

# Welcome to the on-line proceedings of NOSSDAV'95!

Revised, and now available in print as [Lecture Notes in Computer Science 1018 \(Springer-Verlag\)](#)!

## Advance Reservation Systems, Chair: Kevin Jeffay

- [Advance Reservations for Predicted Service](#), M. Degemark , T. Kohler, S. Pink and O. Schelen
- [Distributed Advance Reservation of Real-Time Connections](#), D. Ferrari, A. Gupta and G. Ventre
- [Issues of Reserving Resources in Advance](#), L. Wolf, L. Delgrossi, R. Steinmetz, S. Schaller and H. Wittig

## Operating System Support, Chair: Duane Northcutt

- [A Computational and Engineering View on Open Distributed Real-Time Multimedia Exchange](#), P. Leydekkers, V. Gay and L. Franken
- [Support for User-Centric Modular Real-Time Resource Management in the Rialto Operating System](#), M.B. Jones, P. Leach, R. Draves and J. Barrera, III
- [A Rate-Based Execution Abstraction for Multimedia Computing](#), K. Jeffay and D. Bennett
- [VuSystem Performance Measurements](#), C.J. Lindblad
- [Design of Universal Continuous Media I/O\[\\*\]](#), C.D. Cranor and G.M. Parulkar
- [A New OS Architecture for High Performance Communication Over ATM Networks--Zero-Copy Architecture](#), H. Kitamura, K. Taniguchi, H. Sakamoto and T. Nishida

## Resource Management and Quality of Service, Chair: Aurel Lazar

- [Meeting Arbitrary QoS Constraints Using Dynamic Rate Shaping of Coded Digital Video](#), A. Eleftheriadis and D. Anastassiou
- [Dynamic QoS Management for Scalable Video Flows](#), A. Campbell, D. Hutchinson and C. Aurrecochea
- [Dynamic Service Aggregation for Efficient Use of Resources in Interactive Video Delivery](#), S. D. Venkatesh and T.D.C. Little
- [Evaluation of QoS-Control Servers on Real-Time Mach](#), K. Kawachiya, M. Ogata, N. Nishio and H. Tokuda
- [System-Level Resource Management for Network-Based Multimedia Applications](#), L. Schreier and M. Davis

## NOSSDAV Retrospective, Chairs: Domenico Ferrari and Dan Swinehart

### Audio and Video Systems, Chair: Raj Yavatkar

- [An End-to-End Software Only Scalable Video Delivery System](#), N. Chaddha, G. Wall and B. Schmidt
- [A Distributed Real-Time MPEG Audio Player](#), S. Cen, C. Pu, R. Staehli, C. Cowan and J. Walpole
- [Analysis of Audio Packet Loss over Packet-Switched Networks](#), C. Bolot, H. Crepin and A. Garcia

- [Digital Audio and Video in Industrial Systems](#), H. Lauer, C. Shen, R. Osborne, J. Howard and Q. Zheng, M. Takegaki, H. Shimakawa and I. Mizunuma
- [Workstation Video Playback Performance with Competitive Process Load](#), K. Fall, J. Pasquale and S. McCanne

## Scheduling and Synchronization, Chair: Chuck Kalmanek

- [An Adaptive Stream Synchronization Protocol](#), K. Rothermel and T. Helbig
- [A Method and Apparatus for Measuring Media Synchronization](#), B. Schmidt, J. Northcutt, and M. Lam
- [Integrated Processor Scheduling for Multimedia](#), J. Nieh and M.S. Lam
- [Scheduling and Admission Testing for Jitter Constrained Periodic Threads](#), A. Mauthe and G. Coulson
- [A CPU Scheduling Algorithm for Continuous Media Applications](#), R. Yavatkar and K. Lakshman

## Multicasting, Chair: Jim Kurose

- [Dynamic Configuration of Conferencing Applications Using Pattern-Matching Multicast](#), H. Schulzrinne
- [Wave: A New Multicast Routing Algorithm for Static and Dynamic Multicast Groups](#), E. Biersack and J. Nonnenmacher
- [Connection Establishment for Multi-Party Real-Time Communication](#), R. Bettati, D. Ferrari, A. Gupta, W. Heffner, W. Howe, M. Moran, Q. Nguyen and R. Yavatkar
- [The Role of Multicast Communication in the Provision of Scalable and Interactive Video-on-Demand Service](#), K.C. Almeroth and M.H. Ammar
- Invited Panelists

## Network Scheduling and Real-Time Networking Chair: Steve Pink

- [A New Approach to Support VBR Video in Packet Switched Networks](#), H. Zhang and E.W. Knightly
- [Determining End-to-End Delay Bounds in Heterogeneous Networks](#), P. Goyal, S. Lam and H. Vin
- [Adaptive QoS-Based API for ATM Networking](#), V. Bansal, R.J. Siracusa, J.P. Hearn, G. Ramamurthy and D. Raychaudhuri
- [Burst Scheduling Networks: Flow Specification and Performance Guarantees](#), S.S. Lam and G.G. Xie
- [The Case Against Variable Bit Rate Service](#), M. Grossglauser, S. Keshav and D. Tse

## Storage Architectures, Chair: Jon Walpole

- [A Novel Video-on-demand Storage Architecture for Supporting Constant Frame Rate with Variable Bit Rate Retrieval](#), S.W. Lau and J.C.S. Lui
- [The Design and Implementation of a Raid-3 Multimedia File Server](#), A.J. Chaney and I.D. Wilson
- [Efficient Data Layout, Scheduling and Playout Control in a Multimedia Storage Server](#), M.M. Buddhikot and G. Parulkar
- [Storage Replication and Layout in Video-on-Demand Servers](#), S. Stoller and J. DeTreville
- [Scalable MPEG2 Video Servers with Heterogeneous QoS on Parallel Disk Arrays](#), S. Paek, P. Bocheck and S. Chang
- [Design of a Variable Bit Rate Continuous Media Server](#), G. Neufeld, D. Makaroff and N. Hutchinson