

1st Traffic Monitoring and Analysis (TMA) Workshop

<u>Scope</u>

Modern packet networks are highly complex and ever-evolving. Typically, in such networks, the interaction of different layers and technologies creates many situations that cannot be foreseen during the design and testing stages of technology development. Understanding, developing, and managing production networks can be difficult and expensive in practice. Traffic monitoring and analysis (TMA) is critical in understanding telecommunication technology and operation. The lack of insight and early recognition of emerging risks and/or performance issues can expose the network infrastructure to stability, performance, and security problems. TMA studies in wide range of production environments can be used to uncover deficiencies and identify possible optimizations. Also, it can be the basis for prevention and response in network security, as typically the detection of attacks and intrusions requires the analysis of detailed traces. Furthermore, data collection and analysis is important for generating and validating models of traffic and access patterns, which can be beneficial in performance analysis.

The TMA workshop is intended to serve as a forum for scientists and engineers in academia and industry to exchange and discuss their experiences and research results about all aspects of measurements. It will also initiate discussions on how to use measurement results for designing next generation networks. Furthermore, it aims at enhancing and accelerating the process of sharing traces, tools, and test suites. **Particular attention will be reserved to independent validation of previous studies and to papers that ensure reproducibility of the results (e.g. by publicly sharing the adopted tools and traces).**

In this workshop, we would like to solicit 6-page papers that report on experiences obtained from operational wireless and wired experiments in testbeds or operational networks. Topics of particular interest include but are not limited to:

- * Methods for collecting and analyzing measurements in different network environments (wireless and wired infrastructures, sensor, social networks).
- * Workload characterization, classification, flow-based and traffic analysis.
- * User mobility, traffic, channel, and topology modelling.
- * Predictions of user access and demand over multiple networks.
- * Software tools for supporting measurements and modelling.
- * Measurement-based inference of network properties and impact on perceived user experience.
- * Design of monitoring systems, sampling methods.

- * Traffic anomaly detection.
- * Measurement and monitoring of wireless networks.
- * Techniques for improving the repeatability of tests, benchmarks, and validation studies.

Workshop website: <u>http://www.cost-tma.eu/workshop</u>

TPC members

- 1. Pierre Borgnat, ENS Lyon
- 2. Prosper Chemouil, *France Telecom R&D*
- 3. Jean-Laurent Costeux, France Telecom R&D
- 4. Xenofontas Dimitropoulos, *ETH Zurich*
- 5. Constantine Dovrolis, Georgia Tech
- 6. Michalis Faloutsos, University of California at Riverside
- 7. Timur Friedman, UPMC Paris Universita and CNRS
- 8. Nuno M. Garcia, CICANT, Universidade Lusófona de Humanidades e Tecnologias (ULHT), Lisbon, Portugal
- 9. James Hong, Postech Korea
- 10. Gianluca Iannaccone, Intel Research Berkeley
- 11. Lucjan Janowski, AGH University of Science and Technology
- 12. Merkourios Karaliopoulos, ETH Zurich
- 13. Jasleen Kaur, University of North Carolina at Chapel Hill
- 14. Evangelos Markatos, University of Crete and FORTH
- 15. Sandor Molnar, Budapest University of Technology and Economics
- 16. Jordi Domingo-Pascual, Universitat Politècnica de Catalunya
- 17. Kostas Pentikousis, VTT Technical Research Centre of Finland
- 18. Fabio Ricciato, University of Salento
- 19. Dario Rossi, ENST Telecom Paris
- 20. Luca Salgarelli, University of Brescia
- 21. Kave Salamatian, Lancaster University
- 22. Don Smith, University of North Carolina at Chapel Hill
- 23. Tanja Tzeby, Fraunhofer FOKUS
- 24. Steve Uhlig, T-labs/TU Berlin
- 25. Artur Ziviani, LNCC Brazil

Local organizer

Udo Krieger, Otto-Friedrich University Bamberg, udo.krieger@wiai.uni-bamberg.de

TPC co-chairs:

Philippe Owezarski, *LAAS-CNRS*, *National Centre for Scientific Research* (owe@laas.fr) Maria Papadopouli, *University of Crete and FORTH* (mgp@ics.forth.gr) Aiko Pras, *University of Twente* (a.pras@utwente.nl)

The workshop is co-located with **IFIP Networking 2009**. More information: http://www.networking-2009.org/calls/tma.html

Submission Guidelines

Submissions should not be more than 6 pages with font size of 10pt (or more). We recommend you to follow the LNCS one-column format also for the submission. The format guidelines for the camera-ready paper will be more specific.

MyReview will be used for paper submissions: http://www.laas.fr/COST-TMA/Submissions/

Important Dates:

- Submission deadline January 15th 2009
- Paper reviews due on February 15th, 2009
- TPC meeting: teleconferencing sometime around February 15th (exact date to be confirmed)
- Camera ready paper submission: February 27th, 2009

Workshop takes place on Monday, May 11th, 2009

Accepted papers:

The accepted papers will be published in IFIP open access and LNCS (pending confirmation)