# Mapping the Internet:
Pondering and Patrolling Network Perimeters

Bill Cheswick

The Internet Mapping Project was started at Bell Labs by Bill Cheswick and Hal Burch in the summer of 1998. Its long-term goal is to acquire and save Internet topological data over a long period of time. This data has been used in the study of routing problems and changes, distributed denial of service attacks, and graph theory. It also is great for monitoring calamities and making really smashing posters. In the fall of 2000, Ches and Hal moved to Lumeta Corporation, **www.lumeta.com**, a spin-off from Lucent/Bell Labs, where they have expanded and applied their techniques to large corporate networks that rely on perimeter protection as part of their Internet defenses. They attempt to parameterize how well these defenses are working, and what lies behind them. This talk will describe technologies that help scope out the extent of intranets and find perimeter breaks.

Bill Cheswick has worked on (and against) operating system security for over 35 years. After earning a Computer Science degree from Lehigh University, he spent the early part of his career working for Systems and Computer Technology Corp. at various universities (including Temple University, LaSalle College, Harvard Business School, and NJIT), performing system management, software development, communications design and installation, PC evaluations, and other tasks. In 1987 he joined Bell Labs as a Member of Technical Staff and did early work on firewall design and implementation, including the first circuit-level gateway, for which he coined the term "proxy." In 1994, he co-authored the first full book on firewalls and Internet security (*Repelling the Wily Hacker*), which was updated and reissued in 2003, and he has been lauded (by Cliff Stoll) as "one of the seven avatars of the Internet."

Date: Thursday, January 19, 2006, 8:00 pm (Refreshments at 7:30 pm)
Place: Sarnoff Corp., Routes 1 and 571, Princeton, NJ
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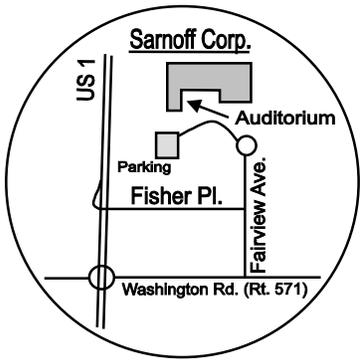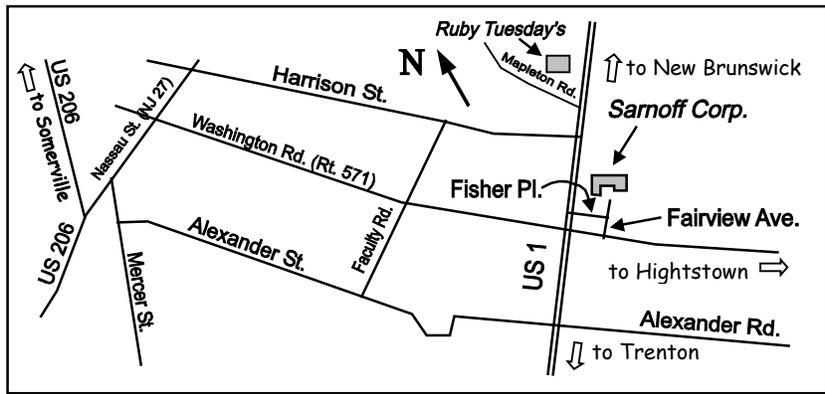
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A pre-meeting dinner with the speaker is held at 6:00 p.m. at Ruby Tuesday's Restaurant on US 1. Please send email to **princetonacm@acm.org** in advance if you plan to attend the dinner.