Crossroads
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Introduction

by ***William Stevenson***

In the Autumn of 1994, the first issue of Crossroads explored the relatively new topic of "The Internet." It goes without saying that the last nine years have brought with them a substantial amount of development in Internet technologies, including new protocols and applications. Many of the topics discussed in this issue were not even conceived of back in the "ancient times" of the early 1990s.

Our first article, "Literary Freedom: Project Gutenberg" by Bryan Stroube discusses a goodwill application of the power of the Internet called "Project Gutenberg." Leveraging the ability to store and distribute material on the Internet, Project Gutenberg allows Internet users to download and read a wide collection of books. These books are in the most open standard of all - plain text, meaning that they will always be readable, unlike eBooks stored in proprietary formats.

While the power of the Internet can be used for good, it can also be used for bad, as is highlighted in "Tracing the Development of Denial of Service Attacks: A Corporate Analogy" by Yanet Manzano. Manzano uses the idea of a fledgling corporation whose business model is to inflict Denial of Service (DOS) attacks as a lens through which to examine the various types of DOS attacks in vogue today. Manzano gives interesting insight into the financial impact that these attacks have by following the DOS company

through its development.

Moving away from doom and gloom, Yanru Zhang and Michael Weiss show us that community spirit can be fostered on the Internet in their article "Virtual Communities and Team Formation." Using an example that is likely to be familiar to many of our readers, that of online gaming communities, the authors give a detailed account of the characteristics that make an online community tick. Furthermore, their gaming analogy gives suggestions on establishing codes of conduct to keep the community in order.

Another type of virtual community that the Internet makes possible is that of the virtual classroom. In their article "Using the Web to Enhance and Transform Education," Michael Hulme and Michael Locasto outline the use of the World Wide Web as both an educational tool and an educational forum. No doubt the new decade will see more and more of the educational experience spill over into cyberspace.

In addition to these articles, we had the chance to interview Dr. Stuart Cheshire of Apple Computer. Cheshire is a principal investigator of Rendezvous, Apple's trade-name for ZeroConf, an open standard that allows for the automatic discovery of computers, devices, and services on IP networks. Rendezvous uses industry standard IP protocols to enable devices to find each other transparently, without the need to enter IP addresses or configure DNS servers. Rendezvous is already being used for automatically locating and configuring network printers, setting up multiplayer games, and effortlessly sharing files and resources with Rendezvous-enabled clients on one's local subnet.

We hope that you enjoy our second visit to the Internet, and that you in turn visit us on the Internet at **http://www.acm.org/crossroads** to read additional online-only articles, including "Network Resource Planning" by Beatriz Acosta and Kostas Pentikousis, "Developing Voice Interfaces for Legacy Web Applications" by Jorge Quiané and Jorge Manjarrez, and "Learning to Use Virtual Team Collaboration to Solve Wicked Problems" by Stephanie Cupp, Joel Foreman, S. Gievska-Krliu, and Rachelle S. Heller.

Biography

William Stevenson (**billstevenson@acm.org**, **http://www.billstevenson.org**) is a graduate student at Pennsylvania State University studying to get his PhD in Computer

Science. Bill's main research interests are in the field of high-performance scientific computing. In his spare time, Bill enjoys cooking, the outdoors, and playing with his PowerBook. He has served as Editor in Chief of ACM Crossroads since July 2001.