

SYSTEMS FOR CONTROLLING AND MONITORING INTERNET AND DATA TRAFFIC

The increasing use of the internet as a fundamental work tool has given rise to management problems with organisational and legal implications. Whether it is an ISP – internet service provider – or company providing network services – or firm that uses the internet for its core business, recent norms on security now oblige companies to equip themselves with tools for managing and controlling web traffic.

CSP's applied research has given rise to CIA – Central Intranet Auditor – and SpyNetLog, solutions for monitoring and controlling internet traffic and data developed in line with current legislation regarding the services of ISPs and companies that handle sensitive data.

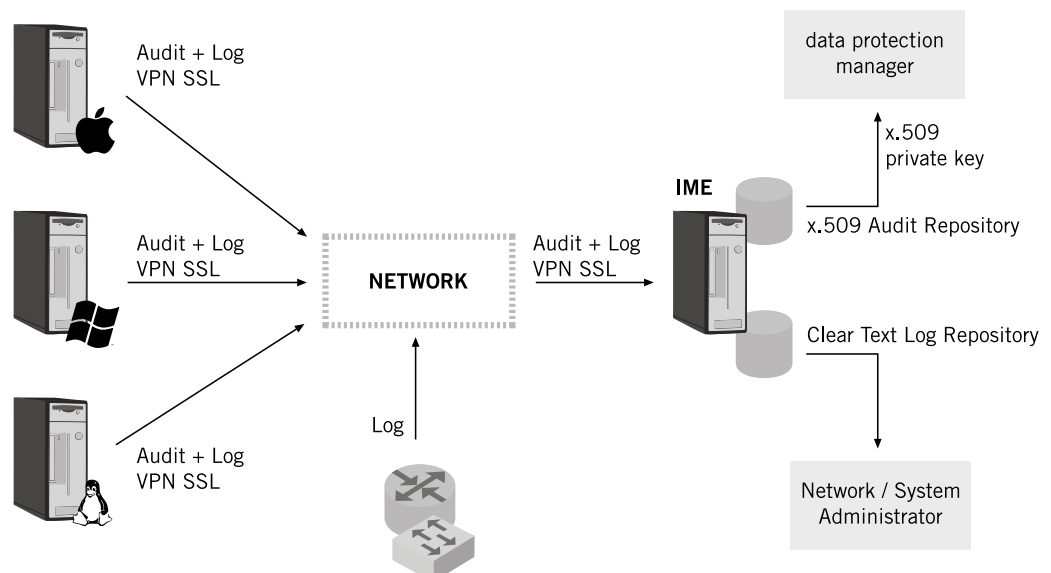
CIA - CENTRAL INTRANET AUDITOR

CIA is a software solution designed to ensure compliance with the rulings issued by the Data Protection Watchdog (Garante Privacy) regarding the logs held by system administrators.

Indeed the ruling of 27 November 2008 regarding "Prescribed measures and precautions for those handling data using electronic instruments regarding the attribution of roles to system administrators" introduces the requirement for companies to keep access logs (audits) for at least six months, in unmodifiable and inalterable archives.

Based on Syslog protocol and compatible with all operating systems, CIA enables all access logs to be archived and managed in specific archives, encrypted with digital certificates, thus guaranteeing and maintaining the inalterability required by law.

CIA function diagram



THE MAIN FUNCTIONS

CIA is structured in two software components, one client-side, namely all the servers on a company network that handle sensitive data, the other server-side.

The system is based on Syslog protocol, which is not native to Microsoft servers. This type of architecture requires the integration of a dedicated client, known as Syslog Agent. CIA is therefore compatible with all types of servers – linux, windows, mac – and intervenes in the phase when access logs are sent to the central system by means of an encrypted connection.

The messages feed into two archives:

- one visible as read-only, for the purposes of debugging and control, by means of a simple web interface accessible to all authorised network administrators;
- one encrypted by means of a digital certificate, which can be visualised by the data protection manager, thus fulfilling the requirement of inalterability of the logs.

SPYNETLOG

SpyNetLog is a software solution that enables companies to monitor the type of web traffic that is generated by a company network towards the internet, archiving the data referring to each single connection.

SpyNetLog therefore enables searches from a source IP to a destination IP address, with a user interface designed to facilitate the work of the network administrator.

The application is designed for ISP and WISP in particular, which are obliged to comply with legal requirements regarding their business activities, and for companies that do not use proxy servers but are interested in monitoring connections for statistical purposes, debug checks, controlling the activity of personnel members, etc.

THE MAIN FUNCTIONS

The system is based on Netflow protocol, which transports the data regarding the IP connections that pass through the border router of the network infrastructure.

Installing SpyNetLog therefore does not entail alterations to existing architecture.

The NetFlow messages are then analysed by the software that, after parsing them, sends them to a local syslog server, making them accessible by means of a simple web interface.

The network administrator can perform search queries for statistical purposes or debugging, visualising the data regarding each single connection as follows:

Protocol: source_ip address:gateway -> destination_ip address: gateway.

The SpyNetLog search interface

COMPATIBILITY WITH OTHER ASSETS

The software applications can be integrated with one another, with I.M.E. (Integrated Monitoring Environment), or with any other monitoring system, or used as stand alone systems.

