May 2018 (Vol.3)

Asi@Connect Newsletter

The 3rd Asi@Connect GOVERNORS' MEETING & PROJECT MEETING
March 26(Mon) Matrix Building, Biopolis, Singapore

The 3rd Governors & Project Meeting news
National launch events
Capacity building workshop & trainings
Overview 2nd Call for Proposals

Voices from the fields : AfgREN
Focusing Partner : SingAREN
Upcoming events

Asi@Connect Activities

The 3rd Asi@Connect Governors Meeting in Singapore, 26 March 2018

The Asi@Connect Governors and Project Meeting brings Asi@Connect partners, NREN managers and researchers across Asia-Pacific, and discuss and share idea for Asi@Connect project. The 3rd meeting was held in Singapore co-located with APAN45. Out of 24 Asi@Connect partners, 23 representatives were attended and there was productive discussion for year 2018 activities.

Read more

National Launch Event in Bangladesh (30 Oct 2017)

Research and education community in Bangladesh celebrated the national launch of Asi@Connect. BdREN, the national research and education network of Bangaldesh, invited high-level officers of Bangladesh government, higher education commissions, academia and researchers. They shared BdREN's vision and possibility of global collaborations through Asi@Connect.

Read more

National Launch Event in Philippines (7 Dec 2017)

The Department of Science and Technology- Advanced Science and Technology Institute (DOST-ASTI) celebrated its 30th Anniversary from 01-08 December 2017. During this conference period, Asi@Connect inaugurated in Philippines and researchers and experts shared idea to promote the achievements, initiatives, and partnership benefits of the Asi@Connect Project.
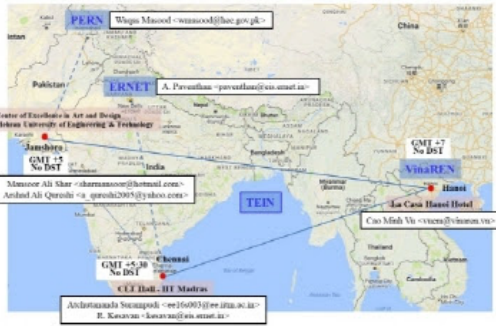
Read more

Network and Information Security Workshop in Bhutan (9-13 Oct 2017)

Network administrators and IT managers from universities and research organization in Bhutan participated Asi@Connect Network and Information Security Workshop. This workshop aimed to provide practical knowledge for network security skills and to combat cyber threat.

Read more

SecureAsi@: Asi@Connect Security Training Workshop in Malaysia (23-25 Oct 2017)

Universiti Sains Malaysia (USM) and Malaysian Research and Education Network (MYREN) organized and conducted the SecureAsi@ workshop for year 2017 in Cyberjaya, Malaysia from 23rd October till 25th October 2017. The workshop was aimed at bringing Asi@Connect partners' network engineers and security administrators to the level qualified for the operation & management of network for their NRENs.

Read more

1st Tech-Culture Fusion Workshop & Live Cyber Performance in Vietnam (6-8 Dec 2017)

The Cyber-performance is enables to exchange borderless cultural communication. The Asian researchers and experts endeavor to establish a tech-fusion platform based on TEIN. The 1st tech-culture fusion workshop and live cyber performance was held in Hanoi, Vietnam during 6-8 December 2017.

Read more

Bangladesh Campus Network Security Workshop (10-14 Dec 2017)

Bangladesh Campus Network Security Workshop conducted focusing on the fundamental aspects of Network security that dealt with key concepts, protocols and the policies involved in establishing a secure network. 30 participants those who are maintaining campus network of public and private universities in Bangladesh placed together and equipped an advanced level of knowledge about network security.
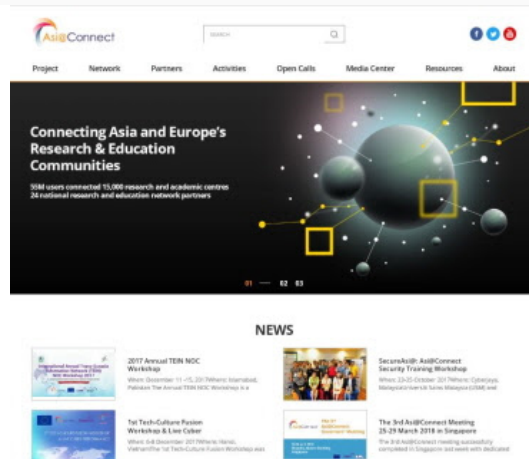
Read more

2017 TEIN NOC Workshop (11-15 Dec 2017, Pakistan)

The Annual TEIN NOC Workshop is a yearly event that is conducted through the funding by Asi@Connect. The year 2017 TEIN NOC workshop was organized by PERN, the national research and education network organization of Pakistan, and total 31 engineers from TEIN community participated.

