

Secure Network Tap Apparatus and Software

APPLICATIONS OF TECHNOLOGY:

PROTOTYPE OF BERKELEY LAB'S SECURE TAP



The Berkeley Lab secure tap is a low-cost solution to the increasing need for secure and auditable network tapping.

Secure and auditable tapping of computer networks

ADVANTAGES:

- Enables remote activation and deactivation of tapping function
- Reduces likelihood of unauthorized access to private or sensitive data
- Offers authentication, authorization, and accounting capabilities
- Provides optional functionality for capturing, archiving, and encrypting tapped traffic
- Protects against local tampering
- Can be manufactured from off-the-shelf parts

ABSTRACT:

Michael Bennett and Gregory Bell of Berkeley Lab have invented an inexpensive apparatus that enables secure and auditable tapping of a computer network. The self-contained Berkeley Lab secure network tap will enable corporations, universities, research institutes, and government agencies to maintain optimal security while meeting increasingly strict privacy requirements.

Network taps make it possible to monitor the data on a particular network medium, such as optical fiber or copper cable. In conventional network taps, the monitoring function is always

activated. As a result, conventional taps may permit unauthorized parties to access sensitive data, including personal information or private phone conversations carried over the increasingly popular Voice-over-Internet Protocol (VoIP).

In contrast, the Berkeley Lab secure network tap incorporates a self-contained computer system for enforcing access policies and for regulating activation and deactivation of the tap. The Berkeley Lab invention also includes encrypted log files, optional means for encrypting and storing tapped traffic, and methods for protecting against local tampering.

As cyber attacks become more sophisticated, traditional firewalls are being supplemented by intrusion detection systems, often in conjunction with a system of network taps. At the same time, privacy regulations are becoming more complex and restrictive, driving the need for secure and auditable taps. The Berkeley Lab secure network tap is a low-cost solution to these emerging network security requirements.

STATUS: Patent pending; available for licensing

FOR MORE INFORMATION SEE: <http://www.lbl.gov/Tech-Transfer/>

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