Policy Based Security Management for IPSec

Luis A. Sanchez August 25, 1998

Outline

- **Problems**
- **■** Requirements
- A Solution
- Next Step

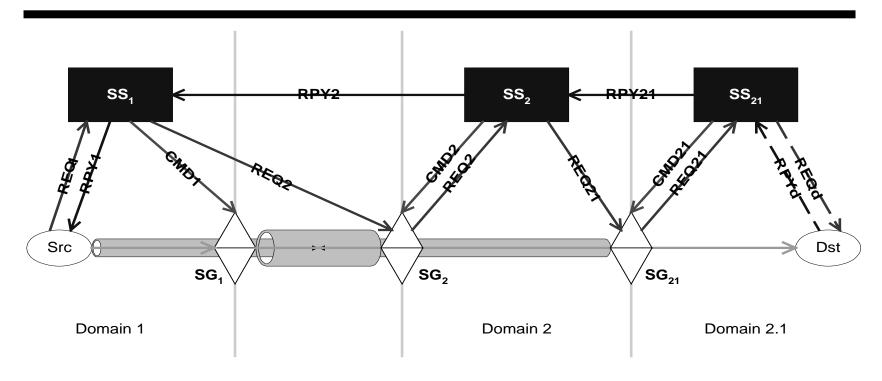
Problems

- Need a common security policy specification language
- Need to specify enforcement points for each policy
- **■** Discovery of security gateways
- Resolution of security requirements for interdomain communication
- **■** Consistency checking of local security policies
- Management of dynamic security associations

Requirements

- **■** Support for complex topologies
 - **♦** multiple embedded tunnels
- **■** Support for legacy systems
 - **♦ non IPSec compliant**
- Scalable and deployable incrementally
- **■** Independence of protocol suite, KMP
- NAT Friendly
- **■** Graceful failure

A Solution



Security Policy Negotiation Protocol (SPP) Message Flow

Legend

SPP Messages

- REQ#: SPP-Request
- RPY#: SPP-Reply
- CMD#: SPP-Policy

Functions

- provides server and security services discovery
- domain based policy resolution
- enforcement point selection
- security association bundle management

Next Step

- Code Release: Pre-Alpha by End of Sept. 1998
- 2 Internet-Drafts underway:
 - **♦** Security Policy Specification Language
 - **♦** Security Policy System (policy exchange and resolution protocol)
- Request feedback from Community and vendors in general
- any questions:
 - ♦ lsanchez@bbn.com