### **Conference Report: LANC05**

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The third Latin American Networking Conference was held on October 10-13, 2005 in Cali Colombia. ACM SIGCOMM, together with IFIP, has been sponsoring this bi-annual conference since its first realization in 2001. This year, the conference was held as part of a larger event organized by CLEI (Centro Latino Americano de Estudios en Informática) and included the Thirty-First Latin American Computing Conference, the Thirteenth Latin American Congress of Higher Education on Computing, the Twelfth Latin American Master's Thesis Contest, and the First Colombian Computation Congress.

LANC drew 33 paper submissions from all over Latin American and Spain. The program committee accepted 12, which formed the LANC track of the overall CLEI conference program. The accepted papers came from Spain, Brazil, Colombia, Paraguay, Uruguay, and Venezuela, showing the strong interest in networking research in the Spanish-speaking world. Paper topics included most of the high-interest areas of current networking research, including multicast routing, sensor networks, quality of service protocols, and multi-protocol label switching. There was good balance between the theoretical and the experimental/practical, with seven papers having a primarily theoretical focus, and five involving significant implementation, measurement, or deployment results.

The integration of LANC with the overall CLEI program worked extremely well. It ensured a critical mass of participants and an opportunity for cross-fertilization among researchers in different disciplines. The LANC sessions drew quite a few listeners from the other areas, while the networking folks got to hear interesting talks subjects as diverse as new compiler technology, advances in computer music, image retrieval, and toolkits for distributed computing. Networking folks were prominent in the CLEI program as whole. Three of the plenary talks were by LANC attendees - Dave Oran gave a talk on "Hard Problems in VoIP QoS," Ramon Puigjaner gave a talk on "Sensor and Actor Networks," and Ana Pont gave a talk on "Peer to Peer Caching." Networking was also featured among the tutorials: Ana Pont (WWW: Making Faster the Most Common Case), Gonzalo Ulloa (QoS in an Academic Research Network), and Gerardo Rubino (Random Neural Networks and Applications in Networking).

Planning is underway for LANC07, which will once again be integrated with CLEI. The venue most likely will be San Jose, Costa Rica. The core of the LANC05 organizing committee has signed on for LANC07. Ernst Leiss (coscel@cs.uh.edu) will once again serve as General Chair. Ana Pont (apont@disca.upv.es) and Hector Cancela (cancela@fing.edu.uy) will co-chair the Program Committee. Dave Oran (oran@cisco.com) will help with various tasks, including acting as liaison with the SIGCOMM leadership. Benjamín Barán and are participating on the organizing committee as well. If any of you in the SIGCOMM community is interested in helping with the planning for LANC07, please let one of us know!

We'd also like to take this opportunity to again thank ACM SIGCOMM for its support for the Latin American Networking Conference, and ACM for making the proceedings available to a larger audience, through its Digital Library. IFIP also provided substantial support by providing the funding for four of the invited speakers and tutorialists.

Annex - the following are the papers presented at LANC05:

#### SensorBus: A Middleware Model for Wireless Sensor Networks

Admilson R. L. Ribeiro (Federal University of Pará, Belém, Brazil), Fabio C.S. Silva (IESAM Computer Engineering, Belém, Brazil), Lilian C. Freitas, João Crisóstomo Costa, Carlos R. Francês (Federal University of Pará, Belém, Brazil)

# Solving Multiobjective Multicast Routing Problem with a New Ant Colony Optimization Approach

Diego Pinto, Benjamín Barán (Universidad Nacional de Asunción, Paraguay)

#### A Multitree Approach for Multicast Routing

Joel Prieto, Benjamín Barán (Catholic University of Asunción, Paraguay), Jorge Crichigno (National University of Asunción, Paraguay)

### The Response Time Distribution of a Discrete-Time Queue under a Generalized Batch Arrival Process

Sebastià Galmés, Ramon Puigjaner (Universitat de les Illes Balears, Palma, Spain)

### A Proposal to Improve Network Throughput Using QoS Building Blocks Approach at Central University of Venezuela

Maria Elena Villapol, Eric Gamess, Neudith Morales (Universidad Central de Venezuela, Caracas, Venezuela)

### Fast Overflow Probability Estimation Tool for MPLS Network

Dario Buschiazzo, Andres Ferragut, Alejandro Vazquez, Pablo Belzarena (Universidad de la Republica, Montevideo, Uruguay)

### Hashing Based Traffic Partitioning in a Multicast-Multipath MPLS Network Model

Xavier Hesselbach (Universitat Politècnica de Catalunya, Barcelona, Spain), Ramon Fabregat (Universitat de Girona, Spain), Benjamin Baran (Universidad Nacional de Asunción, Paraguay), Yezid Donoso (Universidad del Norte, Barranquilla, Colombia), Fernando Solano (Universitat de Girona, Spain), Mónica Huerta (Universitat Politècnica de Catalunya, Barcelona, Spain)

## Multi-objective Optimization Scheme for Multicast Flows: a Survey, a Model and a MOEA Solution

Ramon Fabregat (Universitat de Girona, Spain), Yezid Donoso (Universidad del Norte, Barranquilla, Colombia), Benjamin Baran (Universidad Nacional de Asunción, Paraguay), Fernando Solano, Josep-Lluís Marzo (Universitat de Girona, Spain)

#### A Mathematical Programming Formulation of Optimal Cache Expiration Dates in Content Networks

Pablo Rodriguez-Bocca, Héctor Cancela (Universidad de la República, Montevideo, Uruguay)

## Developing a Functional Tcp/Ip Stack Oriented Towards Tcp Connection Replication

Javier Paris, Alberto Valderruten, Victor M. Gulias (University of A Coruña, Spain)

## Reliability and Maintainability over a Wireless Rayleigh Radio Channel

Miquel Font, Sebastià Galmés, Ramon Puigjaner (Universitat de les Illes Balears, Palma, Spain)