

Tuesday, 22 June 1999

18:00 - 20:00

Opening Reception – McEnery Convention Center

Dance to the music of Jellyroll, a jump jive swing band performing songs from the forties and beyond, during INET'99's kick-off event. Enjoy assorted light hors d'oeuvres and refreshments.

Wednesday, 23 June 1999

08:30 - 10:30

Opening Plenary Session and presentation of the Jonathan B. Postel Service Award

10:30 - 11:00

Refreshment Break

10:30 - 18:00

Exhibition Hall Open

11:00 - 12:30

TRACK	SESSION	CONCURRENT SESSIONS	DESCRIPTION
E-Commerce & E-Business	Designing GREAT Web Sites Chair: Kevin Hughes, Commerce One	Panelists: Jim Isaac, Compaq, IEE Computer Society, j.isaak@computer.org ; Louis Rosenfeld, Argus Associates	Setting up Web sites is getting more complex and expensive – it involves knowledge of standards, current technology, and increasingly, international issues. Hear from some of the leading Web designers and learn about the latest current guidelines and standards for effective Web design.
E-Commerce & E-Business	Private Sector Coalitions Shaping Internet Policy Chair: Vint Cerf, MCI WorldCom, United States, vcerf@mci.net	Panelists: Michael R. Nelson, IBM, United States, mrn@us.ibm.com ; Bill Burrington, AOL and GBDe, United States, billburr@aol.com ; Tara Lemmey, The Electronic Frontier Foundation; Bo Cutter; E. M. Warburg, Pincus & Co.	The US government, the European Union, the Japanese government, and other national governments are increasingly turning to the private sector for help in developing policies on E-commerce and the Internet. A number of industry groups and public interest groups are rising to the challenge, including the Global Business Dialogue for E-Commerce (GBDe), the Electronic Frontier Foundation (EFF), the Global Internet Project (GIP), and the Computer Systems Policy Project (CSPP).
Education & Information Resources	Learning Tools Chair: Keith Yocam, kyocam@aol.com	<ul style="list-style-type: none"> • WBT: The New Millenium: Training at the Speed of Change (Paper 99337) Presenter: Arana J. Greenberg, Alpine Media Corporation, United States, aranag@earthlink.net Panelist: Frank Odasz (invited) 	New tools and new techniques are being developed because of the speed of change, new ways of collaborating, the challenges of integrating networked activities into the curriculum, and the rapid drop in prices of computers, cameras, and peripheral gear.
Technology	Next Generation Research Networks Chair: John Hine, Victoria University of Wellington, New Zealand, John.Hine@cl.cam.ac.uk	<ul style="list-style-type: none"> • TEN-155: High Speed Networking for European Research (Paper 99230) Presenter: Roberto Sabatino, DANTE, United Kingdom, Roberto.Sabatino@dante.org.uk • The International Grid (iGrid): Empowering Global Research Community Networking Using High Performance International Internet Services (Paper 99097) Presenter: Maxine D. Brown, University of Illinois at Chicago, United States, maxine@uic.edu 	The Internet has its roots in the development of computer networks to support research and development. Now that the Internet has become a commodity, initiatives are being taken in Europe and North America to develop new research networks capable of supporting future research requirements.

Wednesday, 23 June 1999 *(continued)*

11:00 - 12:30

TRACK	SESSION	CONCURRENT SESSIONS	DESCRIPTION
Technology	Multicast <i>Chair:</i> Bob Kummerfeld, University of Sydney, Australia, bob@cs.usyd.edu.au	<ul style="list-style-type: none"> • Scalable and Reliable Multicast File Transfer Architecture (Paper 99153) <i>Presenter:</i> Manolo Sola, Waseda University, Japan, sola@jet.es • An Architecture for Push Information Delivery and its Application to News Delivery System (Paper 99051) <i>Presenter:</i> Shingo Kinoshita, Nippon Telegraph and Telephone Corporation, Japan, kinosita@isl.ntt.co.jp • RSVP Integrated Multicast (RIM) (Paper 99353) <i>Presenter:</i> Kenji Fujikawa, Kyoto University, Japan, fujikawa@kuis.kyoto-u.ac.jp 	Just what do we mean by multicast and at what level of the protocol stack should it be implemented? The papers in this session will present alternative views of the answer to this question.
Social, Legal & Regulatory	Policy and Deployment <i>Chair:</i> Hisham el Sherif, IDSC/RITSEC, Egypt, hsherif@idsc.gov.eg	<ul style="list-style-type: none"> • Why Should a Government Invest in the Internet? The Experience of the Ministry of Economy and Finance of Spain (Paper 99053) <i>Presenter:</i> Juan A. Zapardiel, Ministry of Economy and Finance, Spain, juan.zapardiel@inspeccion.meh.es • Connecting Laos: Notes From the Peripheries of Cyberspace (Paper 99071) <i>Presenter:</i> Paula Uimonen, Stockholm University, Sweden, uimonen@i-connect.ch • The Internet in India and China (Paper 99126) <i>Presenter:</i> Larry Press, California State University, United States, lpress@isi.edu • Challenges to Informatics Policy at the End of the Millenium (Paper 99600) 	A look at the challenges to informatics policy at the end of the Millennium and Government investment in the Internet. Also a focus on the internet in India, China and Laos.
Social, Legal & Regulatory	Community Networking: Worldwilde Experiences <i>Chair:</i> Hisham el Sherif, IDSC/RITSEC, Egypt, hsherif@idsc.gov.eg	<ul style="list-style-type: none"> • Networks, Communication Technologies and the Reorganisation of Urban Space - Challenges for Analysing the Case of Rio de Janeiro - Brazil (Paper 99055) <i>Presenter:</i> Rainer Randolph, Federal University of Rio de Janeiro, Brazil, randolph@uol.com.br • Skills.net - Community Internet Access and Training in Victoria, Australia (Paper 99301) <i>Presenter:</i> Adrian Bates, Skills.net, Victoria's Network: VICNET State Library of Victoria, Australia, adrianb@vicnet.net.au • SKI The Swedish Calendar Initiative (Paper 99395) <i>Presenter:</i> Greg FitzPatrick, MediaNet Foundation, Sweden, gf@medianet.org 	This panel will examine the legal and social history, context, possible consequences, and further actions related to community networks and community networking and their involvement with digital divide issues. A look will be taken at what action is required to reduce the damage of the digital divide in general, and to protect the charitable missions of community networks in particular.