Read more

Asi@Connect website (www.tein.asia) revamped with new design and menu composition. Users can access activity information in news, event and open calls directly from the main page. Asi@Connect call for proposals information will be updated in Open Calls menu. The Governors meeting and activities reports are available in Members session which is required to register by Join-in and then Log-in. Please visit Asi@Connect wesite: www.tein.asia

Asi@Connect Applications

Result of the 2nd Call for Proposals

Asi@Connect supports various R&E network-based programs via "Asi@Connect call for proposals, CFPs". It opens to researchers and institutions who are connected to NRENs in Asia-Pacific and globally. The 2nd CFP opened last December 2017 and 17 activities selected among 64 proposals. The selected activities will cover various programs in the area of capacity development for developing countries, campus network design, network security, helping digital divide, e-learning, eduroam, IoT could service and disaster management.

Read more

Voice from the fields: After the AfgREN capacity development workshop

In July 2017, 20 IT managers from public universities in Afgahnistan gathered in Kabul to participate Asi@Connect Capacity Development Workshop for AfgREN Network Engineers. This workshop was the first event in Afghanistan since AfgREN joined TEIN program in 2013. The workshop focused on enhancement of practical knowledge and skills for network routing and switching. After 8 months of this training program, we listened the workshop participants' voices how this workshop program help their daily jobs of the network engineering.

Interviewee 1, Abdul Ahmad Ahmadi

- *What is your role at your institution and what challenges do you face in your job?*

I am the IT manager at Ghor Institute of Higher Education. The main challenges I face in my day-to-day job is the insufficiency of network devices such as firewalls, unstable internet connection and power issues. A single power outage, surge, or spike can damage expensive electronic components and result in critical data loss.

- *What made you sign up for this workshop?*

Well, the main motivation was to acquire new skills to optimize our contributions to the Institute and, by extension, to increase its reputation. Interacting with other engineer colleagues and

meeting experts face-to-face is a great learning experience which keeps me motivated and allows me to tackle new tasks.

- *Did the training live up to your expectations? 9 months on from the workshop, have you had a chance to put the acquired know-how into practice in your day-to-day job?*

The workshop prompted me to explore new ways of working and I have already started to put my learning around routing and switching into practice back home. However, the lack of network equipment at our Institute has not allowed me so far to fully exploit my new skills.

- *What would be on top of your wish list for a training workshop in the future?*

I would like to further advance my expertise in routing, switching and server configuration, but am equally interested in network security, virtualization, troubleshooting, cloud computing as well as open source servers such as Linux.

Interviewee 2, Bahruddin Hanif

- *What is your role at your institution and what challenges do you face in your job?*

I am the IT General Manger at Badakhshan university; as you can imagine as we in a remote area of Afghanistan, there is a lack of qualified IT staff and expertise, specifically in routing and switching.

- *What made you sign up for this workshop?*

The hope to get up to speed on managing our network with more confidence.

- *Did the training live up to your expectations? 8 months on from the workshop, have you had a chance to put the acquired know-how into practice in your day-to-day job?*

Yes, it was indeed useful and feel more confident now. There are still some open issues which I hope to be able to tackle by attending a future workshop.

- *What would be on top of your wish list for a training workshop in the future?*

As you know knowledge, especially in IT, is changing by the minute, my wish is to learn more about routing switching and managing networks.

Case study: Developing Network Capacity

To build human capacity in local institutions and NRENs, TEIN*CC partnered with the Network Startup Resource Center (NSRC), part of the University of Oregon. Through hands-on, lab-based curricula and a train-the-trainers approach, NSRC provides technical capacity development. Especially, In four countries (Bhutan, Myanmar, Laos and Sri Lanka), TEIN*CC and NSRC provided more intensive direct engineering assistance, working with local network staff to help improve operational network infrastructure.

