Design of High Performance Session Initiation Protocol (SIP) Aware Application Level Gateway

Technology #m06-075

“Lead Inventor: Henning Schulzrinne, Ph.D.

Session Initiation Protocol (SIP) Based Systems Require High Speed SIP Packet Processing Session Initiation Protocol (SIP) based systems being increasingly deployed by carriers. It is imperative that the deployed system can process SIP packets at very high speeds so that they are not easily overwhelmed by a denial-of-service (DoS) attack.

SIP Packets Processed at High Speeds for Carrier Grade SIP Servers and Firewalls The technology proposes a novel architecture for processing SIP packets at very high speeds. It uses Columbia’s high performance SIP proxy server along with a fast packet processing application server. The SIP server instructs the packet processing server to open specific ports for media sessions that were established using SIP. The system can support up to 60 thousand concurrent VoIP calls.

Applications:
• Carrier grade SIP servers and firewalls

Advantages:
• SIP proxy server and packet processing application server are decoupled: this allows adding new features to each server without affecting the other

Patent Status: Copyright

Licensing Status: Available for Licensing and Sponsored Research Support

Inventors

Henning Schulzrinne