12:30 - 14:00

Lunch

14:00 - 15:30

E-Commerce & E-Business	Connecting the Unconnected-How to Foster Universal Internet Access? <i>Chair:</i> George Sadowsky, New York University, United States, george.sadowsky@nyu.edu	<ul style="list-style-type: none"> • Universal Service in a Ubiquitous Digital Network (Paper 99227) <i>Presenter:</i> L. Jean Camp, Harvard University, United States, Jean_Camp@harvard.edu • What is the Optimal Technological and Investment Path to "Universal" Wireless Local Loop Deployment in Developing Countries? (Paper 99104) <i>Presenter:</i> Mugo Kibati, Massachusetts Institute of Technology, Kenya, mkibati@mit.edu <i>Panelists:</i> Michael Howard, Infonetics, United States, michael@infonetics.com and Steve Cisler, Tachyon, United States, cisler@pobox.com 	As the Internet becomes a vehicle for E-commerce and government services, there will be an increasing need to make Internet access more affordable and more ubiquitous. Are new government policies and programs needed? Or will new technologies and market pressures be enough to ensure the rapid spread of the Net?
E-Commerce & E-Business	Keeping Customers Happy in Cyberspace <i>Chair:</i> Christine Maxwell, Chiliad Publishing, Inc. France, maxwell@chiliad.com	<ul style="list-style-type: none"> • Distributing E-Coupons on the Internet (Paper 99429) <i>Presenter:</i> Rangachari Anand, IBM T.J. Watson Research Center, United States, anand@watson.ibm.com • Knowledge Platform for Electronic Customer Care (Paper 99347) <i>Presenter:</i> Christoph Jansen, University of St. Gallen, Switzerland, christoph.jansen@unsig.ch • Brokering Automated Enterprises (Paper 99067) <i>Presenter:</i> Jeremy Foss, Marconi Communications Ltd., United Kingdom, jerry.foss@marconicomms.com • A Process-oriented Framework for Efficient Intranet Management (Paper 99083) <i>Presenter:</i> Roland E. Schmid, Institute for Information Management, University of St. Gallen, Switzerland, schmid@acm.org 	As businesses move into cyberspace, they need new ways to find and keep customers. Technology offers new tools, but also increases customer expectations. E-businesses will only succeed if they can provide reliable, easy-to-use service to their customers.

Wednesday, 23 June 1999 *(continued)*

14:00 - 15:30

TRACK	SESSION	CONCURRENT SESSIONS	DESCRIPTION
Education & Information Resources	Digitizing Culture Chair: Francois Fluckiger, CERN, Switzerland, Francois.Fluckiger@cern.ch	<ul style="list-style-type: none"> • Digital Reference Rooms: Access to Historical and Cultural Dimensions of Knowledge (Paper 99092) Presenter: Kim H. Veltman, Maastricht McLuhan Institute, Netherlands, K.Veltman@MMI.Unimaas.Nl • The Digital Beethoven House (Paper 99170) Presenter: Manfred A. Bogen, GMD- German National Research Center for Information Technology, Germany, manfred.bogen@gmd.de 	What are the challenges of linking up cultural resources and navigating the museums and archives of art, history, music and theater? How will these institutions collaborate and interact?
Technology	Internet II Chair: John Hine, Victoria University of Wellington, New Zealand, John.Hine@cl.cam.ac.uk		The Internet2 project is being led by 130 leading U.S. universities, industry and government organizations, to facilitate the advanced network applications necessary to meet emerging needs in higher education. This panel will provide current comments on the status and reception of Internet2.
Technology	Wireless Chair: Jun Murai, Keio University and WIDE Project, Japan, junsec@wide.ad.jp	<ul style="list-style-type: none"> • Wireless Data Transmission in the Andes: Networking Merida State (Paper 99318) Presenter: Ermanno Pietrosemoli, Escuela Latinoamericana de Redes- Universidad de los Andes, Venezuela, ermanno@ula.ve • Applications of High Speed Wireless Solutions for Developing Countries – Lessons Learned in Latvia and Moldova (Paper 99241) Presenter: Guntis Barzdins, University of Latvia, Latvia, guntis@latnet.lv • High-Speed Internet Access via Stratospheric HALO™ Aircraft (Paper 99373) Presenter: Nicholas J. Colella, Angel Technologies Corporation, United States, Ncolella@broadband.com 	Designers turn to a “wireless Internet” for a variety of reasons. This session will address that variety – ranging from established success stories to future visions.
Technology	Measurement I Chair: Youki Kadobayashi, Osaka University, Japan, Youki@center.osaka-u.ac.jp	<ul style="list-style-type: none"> • Traffic Modeling of On-line Multimedia Education (Paper 99162) Presenter: A.L. Cricenti, Swinburne University of Technology, Australia, trcricenti@swin.edu.au • Quality of Service Measurements on SuperJANET – The UK Academic Information Highway (Paper 99328) Presenter: Peter F Linington, University of Kent at Canterbury, United Kingdom, pfl@ukc.ac.uk • Tools to Visualize the Internet Multicast Backbone (Paper 99421) Presenter: K. Claffy, CAIDA, United States, kc@caida.org 	As we strive to design the future protocols for the Internet we need to better understand the beast. The two measurement sessions will cover both measurements that aid our understanding and new tools to assist future investigations.
Social, Legal & Regulatory	Community Networking Around the World Chair: Hans D'Orville, UNDP, United States, dorville@undp.org	<ul style="list-style-type: none"> • Technology Access Community Centers in Egypt: A Mission for Community Empowerment (Paper 99313) Presenter: Sherif M. Reda Hashem, The Regional Information Technology & Software Engineering Center / The Cabinet Information & Decision Support Center, Egypt, shashem@ritsec.com.eg • Cibercentro for Employment in Metropolitan Bilbao: A Successful Initiative to Broaden the Social Use of Internet (Paper 99296) Presenters: Alfonso Martinez-Cearra, Bilbao metropoli-30, Spain, director@bm30.es; Inigo Atxutegi, Bilbao metropoli-30, Spain, atxutegi@bm30.es • Developing Community Networks in Russia: The Russian Civic Networking Program (Paper 99374) Presenters: Greg Cole, Center for International Networking Initiatives, The University of Tennessee, United States, gcole@solar.rtd.utk.edu and Natasha Bulashova, Friends and Partners Foundation, Russia, natasha@www.friends-partners.ru • Network Communication Brings Opportunity for Minority: Identity of Woman at Home (Paper 99351) Presenter: Akiko Orita, Keio University, Japan, ako@sfc.keio.ac.jp 	This panel will focus on the key characteristics of community telecenters. It will define its basic characteristics and highlight its operational issues and sustainability programs. Discussions will focus on broadening the social use of the Internet and an examination of Community Empowerment through technology access and the development of Community Networks in different countries around the world.
Social, Legal & Regulatory	Dimensions of Internet Diffusion Chair: Larry Press, California State University, United States, lpress@isi.edu	<ul style="list-style-type: none"> • Universal Access in Broadcasting: Solving the Information Problems of the Digital Age? (Paper 99349) Presenter: Reza Tadayoni, Technical University Denmark, Denmark, reza@cti.dtu.dk Panelists: Seymour Goodman, Stanford University and the Mosaic Group; John Quarterman, MIDS; Luis Rodriguez, Central University of Venezuela; Michael Minges, ITU 	This session brings together people who have been tracking the global diffusion of the Internet (also including the use of broadband Internet) and policy makers and Internet community members who use the results of their work. The goal is to present an overview of the work that is being done today and to ask what should be done and is feasible to do in the future.