More info

Focusing Partners

Interview with our partner, SingAREN

A/Prof. Francis Lee Bu Sung, Vice-President of SingAREN, is a faculty member of School of Computer Science and Engineering, Nanyang Technological University, Singapore. He was the founding president of SingAREN, which was established in 2003. He is a member of TEIN*CC advisory board. He was the Chair of the Governors of TEIN*CC and a member of TEIN*CC steering committee during 2013-2017. Currently, he is the Chair of the APAN Program Committee and also a member of the Internet2 Summit 2019 program committee.

- ### *What is SingAREN?*

Singapore Advanced Research and Education Network (SingAREN, www.singaren.net.sg) is Singapore's national research and education (R&E) network. It is the sole provider of local and international networks dedicated for serving the R&E community in Singapore. SingAREN's members consist of the Institutions of Higher Learning, research organizations, Government and network industry players.

SingAREN started as a national project funded by the Singapore government in 1997 to take on

the challenge of ensuring that Singapore's research and education community is connected to the international community. On 30 September 2003, SingAREN was officially registered as a not-for-profit society.

SingAREN's objectives are:

- To be an advocate and champion for advanced network applications and technology in Singapore;
- To be a platform for collective representation of the community of research and education networks (RENs) in Singapore;
- To facilitate cost-competitive adoption of advanced Internet technologies for the research and education community in Singapore

SingAREN operates the **SingAREN Open Exchange (SOE)** by upgrading the previous Gigabit Internet Exchange, thereby providing improved higher speed connectivity to meet increasing traffic demands in and out of Singapore. SOE is co-funded by SingAREN and National Supercomputing Centre (NSCC) Singapore. SOE acts as a single point of presence (PoP) in Singapore for establishing interconnections with other countries. Some key connections are the SG-US (100G), SG-HK-JP (100G) and SG-EU (10G) connections. These links are managed by SingAREN and cofunded by NSCC, in collaboration with international partners (Internet2, NICT, TEIN*CC). With the establishment of SG-HK-JP 100G link, it completes the *Asia Pacific Ring* (*APR*) for advanced R&E collaboration. Launch of the First 100G International R&E Link in Asia, 1 Dec 17.

SingAREN has launched the following **value-added services** to benefit the research and education community in Singapore:
eduroam and eduGAIN – SingAREN operates eduroam and eduGAIN service in Singapore.

1. **Database Mirroring Service** - https://dbmirror.singaren.net.sg
   The service mirrors major overseas scientific databases in Singapore, thus enabling collaborations among the research communities in Singapore and overseas.
2. **Cloud Computational Service** - https://www.singaren.net.sg/ccs.php
   Provides access to Virtual Machine (VM) services for the R&E community in Singapore.
3. **Singapore Access Federation:** https://www.singaren.net.sg/SGAF-services.php
   Singapore Access Federation (SGAF) is a federated identity management service that provides single sign-on to registered identity providers and service providers. This makes it convenient for registered users to use their home organization's credentials to access services.

Please refer below for some **applications** that were enabled via SLIX:

1. Enabling Cancer Genomics Research with Advanced R&E Networks
2. Precision Medicine: Improving how diseases are treated
3. **Supporting A*CRC & NSCC Demonstrations at SuperComputing (SC) Conferences**
   The SLIX infrastructure facilitated A*CRC's network demonstration at SC14 involving long distance 100G InfiniBand for global supercomputer collaboration. At SC15, the "Infiniband Circumnavigation of the Globe" by A*CRC was demonstrated. At SC16, *A*CRC's InfiniCortex Demonstration*, which involves the set-up of a global WAN Infiniband network was carried out.
4. **JGN Experiment over 100G SG-HK-JP Link, 6 February 2018**
   SingAREN in collaboration with NICT and NTU, carried out high speed 8k and 4k video streaming of the Sapporo Snow Festival, and Sceneries of Singapore through SLIX and the SG-HK-JP link.

- *Why SingAREN is important to Singapore and Asia-Pacific?*

SingAREN provided the Institutes of higher learning and research institutes in Singapore with high speed local and international network. The SOE is a single point of peering for our members as well as our international partners. Due to Singapore location, SOE has took on the role to be a major R&E POP for the region with high speed international links across the pacific, within the region and to Europe.

