Introduction to AsiaFI and ICN WG

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AsiaFI Steering Group and ICN WG
AsiaFI NDN Workshop
Seoul, Korea
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Content

0 Brief Introduction to AsiaFI (Asia Future Internet Forum)
0 AsiaFI NDN/ICN efforts (history and next step)
Brief Introduction to AsiaFI
AsiaFI

Asia Future Internet Forum (AsiaFI) was founded to coordinate R&D on Future Internet among Asia counties as well as with other continents.

- The 1st Preparation Meeting, Seoul July, 2007
- The 2nd Preparation Meeting, Xi’an, Aug, 2007
- The 3rd Preparation Meeting, Seoul, Nov, 2007
- The Interim Board and Steering Group was elected in Dec. 2007
- The 1st General Meeting, Hawaii, Jan, 2008
- The bylaw is approved in April, 2008
- The Board and Steering Group for the term 2008-2010 is elected in May, 2008
- The 2nd General Meeting, Seoul, June, 2008

www.AsiaFI.net
AsiaFI Organization

- **Board**
- **Steering Group**
- **Technical Groups**
  - **FITG (Future Internet Technology Group)**
  - **ICN WG – AsiaFI’s “flagship” topic**
  - **Testbed WG**
  - **YRG (Young Researcher Group) - BoF**
- **Secretariat**
AsiaFI Schools

0 AsiaFI Regular Schools/Workshops
    0 2008 Winter (Seoul), Summer (Jeju)
    0 2009 Winter (Beijing), Summer (Jeju)
    0 2010 Winter (Seoul), Summer (Yokohama)
    0 2011 Winter WS (Hongkong), Summer (Daejeon)
    0 2012 Summer (Kyoto)
    0 2013 Winter WS(Honolulu), Summer (China)
    0 2014 Summer
AsiaFI Workshops

0 Workshops/Tutorials organized by WGs to discuss specific topics
0 2008.8, 2009.8, WS on FI testbed, Jeju
0 2010.8, 2011.8, 2012.8, WS on FI architecture (FIA), Yokohama, Daejeon, Kyoto
0 2008.10, WS on fundamental issues of Future Internet, Qingdao
0 2009.3, WS on future internet technology for the other billions, Kaohsiung
0 2009.11, FI Workshop, Bangkok
0 2010.2, WS on identifiers in FI (WIFI), Seoul
0 2011.8, Network science workshop, Daejeon
0 2012.3, NDN hands-on workshop, Seoul
Co-sponsored Conf/WS

Conference/Workshops (with papers published by ACM/IEEE)


Please consider to submit papers!
Submission Deadline March 31, 2012

Workshops in conjunction with conferences
MICNET 2009, Beijing, with Mobicom
Workshop on FI Trust and Security (FIST), 2009-2011, with SAINT and ICNP
Asia Workshop on FI Technology 2011 (AWFIT), Bangkok, with AINTEC
AsiaFI Participation

- 14 Countries
- 45 Institutions with MoU
- 500~1000 Participants (2008~2012)
- 250~500 Student Participants
Example: AsiaFI Summer School, Daejoen 2011.8

- 7 countries
- 94 participants
- 41 student participants
- 21 students with paper presentations
AsiaFI NDN/ICN Efforts
2010.2.24 AsiaFI/FIF Workshop on Identifiers in Future Internet (WIFI), Seoul (during AsiaFI winter school)

- Workshop focuses on new ID for mobility
- Discussed Name vs. ID at Panel
  - No clear consensus at panel
  - Rough consensus: name is more like an upper layer id
NDN Introduction Phase

02010.8.24-27 AsiaFI Summer School, Yokohama

0Invited talks at school and FIA workshop
  0Introduction to Named Data Networking, Lixia Zhang
  0Evolving Internet into the Future: Named Data Networking, Lixia Zhang
  0NDN applicability to automotive scenarios: Ryuji Wakikawa
NDN BoF Phase