Wednesday, 23 June 1999 *(continued)*

15:30 - 16:00

Refreshment Break

16:00 - 17:30

TRACK	SESSION	CONCURRENT SESSIONS	DESCRIPTION
E-Commerce & E-Business	<p>The Politics and Economics of Peering and Interconnection</p> <p><i>Chair:</i> Glenn Kowack, iPass Inc., United States, gkowack@ipass.com</p>	<ul style="list-style-type: none"> • Interconnection, Peering and Settlements (Paper 99432) <i>Presenter:</i> Geoff Huston, Telstra, Australia, gjh@telstra.net • Bandwidth Colonialism?: The Implications of Internet Infrastructure on International E-Commerce (Paper 99187) <i>Presenter:</i> Kenneth Neil Cukier, CommunicationsWeek International, France, kenc@cwi.emap.com • The Rise and Reform of Law on the Internet (Paper 99460) <i>Presenter:</i> Curtis Karnow, Sonnenschein Nath + Rosenthal, United States, cek@sonnenshein.com <i>Panelist:</i> Scott Shiffman, International Regulatory Affairs, Law and Public Policy 	<p>In the early days of the Internet, different networks carried each others' traffic for free. Today, an ISP may have to pay larger Internet backbone providers to get access to the global backbone. How do ISPs interconnect? Is there a fair and competitive market for backbone access?</p>
E-Commerce & E-Business	<p>Culture Clash-Lawyers and Techies in Cyberspace</p> <p><i>Chair:</i> Michael R. Nelson, IBM, United States, mm@us.ibm.com</p>	<p><i>Panelists:</i> Holly Towle, Preston Gates & Ellis LLP, United States, hollyt@prestongates.com; Kaye Caldwell, Silicon Valley Industry Coalition, United States, kaye@ix.netcom.com; Roberta Katz, Netscape, United States</p>	<p>As the Internet has matured and become not only a tool for researchers, but the foundation of the Digital Economy, engineers and programmers are spending more and more time working with lawyers to determine how to design and deploy products and services. But they come from two very different cultures. Is it possible to bridge this cultural gap?</p>
Education & Information Resources	<p>Youth on the Internet</p>	<ul style="list-style-type: none"> • KIDS (Kids Investigating and Discovery Sites) Report: Evaluating and Annotating Internet Resources (Paper 99101) <i>Presenter:</i> Deborah Reilly, University of Wisconsin-Madison, United States, reilly@maccc.wisc.edu • Running an Online Forum With 3000 Kids From 139 Countries (Paper 99233) <i>Presenters:</i> Scott A. Gunn, MIT Media Lab, United States, sgunn@media.mit.edu and William W. Wright, International Telecomputing Consortium, Inc., United States, wright@itc.org • Strategies for Promoting Access to the Internet Among Children and Youth: A Case Study of the San Francisco Public Library's Electronic Library Project (Paper 99117) <i>Presenter:</i> Sybil L. Boutillier, San Francisco Public Library, United States, sybilb@sfpl.lib.ca.us 	<p>At the 1998 INET in Geneva, one of the most popular programs involved young network users. What are the projects underway in 1999, and how are the kids using the new tools to learn and collaborate?</p>
Technology	<p>Differentiated Services</p> <p><i>Chair:</i> Francois Fluckiger, CERN, Switzerland, Francois.Fluckiger@cern.ch</p>	<ul style="list-style-type: none"> • Internet2 Qbone-A Testbed for Differentiated Services (Paper 99242) <i>Presenter:</i> Benjamin Teitelbaum, Advanced Network & Services, United States, ben@internet2.edu • Simulation Study On the DS Forwarding Architectures (Paper 99074) <i>Presenter:</i> Mika Loukola, Helsinki University of Technology, Finland, mika.loukola@hut.fi • DiSp: An Architecture for Supporting Differentiated Services in the Internet (Paper 99402) <i>Presenter:</i> Anshul Kantawala, Washington University in St. Louis, United States, anshul@arl.wustl.edu 	<p>Differentiated services is an area of intense activity as we attempt to find solutions to quality of service demands within the Internet. This session will present some initial approaches to studying and implementing differential service algorithms.</p>
Technology	<p>Routing Optimization</p> <p><i>Chair:</i> Youki Kadobayashi, Osaka University, Japan, Youki@center.osaka-u.ac.jp</p>	<ul style="list-style-type: none"> • Evaluation of Label Mapping Policy for Aggregated Packet Flow in Label Switching Network (Paper 99217) <i>Presenter:</i> Kenichi Nagami, Toshiba Corporation, Japan, ken.nagami@toshiba.co.jp • Reducing Routing Table Computation Cost in OSPF (Paper 99441) <i>Presenter:</i> Xipeng Xiao, Michigan State University and Frontier Globalcenter, United States, xipeng@globalcenter.net • Improving the Availability and Performance of Network-Mediated Services (Paper 99435) <i>Presenter:</i> Germán Goldszmidt, IBM Research, United States, gsg@us.ibm.com 	<p>Routing problems have been with us as long as the Internet. This session will look at proposed improvements to speed up OSPF and a system capable of client based application level routing.</p>