In addition to connectivity, SingAREN has provided its members with new services, eg. access to Supercomputer, via SingAREN Access Federation, shared database, etc.. These services have facilitated the researchers needs in a data and compute intensive research.

- *What is the main challenge faced by the R&E communities?*

The challenge of NREN is how to provide network and services which is needed by the community. NREN has to be innovative and cost effective in its network deployment and services and push the boundary of technology. Federation is the next level for NREN to work together to deploy services, eg. eduroam, access federation etc…

- *What is SingAREN's interest in Asi@Connect activities?*

SingAREN is a founding member of TEIN project and been actively contributing to the TEIN project which was renamed to Asi@Connect. We feel that by working together with our neighbours to achieve bigger things. Eg working with Asi@Connect we have now built a resilient network and a community that is stronger and growing beyond just network but more focus on services and manpower development. Some example of our activities/contribution are as follows:

1. Setting up of the SingAREN Open Exchange as a major NREN POP to support an efficient, resilient network interconnection in the region.
2. SingAREN and National Supercomputing Centre (NSCC) Singapore working with TEIN*CC co-funded the upgrade of the SG-EU from 2.5G to 10G, enabling more data intensive application.
3. Extending eduroam in the Asia Pacific (XeAP) SingAREN was a project partner for the regional eduroam project, Extending eduroam in the Asia Pacific (XeAP) in 2016, which was led by AARNet and funded by TEIN (predecessor to Asi@Connect).

Announcement : Upcoming Events

Bat Bioacoustic Workshop (8 – 11 May 2018, Vietnam)
To date, The Asian Soundscape network team has established 18 long-term acoustic monitoring sites for terrestrial audible soundscape from 4 countries in the region and set up an online open-assessed platform for data management, query, listening, and visualization for audible soundscapes. #Asi@Connect#1stCall#Soundscape

More info

Workshop on Aquatic Soundscape (14 – 16 May 2018, Philippines)
Marine soundscape is a collection of environmental sound, biological sound, and anthropogenic noise. In this training workshop, marine ecological researchers from Japan, Taiwan, Hong Kong, and Philippine will be invited to discuss the future collaboration of coral reef soundscape monitoring. #Asi@Connect#1stCall#Soundscape

More info

Workshop on Joint Monitoring of Asian Terrestrial Soundscape
(29 – 30 May 2018, Taiwan)

Long-term monitoring soundscape will generate huge amount of acoustic data and associated metadata. It raises the big data challenges to persistent archiving, visualizing, analyzing, and sharing the soundscape data. Through this training workshop held by TFRI and ASGC, we expect that achieve advanced soundscape management. #Asi@Connect#1stCall#Soundscape

More info

2018 Internet2 Global Summit (6 - 9 May 2018, USA)

In the 2018 Internet2 Global Summit, The global communities will focus on the diverse relationships connecting people, networks, technologies and solutions across the broader research and education ecosystem. Together, let's continue to accelerate discovery and advance national and global research and education.

More info

TNC18 - Intelligent networks (10 - 14 June 2018, Norway)

TNC is the largest and most prestigious European research networking conference. TNC18, 18th turn, will focus on a variety of thought-provoking sub-themes such as: the power of the Internet, the responsibility of sustainability and delivery, the power of data analytics, the creation of intelligent complexity, and networking at the speed of science.

More info

The 4th Asi@Connect Governors & Project Meeting
(5 - 9 August 2018, New Zealand)

The 4th Asi@Connect Governors & Project Meeting will be held in Auckland, New Zealand on 5-9 August 2018. The meeting will be co-located with APAN46. For more information and meeting agenda will be announced soon. Also Asi@Connect supporting programs will take place during this period; eduroam, tele-medicine, OF@TEIN, TEIN Cyberperformance, CSIRT and BACKFIRE.

Asi@Connect is..

The EU co-funded Asi@Connect Project provides a dedicated regional high capacity and high quality internet network, TEIN, for research and education(R&E) communities across Asia-Pacific and Europe, and leverages e-infratstutures developed for public service project.

TEIN*Cooperation Center

A-#708, DMC High-Tech Industry Center

330 Sungam-ro, Mapo-gu, 03920

Seoul, South Korea

Website: www.tein.asia

Email: teincc@teincc.org