Program Co-Chairs' Message

Everyone knows that the Internet is experiencing explosive growth. But it is more important to notice that the Internet is also changing from an academic research tool into a ubiquitous platform for education and commerce. Every day, more users become dependent upon Internet services to do their jobs and to carry their data. Every day, more of the data found on the Internet is sensitive data that needs protection. Thus, there is an urgent need to secure the Internet in all of its aspects.

Happily, network security has been studied since before the Internet began. At the same time that computing and communication technology were developed to make the Internet's growth possible, security technology was also being developed. Now, the Internet community is beginning to apply that technology. There is security activity in many places, especially in the Internet Society's Internet Research Task Force (IRTF) and Internet Engineering Task Force (IETF). These activities are incorporating security techniques into Internet protocols and components, and are producing practical implementations of security technology.

Many security tools and systems are already available for use, such as the Kerberos system, the Generic Security Service API, the Privacy-Enhanced Mail system, and security features for Point-to-Point Protocol, Telnet, and Simple Network Management Protocol. Additional security tools are in the works, including security for the underlying Internet Protocol (IP), the File Transfer Protocol (FTP), the Domain Name System, and routing protocols.

Still, there is a much work to be done. The increasingly popular network information discovery and retrieval protocols — such as Gopher, WAIS, and World-Wide Web — need protection. So do protocols for time services, transaction processing, and voice and video conferencing. And, in every case, the security must be made user-friendly and low-cost, or else users will avoid it.

The organizers of this Symposium seek to enable and encourage the Internet community to deploy the available security technology, as well as develop new technology in areas where it is lacking. Hopefully, all protocols and components used in the Internet eventually will include or use suitable security facilities. This will make possible a protected Internet environment that can meet the wide range of security needs found among the diverse, global community of users.

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