Wednesday, 23 June 1999 *(continued)*

16:00 - 17:30

TRACK	SESSION	CONCURRENT SESSIONS	DESCRIPTION
Technology	Measurement II Chair: Paul V. Mockapetris, Siara Systems, United States, pvm@siara.com	<ul style="list-style-type: none"> An Internet Traffic Data Repository: The Architecture and the Design Policy (Paper 99211) Presenter: Akiro Kato, The University of Tokyo, Japan, kato@wide.ad.jp Surveyor: An Infrastructure for Internet Performance Measurements (Paper 99272) Presenter: Sunil Kalidindi, Advanced Network & Services, United States, sunil@advanced.org Otter: A General-purpose Network Visualization Tool (Paper 99422) Presenter: Bradley Huffaker, CAIDA, United States, bhuffake@caida.org 	As we strive to design the future protocols for the Internet we need to better understand the beast. The two measurement sessions will cover both measurements that aid our understanding and new tools to assist future investigations.
Social, Legal & Regulatory	Copyright Law and Regulatory Issues Chair: Curtis Karnow, Sonnenschein Nath + Rosenthal, United States, cek@sonnenschein.com	<ul style="list-style-type: none"> Copyright Information Management, A Design and Implementation of New Protocol Architecture (Paper 99418) Presenter: Yoko Murakami, Keio University, Japan, yoko@sfc.wide.ad.jp Indirect Liability on the Internet and Loss of Control (Paper 99459) Presenter: Curtis Karnow, Sonnenschein Nath + Rosenthal, United States, cek@sonnenschein.com Panelist: Laura Fillmore, Open Book Systems, United States, laura@obs-us.com 	An examination of the following issues will be the subject of this session: <ul style="list-style-type: none"> Copyright information management, including a look at application of new standards like the DOI. Design and implementation of new protocol architecture. Indirect Liability on the Internet and Loss of Control.
Social, Legal & Regulatory	Internet Development in the Developing World: Case Studies and Lessons Learned Chair: Larry Press, California State University, United States, lpress@isi.edu	<ul style="list-style-type: none"> The Evolution of OANET: Lessons from Sub-Saharan Africa (Paper 99335) Presenter: Abraham Ola, UN Centre for Space Science Technology, Obafemi Awolowo University, Nigeria, mbello@oauife.edu.ng Alternative Paths to Internet Infrastructure: The Case of Haiti (Paper 99437) Presenter: Jon M. Peha, Carnegie Mellon University and US Congress, United States, peha@ece.cmu.edu Enabling Better Land Use in East Africa (Paper 99144) Presenters: Michael Hailu, Centre for International Forestry Research, Indonesia, M.Hailu@cgjar.org and Elke Delvoeye, International Centre for Research in Agroforestry, Kenya, E.Delvoeye@cgjar.org Keys to Human Resource Development: Capacity Building Through Train the Trainer Programs and Universal Access by Affordable Wireless Technologies (Paper 99168) Presenter: Daniel Stern, Mission Mobile Education, Uganda, dstern@uconnect.org 	This session will highlight case studies and lessons learned in infrastructural maintenance, human resource development, uses of web technology, and unconventional technical approaches to Internet development in the developing world.

18:00 - 19:30

Birds of a Feather (BOF) Meetings

19:00 - 22:30

Gala Evening – Tech Museum of Innovation

This unique and festive evening is the social highlight of INET99. The museum is part of the next generation of museums, offering an engaging, interactive experience with the leading-edge technologies that affect our daily lives. A tempting array of hors d'oeuvres, carving stations, and refreshments will be served throughout the museum.

Thursday, 24 June 1999

08:30 - 10:30

Plenary Session

10:30 - 11:00

Refreshment Break

10:30 - 18:00

Exhibition Hall Open

Thursday, 24 June 1999 *(continued)*

11:00 - 12:30

TRACK	SESSION	CONCURRENT SESSIONS	DESCRIPTION
E-Commerce & E-Business	Electronic Commerce Around the World Chair: Mark Rush, CommerceNet	<ul style="list-style-type: none"> • Electronic Commerce and Internet Service Providers in Canada (Paper 99280) <i>Presenter:</i> Paul Pierlot, Information and Communications Technologies Branch, Industry Canada, Government of Canada, Canada, pierlot.paul@ic.gc.ca • E-Commerce for Development - Challenges and Opportunities (Paper 99131) <i>Presenter:</i> Allison Murray, Canada, alliemurr27@yahoo.com • Overcoming Deterrents and Impediments of Electronic Commerce in Light of Globalization: EGYPT – A Case in Point (Paper 99093) <i>Presenter:</i> Magda M. Ismail, The Cabinet Information and Decision Support Center & Electronic Commerce Committee and The Internet Society of Egypt, Egypt, Magda.Ismail@ise.org.eg • Towards an Electronic Commerce Policy for South Africa (Paper 99205) <i>Presenter:</i> Michael Groenewald, CSIR, South Africa, mgroen@csir.co.za 	E-commerce is growing and spreading even faster than the Internet. This session provides case studies of how E-commerce is developing in Canada, Asia, Egypt and South Africa.
Education & Information Resources	Impact on Universities Chair: Carole Barone, EDUCAUSE, United States	<i>Panelists:</i> Murray Goldberg, WebCT Educational Technologies, British Columbia; Paul Lefrere, UK IMS Centre, Open University, United Kingdom, P.Lefrere@open.ac.uk	The Rise and Fall of Distance Learning Universities: Distance learning programs in higher education are sprouting on the Internet, but will any of them really take root and become trusted institutions that are flexible enough to serve the needs of network-based learners? This session will present varying views on the usefulness of distance learning courses and virtual university projects.
Technology	IETF Applications Chair: Fred Baker, Cisco Systems, United States, fred@cisco.com	<i>Panelists:</i> Ned Freed, Innosoft International; Patrick Fålrström, Tele2, Sweden, paf@swip.net; Keith Moore, University of Tennessee, Knoxville, United States	The Chair will lead a panel of area directors in a discussion of the latest developments in email, information services and other application related developments.
Technology	Algorithms Chair: Paul V. Mockapetris, Siara Systems, United States, pvm@siara.com	<ul style="list-style-type: none"> • Schemes for Adaptive QoS Routing (Paper 99275) <i>Presenter:</i> Eleni Stroulia, University of Alberta, Canada, stroulia@cs.ualberta.ca • A Deterministic IP Table Look-up at Wire Speed (Paper 99176) <i>Presenter:</i> Andrey Belenkiy, New Jersey Institute of Technology, United States, abelenki@telcordia.com • WDM Burst Switching (Paper 99406) <i>Presenter:</i> Jonathan S. Turner, Washington University, United States, jst@cs.wustl.edu 	Good algorithms are at the heart of new software and hardware that improves the Internet's performance. This session will present three new algorithms concerned with switching and routing.
Technology	Security Chair: Youki Kadobayashi, Osaka University, Japan, Youki@center.osaka-u.ac.jp	<ul style="list-style-type: none"> • Pequi: An PKIX Implementation for Secure Communication (Paper 99381) <i>Presenter:</i> Michael Anthony Stanton, Universidade Federal Fluminense, Brazil, michael@inf.puc-rio.br • A Method of Tracing Intruders by Use of Mobile Agents (Paper 99165) <i>Presenter:</i> Midori Asaka, Information-technology Promotion Agency, Japan, asaka@ip.go.jp • Security Assessment of IP-based Networks: A Holistic Approach (Paper 99385) <i>Presenter:</i> Mahesh V. Tripunitara, AT&T Labs and CERIAS, Purdue University, United States, mahesh@ipo.att.com 	Security is a constant concern of Internet and intranet designers and users. A range of approaches may be required to address these problems and the papers in this session will present three different views.

