PFLDNeT 2009

The 7th International Workshop on Protocols for Future, Large-Scale and Diverse Network Transports

Lars Eggert (Nokia/TKK) & Kei Hiraki (The University of Tokyo)
Tokyo, Japan
May 21-22, 2009
Committees

**Technical Program Committee**

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- Doug Leith  
- Injong Rhee  
- Pascale Vicat-Blanc  
- Michael Welzl

**Local Arrangements**

- Katsushi Kobayashi

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May 21-22, 2009

Nokia Research Center

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Author Breakdown (Registered Papers)

- Japan: 28%
- USA: 18%
- France: 11%
- Germany: 6%
- Finland: 6%
- Spain: 4%
- Portugal: 3%
- Iran: 3%
- India: 3%
- UK: 3%
- Taiwan: 3%
- Greece: 3%
- Saudi Arabia: 1%
- Korea: 1%
- Italy: 1%
- Australia: 1%
- Hong Kong: 6%
- Germany: 6%
- Finland: 6%
Review & Acceptance Process

TPC = SC + 17 TPC members
  (TPC chairs and local arrangements chair excluded)

Single-blind review process

35 submissions, 8 withdrawals

27 submissions assigned to 3-4 TPC members each
  81 total reviews

Average review length ~1200 characters
  (thank you, last-minute reviewers!)

Accepted 14 out of 27 submissions = ~51%

Accepted papers will be published under ISSN 2074-5168
Author Breakdown (Accepted Papers)

- Japan: 37%
- USA: 27%
- Finland: 8%
- Germany: 8%
- France: 6%
- UK: 4%
- Australia: 2%
- Hong Kong: 8%
# Program Overview – Thursday, May 21, 2009

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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Kenjiro Cho (IIJ Lab) |
<p>| 10:35 – 11:00 | Break                                                                 |
| 11:00 – 12:30 | <strong>Technical Session 1</strong> (3 papers)                                     |
| 12:30 – 13:30 | Lunch                                                                 |
| 13:30 – 15:30 | <strong>Technical Session 2</strong> (4 papers)                                     |
| 15:30 – 16:00 | Break                                                                 |
| 16:00 – 17:30 | <strong>Panel: Doing away with TCP-friendliness?</strong>                          |
|             | Michael Welzl (Univ. of Innsbruck, Austria)                           |
|             | Matt Mathis (PSC, USA)                                                |
|             | Bob Briscoe (BT, GB)                                                 |
|             | Kevin Mills (NIST, USA)                                               |
|             | Michio Honda (Keio University, Japan)                                  |</p>
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| 9:30 – 10:30 | **Keynote: Optical Packet Switching for New Generation Network**  
Hiroaki Harai (NICT) |
| 10:35 – 11:00 | Break                                                                |
| 11:00 – 12:30 | **Technical Session 3**  
(3 papers) |
| 12:30 – 13:30 | Lunch                                                                |
| 13:30 – 15:30 | **Technical Session 4**  
(4 papers) |
| 15:30 – 16:00 | Break                                                                |
| 16:00 – 17:30 | **Excursion to a Japanese Internet Exchange**  
1 mile from here; talk to Katsushi Kobayashi |
Keynote:
Where Does All the Traffic Go?
Observing Trends in Japanese Residential Traffic

Kenjiro Cho (IIJ Lab)

Kenjiro Cho is a senior researcher at Internet Initiative Japan, Inc., an adjunct professor at JAIST, and a board member of the WIDE project. He has been working on Internet measurement research for the last 10 years.
Technical Session 1
Chair: Lars Eggert

Sampling TCP Data-Path Quality with TCP Data Probes
Rocky Chang, Edmond CHAN, Waiting Fok, Xiapu Luo (The Hong Kong Polytechnic University, Hong Kong)

Buffer Estimate Filtering Using Dispersion Deltas
Brandon Pancost, Chien-Chia Chen, Medy Sanadidi, Mario Gerla

The Effect of the Buffer of the Path-Bottleneck Switch of Long Fat-pipe Network
Mary Inaba, Kenichi Koizumi, Takeshi Yoshino, Yutaka Sugawara, Junji Tamatsukuri, Hiroshi Tezuka, Kei Hiraki
Technical Session 2
Chair: Tomohiro Kudoh

Multipath Congestion Control for Shared Bottleneck
Michio Honda, Yoshifumi Nishida, Lars Eggert, Pasi Sarolahti, Hideyuki Tokuda

Netset: Automating Network Performance Evaluation
Puneet Arora, Yaogong Wang, Injong Rhee

Incremental deployment of new ECN-compatible congestion control
Ihsan Qazi, Lachlan Andrew, Taieb Znati

Relentless Congestion Control
Matt Mathis
Panel Discussion: Doing away with TCP-friendliness?

Chair: Michael Welzl (Univ. of Innsbruck, Austria)

Panelists:
- Matt Mathis (PSC, USA)
- Bob Briscoe (BT, UK)
- Kevin Mills (NIST, USA)
- Michio Honda (Keio University, Japan)
Hiroaki Harai (NICT)

Hiroaki Harai has been a Group Leader at the National Institute of Information and Communications Technology (NICT), Tokyo, Japan since September 2008. He is leading the AKARI Architecture Design Project, in which a new generation network architecture is designed. Until now, he was mainly engaged in the R&D of optical grid infrastructure and optical packet switches.
A Reconfigurable Hardware Mechanism for Harmonizing Parallel TCP Streams of 10 Gigabit Ethernet

Kenichi Koizumi, Takeshi Yoshino, Yutaka Sugawara, Mary Inaba, Kei Hiraki

UDT as an Alternative Transport Protocol for GridFTP

Rajkumar Kettimuthu

Designing TCP-Friendly Window-based Congestion Control for Real-time Multimedia Applications

Soo-Hyun Choi, Mark Handley
Technical Session 4
Chair: Kei Hiraki

Comparing Some High Speed TCP Versions under Bernoulli Losses
Alberto Blanc, Konstantin Avratchenkov, Denis Collange

Speeding up the 3D Web: A Case for Fast Startup Congestion Control
Michael Scharf, Mike Eissele, Christian Mueller, Thomas Ertl

Improving Processing Performance of Linux TCP SACK Implementation
Ilpo Järvinen, Markku Kojo

CapStart: An Adaptive TCP Slow Start for High Speed Networks
Dirceu Cavendish, K Kumazoe, Tsuru Masato, Yuji Oie, Mario Gerla