PRESS RELEASE

PADIOFIRE: Web 2.0 Firewall Research Project

A Cooperation between GeNUA and the Universities of Cottbus and Erlangen-Nürnberg

Kirchheim near Munich, 16th May 2011. Whilst the number of Web 2.0 Applications is steadily increasing, they are rarely checked for unwanted contents. This is because today's firewalls cannot analyze all protocols – in particular Web 2.0 protocols that are nested within one another in the application layer. It is intended that this vulnerability will be closed by the PADIOFIRE research project, which is being contributed to by GeNUA, a German specialist in IT security. The goal of this project is to develop a new type of firewall for the comprehensive analysis of Web 2.0 applications. Further contributors to this project are the Brandenburg University of Technology Cottbus (BTU) and the Friedrich-Alexander-University of Erlangen-Nürnberg (FAU). The PADIOFIRE project started at the beginning of July and will be supported for two years by the Federal German Ministry of Education and Research.

Firewalls form a fundamental part of every IT security strategy. controlling traffic and blocking unwanted connections at sensitive boundaries such as that between a LAN and the Internet. In addition, high quality firewalls analyze the contents of the application protocols with special software in order to identify and block viruses, spam and other harmful code. However, numerous Web 2.0 services, such as Google Maps, use several protocols, nested within each other in the application layer. The current generation of firewalls is, unfortunately, unable to filter the content of these complex applications. This is where the PADIOFIRE project comes in: the three organizations participating, BTU, FAU and GeNUA, are developing a firewall system that can analyze nested Web 2.0 protocols. An important part of this new system is intelligent load distribution, as the complex analysis has to be distributed over several systems, in order to be able to achieve a high data throughput.

Using Research Results for Product Development

GeNUA is responsible for the asynchronous coupling of the firewall and the analysis mechanisms in the project. The time-consuming analyses need to be coordinated with the other firewall functions, in order to avoid delays and thereby provide a quicker data throughput.

VoIP Security Framework Developed in the SUNsHINE Research Project

GeNUA has actively supported the SUNsHINE research project since May 2011. The project involves the development of a security framework for recognizing and preventing potentially fraudulent attacks centered on the widely used Voice over IP

(VoIP) communication protocol. Also taking part in this project are the University of Duisburg-Essen, Fraunhofer FOKUS and the ISACO GmbH. As firewall specialists, the main interest of GeNUA in this project is the packet analysis of VoIP protocols. The SUNsHINE project will last from May 2011 to April 2013 and is supported by the Federal German Ministry of Education and Research.

About GeNUA

GeNUA, Gesellschaft für Netzwerk- und Unix-Administration, is a specialist in IT security. Their product range includes firewalls, remote maintenance and VPN systems, mobile security solutions, ongoing system management as well as a comprehensive range of related services. The GeNUGate and GeNUScreen firewalls have been certified by the Federal German Office for Information Security (BSI) as meeting the strict level EAL 4+ Common Criteria (CC) requirements. The GeNUGate is equipped with an impenetrable self-protection system and is the only firewall worldwide to be classified as “Highly Resistant”. GeNUA was founded in 1992 and now has over 150 employees at its site in Kirchheim near Munich in Germany. Since its founding, GeNUA has won many customers, in particular from business and public agencies, who have come to rely on the experience and solutions provided by the company.

Further information:

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