Thursday, 24 June 1999 *(continued)*

11:00 - 12:30

TRACK	SESSION	CONCURRENT SESSIONS	DESCRIPTION
Social, Legal & Regulatory	Controversies and Conflicts in Cyberspace Chair: David Mathus, Baer Marks & Upham LLP, United States, mathus@baermarks.com	<ul style="list-style-type: none"> • The IRS, Community Networking and Public Policy (Paper 99006) <i>Presenter:</i> Shava Nerad, DigitalDivide, United States, shava@digitaldivide.org • The "Social Engineering" of Internet Fraud (Paper 99342) <i>Presenter:</i> Jonathan J. Rusch, U.S. Department of Justice, United States, rusch1@erols.com • Whisper Who Dares: Encryption, Privacy Rights and the New World Disorder (Paper 99204) <i>Presenters:</i> Yaman Akdeniz, Cyber-Rights & Cyber-Liberties, United Kingdom, lawya@leeds.ac.uk and Clive Walker, Cyber-Rights & Cyber-Liberties, United Kingdom, law6cw@leeds.ac.uk • Section 706: Net-Heads and Bell-Heads Battle Over Internet Access at the U.S. Federal Communications Commission (Paper 99219) <i>Presenter:</i> Robert Cannon, Internet Telecom Project, United States, cannon@world.oberlin.edu 	Controversies and conflicts abound in the world of Cyberspace. This session will look particularly at: <ul style="list-style-type: none"> • Community Networking and issues of Public Policy. • The "Social Engineering" of Internet Fraud. • Encryption, privacy rights and the new world 'disorder'.

Social, Legal & Regulatory	Managing the Networks Chair: Kilnam Chon, KAIST, Republic of Korea	<ul style="list-style-type: none"> • National Research and Education Networks: Analysis of Management Issues (Paper 99326) <i>Presenter:</i> Dmitry Galagan, Delft University of Technology, Netherlands, D.Galagan@is.twi.tudelft.nl • Domain Name Conflict Resolution under the .CL Top-Level Domain (Paper 99253) <i>Presenter:</i> Patricio V. Poblete, University of Chile, Chile, ppoblete@dcc.uchile.cl 	This session will examine the challenges of managing the Networks --with special reference to a whole variety of management issues. Domain Name Registration Rules and the challenges of offering universal access. Examination of how different modes of operation could support other pricing models to address failures in the offering of universal service.
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12:30 - 14:00

Lunch

14:00 - 15:30

E-Commerce & E-Business	E-Commerce and the Law Chair: Pamela Samuelson, UCLA, United States	<ul style="list-style-type: none"> • Electronic Commerce with Verifiable Audit Trails (Paper 99438) <i>Presenter:</i> Jon M. Peha, Carnegie Mellon University and US Congress, United States, peha@ece.cmu.edu • Developing Liability Standards for Electronic Commerce (Paper 99345) <i>Presenter:</i> Steven Gillis, Riptech Security Consulting Group, United States, steve@ripteck.com • The Rise and Reform of Law on the Internet (Paper 99460) <i>Presenter:</i> Curtis Karnow, Sonnenschein Nath + Rosenthal, United States, cek@sonnenschein.com 	E-commerce is growing explosively and will soon generate a billion dollars a day in sales. Can the law keep up? Liability, intellectual property, and contract law must all adapt to the global digital marketplace.
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E-Commerce & E-Business	Moving EDI to the Internet Chair: Jay "Marty" Tenenbaum, VeoSystems and CommerceNet, United States, marty.tenenbaum@commerceone.com	<ul style="list-style-type: none"> • Reshaping the EDI Business Landscape Utilizing XML (Paper 99029) <i>Presenter:</i> Graham R Smith, Shell Services International, United Kingdom, Graham.R.Smith@si.shell.com • Design and Set-up of an EDI Clearing-House (Paper 99039) <i>Presenter:</i> Nikolaos A. Kyrloglou, Athens Chamber of Commerce and Industry, Greece, nikoky@acci.gr 	In the past, EDI (Electronic Data Interchange) relied on proprietary systems and software. The growth of the Internet has enabled companies to take advantage of the open standards of the Internet to reach more business partners and customers more quickly.
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Education & Information Resources	Maturing National Networks Chair: Leonardo Lazarte, Universidade de Brasilia, Brazil, llazarte@ipe.mat.unb.br	<ul style="list-style-type: none"> • Network Design and Resource Management Scheme in SchoolNet Thailand Project (Paper 99314) <i>Presenter:</i> Thaweesak Koanantakool, National Science and Technology Development Agency, Thailand, htk@nectec.or.th • Comparative Study: School Networks in Latin America (Paper 99376) <i>Presenter:</i> Julian Dunayevich, Ministerio de Cultura y Educacion de la Nacion, Argentina, julian@esc.edu.ar • Developing Telematised Teaching Environments in the National Teachers Colleges Network (Paper 99265) <i>Presenter:</i> Dov Winer, ISOC-IL Internet Society, Israeli Chapter, Israel, dovww@isoc.org.il 	National efforts to connect schools and other learning institutions are progressing but at different rates. Presenters from Israel, Latin America, and Thailand will highlight the successes and problems in rolling out national networks and in training the users.
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Thursday, 24 June 1999 *(continued)*

