

e-mail's pivotal role in the development of modern networking is this: current estimates from people who watch Internet traffic patterns say that the Internet will pass over 36 billion e-mails this year. That comes out to 114 e-mails to roughly a second, every second of the year. And that figure will only grow as more areas of the world gain access.

Closing Words

There are various opinions on what it takes to build a network, but one that caught my eye recently was offered by Van Macatee, an executive at Level 3 Communications, in the November 1, 2002, issue of the Web magazine *America's Network*: "*Any schmuck can build a network.*" I'm not sure how Macatee defines a schmuck, so I'll offer a definition: a network schmuck is someone who knows what the technology can do and how to plug it in and turn it on, but not how the technology works or what effect it will have on the people connected to it.

The Internet, is only relatively simple today because of the efforts of the pioneers in the field who had the vision to see the future, the skills and will to make it happen, and the wisdom to cooperate to achieve common goals. The development of the hardware, software, and transport protocols and technologies that make up modern networking are the products of many dedicated, intelligent, talented people whose efforts rival the building of the Pyramids and the Apollo space program as cooperative human endeavors. Schmucks did not build the Internet. Despite the probable difference in our salaries, I strongly disagree with Macatee's assertion. Perhaps just about anyone can buy a network out of a box and just plug it in. But plugging in and turning on a network are not the same as building one.

A modern parallel to the development of the Internet is the Navy's NMCI project. The goal is similar: build a single extended network to serve the entire service in much the same way that the Internet now serves the world. The Navy has many of the same challenges in building the NMCI that faced the people who built the Internet: defining common standards, integrating technologies, and getting everyone to agree on the one right way to do certain things. The Navy is at a pivotal point. In building the NMCI you can, right now, shape the work environment of the entire Navy for decades to come. Please remember, though, that simply building a big network that adheres to a single set of technical standards is not the goal. NMCI will ultimately be judged on how it supports the Navy as an organization. What the world has done with the Internet, I believe can be done with NMCI.

That's all for now. In the next issue, we will conclude this serial history of personal computing with a look at the development of the World Wide Web and what it means to be part of today's wired, interconnected world. Until then...



Happy Networking!

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Talking with Dinah Cohen Computer/Electronic Accommodations Program (CAP) Director

CHIPS: Many people talk about the "digital divide" separating those with access to computers and the Internet to those who do not have access opportunities for financial reasons. But isn't there another digital divide separating private citizens with disabilities from technology? CAP does such a great job assisting DoD and Federal employees with disabilities to bridge the gap, but is there an agency to assist private citizens with disabilities who may be cut off from technology?

Ms. Cohen: The digital divide falls into two categories. The first, people who have access to a computer, but cannot access the information. I hope and think that Section 508 is reducing this divide by working with industry and Federal Government to ensure that electronic and information technology is accessible and usable by people with disabilities. For assisting people in obtaining access to a computer, I am aware of some bold actions regarding universal design and assistive technology/computer access that are part of President Bush's New Freedom Initiative. You can see more on this issue at www.disabilityinfo.gov.

Editor's Note: The New Freedom Initiative was established to ensure that the more than 54 million Americans with disabilities learn and develop skills, find meaningful work, and realize the promises of the Americans with Disabilities Act. To achieve equality of opportunity, independent living, and economic self-sufficiency, this comprehensive plan promotes the full participation of people with disabilities in all aspects of American life. The Federal Web site, www.disabilityinfo.gov, provides resource information and links to agencies and programs designed to assist citizens with disabilities. Just a sampling of links follow. Comprehensive information about Federal job opportunities can be found at www.usajobs.opm.gov or call 1-478-757-3000/TDD 1-478-744-2299. A free service of the Office of Disability Employment Policy (ODEP) of the U.S. Department of Labor, the Job Accommodation Network available at www.jan.wvu.edu or 1-800-526-7234 (V/TTY), provides information about job accommodations, the Americans with Disabilities Act (ADA), and the employability of people with disabilities. The RESNA Alternative Financing Technical Assistance Project (Agreement No. H224C000200) is funded by the National Institute on Disability and Rehabilitation Research (NIDRR) under Title III of the Assistive Technology Act of 1998. This Web site, www.resna.org/AFTAP/index.html, was developed with grant funds and is designed to assist individuals in receiving loans to ensure they can access assistive technology. The information on these pages does not necessarily reflect the position of NIDRR/U.S. Department of Education or RESNA, and no official endorsement of the materials should be inferred. □