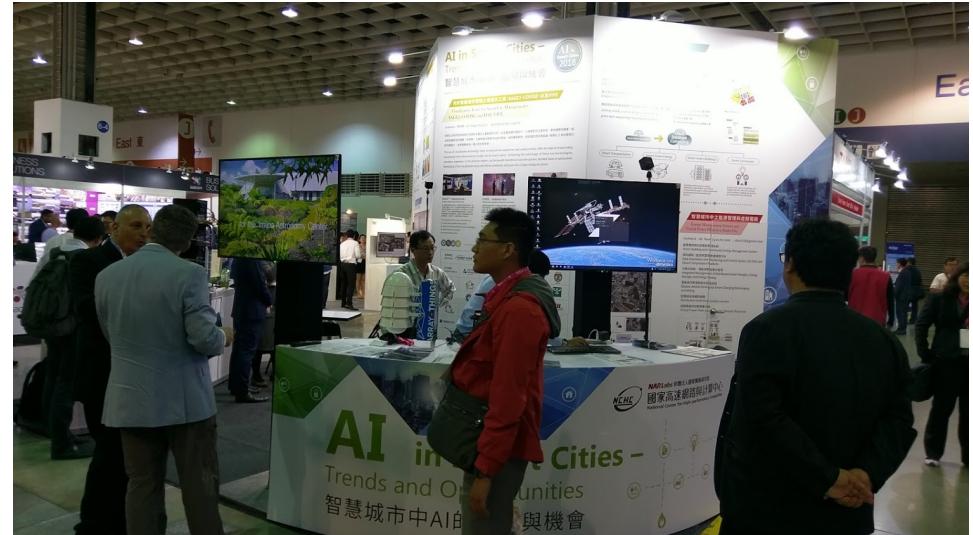
Viz of 3D city scanning (COVISE-based)



Phang Pang Lin

Workshop & Exhibit @ Smart Cities Summit & Expo, Taipei

27-30, March, 2018



Technology & Applications on

1. Big Data Desktop Node (Whey-Fone)
2. AR/VR for Cities Pollution Simulation & Planning for Citizen Communication (Hsing-Hung, Uwe)
3. AOT Technology (Charles)
4. Smart Grid Technology (Horng-Jer)
5. Green Energy Park Planning (Yen-Jung)
6. City Scale Monitoring (Taichung City)
7. General Applications of AI (Taiwan AI Lab)
(<https://event.nchc.org.tw/2018/SmartCitiesAI/>)



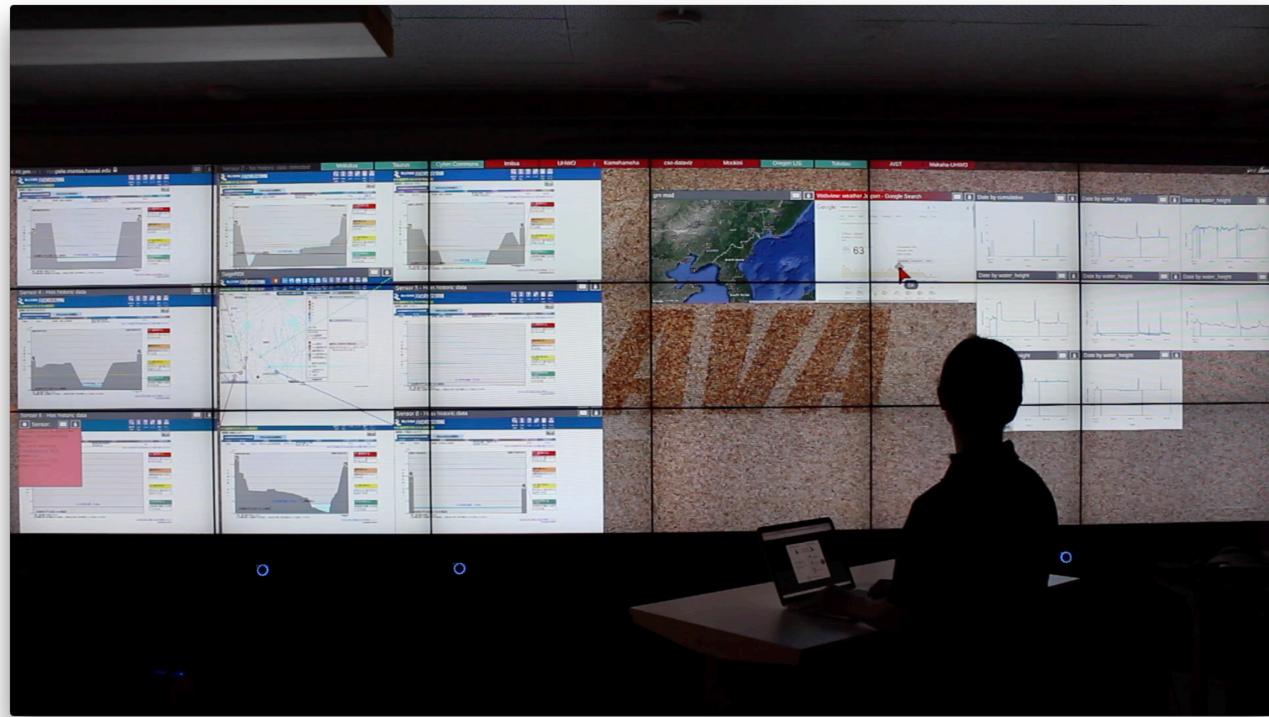
Ryosuke Nakamura,AIST

Charles Catlett, ANL

Phang Pang Lin

Sage RDI

- AIST-LAVA collaboration
 - Dylan Kobayashi
 - Summer internship 2017 @ AIST
- Decision support for natural disasters (river flooding)
 - A step toward a “smart” SAGE2
- New SAGE2 features:
 - Linked visualizations
 - Voice commands



Jason Haga