14:00 - 15:30

TRACK	SESSION	CONCURRENT SESSIONS	DESCRIPTION
Technology	IETF Infrastructure <i>Chair:</i> Charles Perkins, Sun Microsystems, United States, charles.perkins@eng.sun.com	<i>Panelists:</i> Thomas Narten, IBM, United States; Scott Bradner, Harvard University, United States, sob@harvard.edu ; Rob Coltrun, FORESystems, United States	The chair will lead a panel of area directors in a discussion of the latest infrastructure developments including transport and routing.
Technology	Network Innovations <i>Chair:</i> Bob Kummerfeld, University of Sydney, Australia, bob@cs.usyd.edu.au	<ul style="list-style-type: none"> • A Dynamic QoS Control Scheme for Videoconferencing in a Heterogenous Internet (Paper 99118) <i>Presenter:</i> Sanku Jo, Lawrence Berkeley National Lab, United States, skjo@lbl.gov • Lessons Learned From the Early Adoption of URNs in an Intranet Environment (Paper 99245) <i>Presenter:</i> Pedro Manuel Cuenca Jiménez, Grupo Anaya, S.A., Spain, pcuenca@ieee.org • Mobile Components to Manage the Heterogenous Internet (Paper 99290) <i>Presenter:</i> Madhuranath R. Konety, Virginia Polytechnic and State University, United States, mkonety@hccitech.com 	This session will present three diverse innovations that may signal the shape of the future Internet.
Technology	Web Performance <i>Chair:</i> Francois Fluckiger, CERN, Switzerland, Francois.Fluckiger@cern.ch	<ul style="list-style-type: none"> • Web Traffic Logs: An Imperfect Resource for Evaluation (Paper 99182) <i>Presenter:</i> Brian D. Davison, Rutgers University, United States, davison@cs.rutgers.edu • A Quantitative Analysis of ICP Queries at the Distributed WWW Caching System (Paper 99193) <i>Presenter:</i> Eiji Kawai, Nara Institute of Science and Technology, Japan, eiji-ka@is.aist-nara.ac.jp • ENMA: The WWW Server Performance Measurement System via Packet Monitoring (Paper 99192) <i>Presenter:</i> Yutaka Nakamura, Nara Institute of Science and Technology, Japan, yutaka-n@is.aist-nara.ac.jp 	What's happening within the web? Learn what works and what doesn't and how the WWW is performing.
Social, Legal & Regulatory	Defining the Nature of Power in Cyberspace <i>Chair:</i> Jean-Claude Guédon, Université de Montréal, Canada, Guedon@ere.umontreal.ca	<ul style="list-style-type: none"> • Cyberpower: The Culture and Politics of Cyberspace (Paper 99110) <i>Presenter:</i> Tim Jordan, University of East London, United Kingdom, t.r.jordan@uel.ac.uk • Optic Fibre vs. Social Fabric (Paper 99358) <i>Presenter:</i> Juan Manuel Soto, United Nations Development Programme, Colombia, jmsoto@rds.org.co • Language as a Barrier (Paper 99156) <i>Presenter:</i> Katja Lozar, University of Ljubljana, Slovenia, katja.lozar@uni-lj.si 	The nature of power in cyberspace is looked at in the context of categorization of problems associated with connectivity expansion. This includes the importance of the social impact and the effect of language difficulties on Internet penetration.
Social, Legal & Regulatory	The Second Generation of Internet Users: Designing Electronic Communities <i>Chair:</i> Joshua Berman, Georgia Institute of Technology, United States	<ul style="list-style-type: none"> • SMART and SAFE COMMUNITIES (Paper 99042) <i>Presenter:</i> Georges Yves Kervern, Tactic Kervern, France, gyk@tactic.fr <i>Panelist:</i> Linda Stone, Microsoft, United States, lindastone@msn.com 	This panel will address how the design process is influenced when creating communities for special populations. Online communities have become an increasingly important part of how we work, play and learn, and yet designing these communities until recently has remained largely a matter of fitting all users to a single mold. Users from special populations are now recognized as having distinct needs, and community designers need to discover and be guided by those needs in order.

15:30 - 16:00

Refreshment Break

Thursday, 24 June 1999 *(continued)*

16:00 - 17:30

TRACK	SESSION	CONCURRENT SESSIONS	DESCRIPTION
E-Commerce & E-Business	Venture Capital, IPO's and the Internet – Magic, Mania or Both? <i>Chairs:</i> Tim Newell, E*Offering, United States, tnewell@eoffering.com and Stanford R. Robertson	<i>Panelists:</i> Garret Gruener, Alta Partners; John Batell, Industry Standard; Neal Weintraut, 10101 Century Fund	In the US, the growth of the Internet has been fueled by hundreds of millions of investment dollars provided by venture capital and the stock market. To the outsider, Internet financing appears to be a mysterious, almost magical, process. This panel of insiders, representing some of Silicon Valley's most successful Internet investors, will explain the "Silicon Valley money machine."
Education & Information Resources	Case Studies in Learning <i>Chair:</i> Anne Villems, University of Tartu, Estonia, anne@cs.ut.ee	<ul style="list-style-type: none"> • We Are All Publishers Now. What Does That Mean? (Paper 99458) <i>Presenter:</i> Peter B. Boyce, Chiliad Publishing, Inc., United States, pboyce@aas.org • A Qualitative Study of Children's Exchanging Activity in the Group Work of Software Making: The Software Creating Project (Paper 99128) <i>Presenter:</i> Hitoshi Nakagawa, Yokohama City Board of Education, Japan, hitoshi_nakagawa@mediakids.or.jp • Clinical Epidemiology and Internet (Paper 99266) <i>Presenter:</i> Naoko Tajima, Jikei University School of Medicine, Japan, ntajima@jikei.ac.jp • Case Study: An Evaluation of Two Courses for Graduate Level Professors Designed to Improve Academic Internet Use in Research and Teaching (Paper 99302) <i>Presenter:</i> Anise Abreu Gonçalves D'Orange Ferreira, Catholic University of São Paulo, Brazil, anise@mailmac.macbbs.com.br 	Lessons learned from very different learning environments involving young people as software developers, training faculty and epidemiologist, and the effects of the Internet making everyone a potential publisher.
Technology	IETF Network Management, Security and User Services <i>Chair:</i> Brian Carpenter, IBM, United States, brian@hursley.ibm.com	<i>Panelists:</i> Bert Wijnen, IBM, United States; Jeff Schiller, MIT, United States, js@mit.edu ; April Marine, Internet Engines, United States, april.marine@iengines.net	The IAB Chair will lead a panel of area directors in a discussion of the latest developments in network management, operations, security and user services.
Technology	IP Audio <i>Chair:</i> Francois Fluckiger, CERN, Switzerland, Francois.Fluckiger@cern.ch	<ul style="list-style-type: none"> • Open Charging and QoS Interfaces for IP Telephony (Paper 99167) <i>Presenter:</i> Burkhard Stiller, Computer Engineering and Networks Laboratory, Switzerland, stiller@tik.ee.ethz.ch • An Approach to IP Telephony Performance Measurement and Modeling in Government Environments (Paper 99264) <i>Presenter:</i> Martin John Fischer, Mitretek Systems, United States, mfischer@mitretek.org • Robust Audio Streaming over IP (Paper 99059) <i>Presenter:</i> Rory Stewart Turnbull, BT, United Kingdom, rory.turnbull@bt.com 	Audio over IP exists but most of us would agree that it needs to improve to gain general acceptance. The papers of this session study the characteristics of audio and look at how to improve its quality on the Internet.
Technology	Middleware Services <i>Chair:</i> Bob Kummerfeld, University of Sydney, Australia, bob@cs.usyd.edu.au	<ul style="list-style-type: none"> • DepotNet: Support for Distributed Applications (Paper 99190) <i>Presenter:</i> Kris Bubendorfer, Victoria University of Wellington, New Zealand, Kris.Bubendorfer@mcs.vuw.ac.nz • Adding Intelligence to Satellite-based Internet Links: Architecture of a Second-Generation Satellite-based Internet Delivery System (Paper 99247) <i>Presenter:</i> Anup Mathur, A&T Systems, United States, amathur@ats.com • Distributed Network Storage with QoS Guarantees (Paper 99251) <i>Presenter:</i> John Chung-I Chuang, Carnegie Mellon University, United States, chuang+@cmu.edu 	Over time we come to better understand the requirements of different protocols or services and they subsequently become part of our infrastructure. The three papers in this session take distinct approaches to providing new services to applications.
Social, Legal & Regulatory	The Rise and Reform of Public Law on the Internet <i>Chair:</i> Curtis Karnow, Sonnenschein Nath + Rosenthal, United States, cek@sonnenschein.com	<i>Panelists:</i> Curtis Karnow, Sonnenschein Nath + Rosenthal, United States, cek@sonnenschein.com ; Christine Maxwell, Chiliad Publishing, Inc., France, maxwell@chiliad.com ; David L. Mathus, Baer Marks and Upham LLP, United States, mathus@baermarks.com ; Zimmerman; Hisham el Sherif, IDSC/CRITSEC, Egypt, hsherif@idsc.gov.eg	This panel discussion will address the infiltration of civil public law into the Internet. With the development of E-commerce and online communities, Internet activity is increasingly coming under the scrutiny of public law all over the world.