NDN BoF during 2010 Summer School

Consensus: NDN is an interesting new research direction

Decided to set up NDN BoF towards a new working group
NDN BoF Phase

0 2011.2.23 AsiaFI Workshop/Meetings at APAN-APRICOT, Hongkong
   0 Invited talk on NDN
      0 Evolving Internet into the Future: Named Data Networking, Lixia Zhang

0 AsiaFI NDN BoF meeting on 2011.2.24
   0 Lixia Zhang and Dan Massey introduced NDN project progress
   0 Jun Bi and Sen Wang introduced UCLA-Tsinghua joint efforts on NDN audio conf. tool with a demo
   0 YH Choi introduced a planed NDN project at SNU
   0 Initial plan to organize a NDN hands-on workshop with Homework
NDN BoF Phase

2011 8.8-8.12 summer school, Daejeon

About 3 students papers on NDN/ICN

Research on wireless NDN architecture, SNU

Caching in Information-Centric Networking, Tsinghua

SIONA: A Service and Information Oriented Network Architecture, Tsinghua
ICN WG Phase

AsiaFI NDN BoF during 2011 Summer School

Participants

- China: Tsinghua (4), BUPT (1)
- Japan: Keio (2), IIJ Lab (1), NICT (1)
- Korea: SNU (3), KHU (1), Konkuk (1), GIST (1), KT (3), Bell Labs Korea (1), Samsung (1)

CJK NDN/ICN research updates

- Tsinghua, SNU, KT

Draft WG charter was approved

Agreed to set up AsiaFI ICN WG

Approved by SG/board later
ICN WG Phase

0 2011.11.12 AWFIT Workshop at AINTEC11, Bangkok

0 Keynote speech on NDN and how to start your own research on NDN by Lixia Zhang

0 4 papers on ICN/NDN among 12 accepted papers

0 Content-Oriented Transport Protocol, U. Tokyo
0 Could in-network caching benefit Information-Centric Networking?, Tsinghua
0 Potential Based Routing for ICN, NICT/Osaka Univ
0 A New Approach to Securing Audio Conference Tool, UCLA
NDN/ICN Publications

SIGCOMM2011 ICN WS
  1 (China joint with USA) among 12 papers

INFOCOM2012 NOMEN WS
  3 among 11 papers
  Korea:1, China:1, Korea joint with USA: 1
  France:4, USA:4

MOBIHOC2012 NOM WS

SIGCOMM2012 ICN WS
AsiaFI NDN Workshop

0 2012.3.19-21, AsiaFI NDN Workshop, Seoul

0 Total registrations: ~90

0 Students: ~60

0 From 25 institutes (average 3-4 persons)

0 Universities (17)


0 Research Institutions (5)

0 NICT, GIST, KISA, NIMS, NUS

0 Research Labs in Industries (3)

0 Huawei, SAIT/Samsung, KT
AsiaFI ICN WG Charter

0 Goal
  0 Organize ICN related tutorial/workshop
  0 promote discussions/joint research
  0 coordinate prototyping/testing

0 Scope
  0 ICN Research (Architecture /Routing/Forwarding /Caching/Application)
  0 ICN Prototyping, Test-beds
  0 Special focus on NDN in the current phase: NDN-Asia

0 Chair: Jun Bi, Co-chairs: Hitoshi Asaeda/Kideok Cho

0 http://www.asiafi.net/org/ndn/
0 Wellcome to join icn@asiafi.net
Next Step of ICN WG

- ICN/NDN Day at 2012 Summer School, Kyoto
- Morning: Invited speakers to present
  - USA, Europe
  - China/Japan/Korea NDN research update
- Afternoon: Students in this area to present: papers & posters
- NDN Discussion among professors/researchers and students
Next Step of ICN WG

- ICN/NDN “Vision Statement” at WG mailing-list
- ICN WG Meeting and Election during 2012 summer school
- NDN Session at 2013 Honolulu APAN/AsiaFI FI Workshop/Meetings
- NDN topic at 2013 summer school (China)
- Joint research/testbed in Asia
- Welcome to this community!
Thank You!