



Call for Papers



Second Workshop on *ns-2* (WNS2 2008)



Organised in association with

The Third International Conference on Performance Evaluation Methodologies and Tools (VALUETOOLS 2008)

October 23-24, Athens, Greece

<http://www.wns2.org/>

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ns, the free open-source **network simulator**, is the de-facto standard for research over a wide variety of networking areas. *ns* version 2 is widely used across both academia and industry as a way of designing, testing and evaluating new and existing protocols and architectures, and has also proven to be a very useful tool for teaching purposes. *ns* version 3 is under active development.

The Workshop on *ns-2* (WNS2) (<http://www.wns2.org/>) is a two-day event held in conjunction with VALUETOOLS 2008, the Third International Conference on Performance Evaluation Methodologies and Tools (<http://www.valuetools.org/>), during the week of 20-24 October 2008 in Athens, Greece. WNS2 2008 follows the success of the first WNS2 workshop in 2006. A tutorial day on Thursday 23 October is followed by presentation of reviewed papers on Friday 24 October 2008.

The main goals of this second WNS2 workshop are to bring together networking researchers from both academia and industry, to discuss recent advances, to identify future directions in network simulation, and to foster interdisciplinary collaborative research in this area. The workshop aims to emphasise the future evolution of *ns-2*, now that *ns-3* is under active development, and its extension in novel research areas and networking technologies and scenarios.

TOPICS OF INTEREST

This workshop focuses on the *ns* simulator in itself, and in improving simulation. We seek original contributions that go beyond the use of *ns-2* "as is" for networking scenarios, and which try to make *ns* do something new and different. Topics of interest for the Workshop include, but are not limited to:

Structural developments/enhancements to the *ns-2* simulator itself:

- Presentation/evaluation of new features/architectures under development for *ns-3*.
- Dynamic management of libraries / *ns*-Modules.
- Large-scale network simulation and model-based simulation approaches.
- Development of parallel and distributed versions of *ns*. Use of virtualization with *ns*.
- Integration of simulation and emulation.
- Post-processing tools, including GUIs for statistical analysis and visualization of simulation results.

Simulator use and validation of simulation accuracy:

- Validation of *ns* behaviour with experimentation and real data from implementations.
- Comparative studies of *ns* and other network simulation tools, both commercial and freely available.
- Environments and methodologies: the best practices, third-party code, helper scripts, and frameworks that serious users of *ns* recommend to get things done.

New simulation models and features:

- Wireless channel modelling.
- Frameworks for cross-layer support.
- Mobile and wireless networks, 3G/4G networks, WLANs, WPANs, WiMAX, Mesh networks...
- Delay-tolerant networking.
- Congestion-control and transport-layer issues in long-fat networks.
- Mobility: network mobility (NEMO), physical node mobility (e.g., group mobility models).
- Sensor and actuator networks (wireless, underwater, underground).
- Peer-to-peer systems.
- Network coding: data dissemination, encoding/decoding suites.
- Grid computing.

IMPORTANT DATES

Submission of research papers due: **June 9, 2008**
Notification of paper acceptance: **July 1, 2008**
Submission of camera-ready papers due: **August 1, 2008**
Paper presentation date: **October 24, 2008**

PAPER SUBMISSION

Papers should contain *original material and not be previously published or currently submitted* for consideration elsewhere. Manuscripts must be submitted by using the Cocus conference management system (<http://www.cocus.eu>). Conference language is English. Prospective authors are encouraged to submit a PDF version of the full paper, with all fonts embedded, using the ACM conference proceedings format. Paper length is limited to ten two-column pages, in a font no smaller than ten points.

Please visit <http://www.wns2.org/> for additional information. Inquiries regarding the Workshop should be directed to the WNS2 Workshop Co-Chairs.