Thursday, 24 June 1999 *(continued)*

16:00 - 17:30

TRACK	SESSION	CONCURRENT SESSIONS	DESCRIPTION
Social, Legal & Regulatory	<p>People with Disabilities and the Internet: Enabling Technology or Barrier to Progress?</p> <p><i>Chair:</i> Michael Burks, Internet Society Special Interest Group for Access to the Internet for People with Disabilities, United States, mburks952@att.net</p>	<ul style="list-style-type: none"> • Designing and Constructing Job Matching Service on the Internet for People with Disabilities (Paper 99207) <i>Presenter:</i> Shoko Miyagawa, Keio University, Japan, miyagawa@sfc.wide.ad.jp • Disability Resources on the Internet: Collecting, Organizing and Presenting in an Accessible Manner (Paper 99236) <i>Presenter:</i> Michael R. Burks, Internet Society Special Interest Group for Access to the Internet for People with Disabilities, United States, mburks952@att.net 	<p>This panel will explore the issues that people with disabilities face in using the Internet. Many people with disabilities use the Internet as an integral part of their private lives and jobs. But, what are some of the issues involved in its use and how do they use it to overcome disabilities? This panel will discuss these issues in the context of both an advanced US and European environment and the emerging Internet of Asia and Eastern Europe. Legal and technical issues will be discussed.</p>

18:00 - 19:30

Birds of a Feather (BOF) Meetings

Friday, 25 June 1999

08:30 - 13:00

Exhibition Hall Open

08:30 - 10:00

E-Commerce & E-Business	<p>The Economics of the Net: Does it Really Change Everything?</p> <p><i>Chair:</i> Michael Borrus, Petkevich and Partners, LLC, United States, mborrus@Petkevich.com</p>	<p><i>Panelists:</i> Francois Bar, Stanford University, United States, fbar@leland.stanford.edu; William Whyman, Legg-Mason Precursor Group, United States, wewhyman@leggmason.com; Mike Kleeman, Boston Consulting Group, United States, kleeman.michael@bcg.com; Madanmohan Rao, Planetasia.com, India, madanr@planetasia.com</p>	<p>The rapid development of Internet technology and electronic commerce is changing large sectors of the economy. What are the economic impacts of the Net? Do the old economic rules and models still apply?</p>
Technology	<p>Social Science Road Maps for High Performance Digital Experiences</p> <p><i>Chair:</i> John Hine, Victoria University of Wellington, New Zealand, John.Hine@cl.cam.ac.uk</p>		<p>This panel has its origins in the Sociotechnical Summit for Advanced Networking. The panelists will examine how a better understanding of the human and organizational dimensions of high performance digital experiences can advance the development of the next generation of Internet applications.</p>
Technology	<p>Ipv6</p> <p><i>Chair:</i> Paul V. Mockapetris, Siara Systems, United States, pvm@siara.com</p>	<ul style="list-style-type: none"> • A Study into the Visualization of an Ipv6 Network (Paper 99197) <i>Presenter:</i> Shu Nakamae, Keio University, Japan, baseman@sfc.wide.ad.jp • An Overview of KAME Network Software: Design and Implementation of the Advanced Internetworking Platform (Paper 99198) <i>Presenter:</i> Tatuya Jinmei, Toshiba Corporation, Japan, jinmei@isl.rdc.toshiba.co.jp • Entering the Ipv6 Communication World by the SOCKS-based Ipv6/Ipv4 Translator (Paper 99396) <i>Presenter:</i> Hiroshi Kitamura, NEC Corporation, Japan, kitamura@ccm.cl.nec.co.jp 	<p>Ipv6 is Coming! This session will provide some new insights into Ipv6 networks, what they will look like and how we will get there.</p>

