

# Network Abnormal Behavior Analysis System

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**Abstract**— As cyber attacks have increased in recent years, network forensics, which collects and analyzes network packets as well as digital forensics, has been studied. However, high-speed networks such as 1 or 10 Gbps networks have many network flows. For example, a 1 Gbps network has hundreds of millions of network flows per day. Analyzing network traffic in this situation is very difficult and time-consuming. In this paper, we propose a system that can analyze network abnormal behavior quickly and easily. We first propose a system that stores the tcp flag when generating network flows. Second, we present some ways to use the tcp flag in network flows to analyze network anomalies such as persistent outbound connections.

**Keyword**—Network Forensics, Network Flow



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