Policy Based Security Management for IPSec

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Outline

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

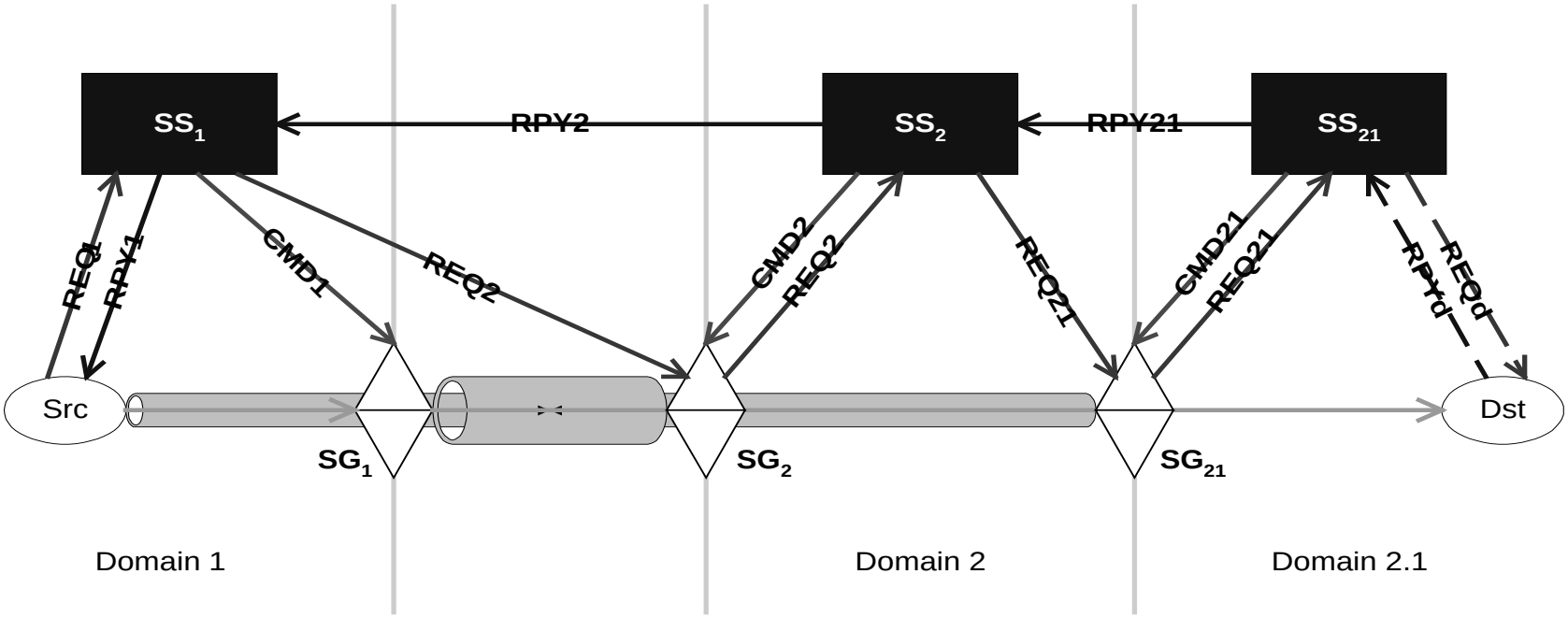
Problems

- Need a common security policy specification language
- Need to specify enforcement points for each policy
- Discovery of security gateways
- Resolution of security requirements for inter-domain 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:**
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