Friday, 25 June 1999 *(continued)*

08:30 - 10:00

TRACK	SESSION	CONCURRENT SESSIONS	DESCRIPTION
Social, Legal & Regulatory	Kids, Technology and the Next Millenium <i>Chair:</i> Hassim el Sherif, IDSC/RITSEC, Egypt, hsherif@idsc.gov.eg	<ul style="list-style-type: none"> • KIDLINK A GLOBAL CLASSROOM (Paper 99331) <i>Presenter:</i> Ricardo A. Viglianco, National University of Rosario Argentina, Argentina, rviglian@citynet.net.ar <i>Panelists:</i> Keith Vogt; Heba Ramzy; Al Weis, Advanced Network and Services, Inc., United States; Philip Bossert 	<p>This panel will address the issues related to preparing out future leaders for the 21st century. This is achieved by exploring opportunities and presenting Internet-related experiences of children and youth from different parts of the world. The Internet and "CIT" brings our children together regardless of time, space and difference and encourages collaboration towards the achievement of a true global village.</p>
Social, Legal & Regulatory	Overcoming Geographic and Economic Barriers to Internet Access <i>Chair:</i> Jean-Claude Guédon, Université de Montréal, Canada, Guedon@ere.umontreal.ca	<ul style="list-style-type: none"> • Amic@s: Public Access Centers in Asuncion, Paraguay (Paper 99181) <i>Presenter:</i> Steve Cisler, Tachyon, Inc., United States, cisler@pobox.com • Community Portal Hosting of Free Web-Based Email: A Non-Random Survey of Community Oriented Websites (Paper 99350) <i>Presenter:</i> Isabel Maxwell, Commtouch Software, United States, imax@commtouch.com 	<p>An examination of the impact of Email and other Internet services on users in the context of:</p> <ul style="list-style-type: none"> • The role of Online email providers in developing new service programs to meet the requirements of micro-organizations, and special communities of interest. • The establishment of a network of public Internet access centers. • The generating of sustainable activities and jobs.
Social, Legal & Regulatory	The Dawn of Internet Diplomacy: From the Telegraph to the Web <i>Chair:</i> Chris Coward, University of Washington, United States, chrisc@iip.washington.edu	<i>Panelists:</i> Jonathan Spalter, US Information Agency, United States, jsalter@usia.gov; Pamela Slutz, ARFNET, US Department of State, United States, slutzp@state.gov; Venilde Jeronimo, Stanford University, United States, venilde@stanford.edu; Rex Hughes, University of Washington, United States, rexh@iip.washington.edu	<p>Today, the Internet, like its binary cousin the telegraph, has the potential to introduce fundamental changes to the conduct of diplomacy. This panel will look at several early examples of how the Internet is re-engineering diplomatic communications in the US, EU and APEC. How are Internet technologies being customized to meet the needs of diplomats? What leadership is being exerted from within governments to change the culture of diplomacy and promote the use of Internet technology? What will diplomacy look like in the 21st century?</p>

10:00 - 10:30

Refreshment Break

10:30 - 12:30

Closing Plenary Session

NOTE:

Program is current as of 12 April 1999, but is subject to change. Complete author information can be found in the INET'99 CD-ROM of Proceedings.



The Poster Session Program is an integral part of INET'99, providing a medium for presentation of interesting initiatives and ideas and a venue for intense discussions by all conference participants. Hard-copy posters will be on display during open hours of the Exhibition Hall.

NATIONAL AND REGIONAL ISSUES

The Rural Poor of Developing Countries: Exploring the World with School Internet Programs

An Interactive Infrastructure for Facilitating Learner-Participation Within a Web-Enabled Courseware Delivery Environment

In the Service of Diversity: Internet Publishing for Papua New Guinea

Regulations, Funding and Turkish Internet

'La Brujula': A Compass to Chile on the Internet: Developing Local Search Engines

MEDICINE

Telemedicine: A Case Study Between Sri Lanka and Singapore

Disabilities: Enabling Consultations On-Line

Legal and Technical Frameworks for Electronic Patient Records and Networked Health Information

Patients' Responses to Emerging Telemedicine Systems in Taiwan

EDUCATION

Bridging the Chasm Between School Teacher and Internet Specialist

Distance assessment System for accreditation of competencies and skills acquired through in-company Placements (DASP)

TimeScope: An Educational 3D Multi-User Role Playing Environment

Are you Happy with On-Line Classes? A Survey/Interview of Adults Who Took Technology-Related On-Line Courses in Singapore and Silicon Valley in 1998-1999

From East to West: A First Look at the Receptiveness of Internet

Factors for Success: Effective Online Customer Service Training Programs

CONTENT DEVELOPMENT

Enabling Better Land Use in East Africa Using Web Technology

Empowering 400 K-12 and High School Pupils as Collaborative Internet Producers

UK Law Online: The Legal System on the Internet

Normos: An Internet Engineering Standards Repository

Evaluating Trends in Online Auctioning

SOCIAL APPLICATIONS

Correction Policies of Online Publications: Setting the Record Straight in the Bazaar of Ideas

A Web Search Engine for Indexing, Searching and Publishing Arabic Bibliographic Databases

Surveying the Global Diffusion of the Internet

International Conflict Resolution on the Internet: Lessons Learned from Selected Peacemaking Projects

Users Training: A Crucial But Ignored Issue in Remote Cooperative Work

Measuring Languages in the Internet by Counting Word Occurrences with Search Engines

Latin American Social Movements on the Internet: An Innovative Experience

Disability Resources on the Internet: Collecting, Organizing and Presenting in an Accessible Manner

The Internet and the First Amendment: Current Issues in U.S. Government Efforts to Control Online Content

GIS Enhanced TCP/IP Networks Monitor System

Quebec At a Time of Generalized Access to the Internet

Construction of Okayama Information Highway

TECHNOLOGY

Security and Authentication in Internet Mail

Network Monitoring

Mobile Computing Support for High Speed Nodes

Optimal Video Distribution Using Anycasting Service

The Extensively Instrumented Apache and Linux

Reliable IP Multicast

Prefetching the Brand-new Documents for Improving the Web Performance

Building Successful Global Extranets

Network Monitoring with OC3mon for Globalwide Network

Building a Secure Government Communication System over the Internet

An ADSL/ATM Based Multimedia-On-Demand Trial: Architecture, Application, and Impacts of Large Multicast Traffic

Dynamic Steiner Tree with Partial Reconstruction

The ADVICE (AuDio Video Conferencing Environment): an Open Integrated Video Conferencing Architecture

A Multilingual (Chinese, English) Indexing, Retrieval, Searching Search Engine

ISP Basics: Insights Into Traffic Statistics on the Internet Subscriber Line

Low-level Security Concerns for a Campus-wide University Network

MirNET: Linking Russian and American Science using Next Generation Networking Technologies

Digitizing International Conference for Reaching Out to More Communities in the World: Our Challenges on UNFCCC's COP3 and COP4

Business Class IP Services

When Cache Comes in Handy - A Look at Network Caching and Bandwidth

Distributed Net Caching: Beyond the Bandwidth Blues

E-COMMERCE

How Smart Is the IC Card?: The Proposed National Smart Card Plan, BOO Strategy, Electronic Commerce, and the Emerging Danger to Online Privacy in Asia