Security Policy

IETF-109

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Overview

- BPSec represents security operations as extension blocks in a bundle
- The lifecycle of an extension block is:
  - A series of events
  - Finite and unchanging
- The reaction to these events can make or break end-to-end security
  - Consistent reactions to events enable end-to-end security
  - Inconsistent reactions to events disable end-to-end security
- There is value in documenting these events and possible reactions to the events

Interoperability Enabled by Security Policy

Syntactic Interoperability

- Enabled by:
  - Security protocols
  - Cipher suites
- Required to:
  - Parse/decode network information
  - Generate cryptographic material

BPSec establishes a security context

Semantic Interoperability

Policy required to process security services

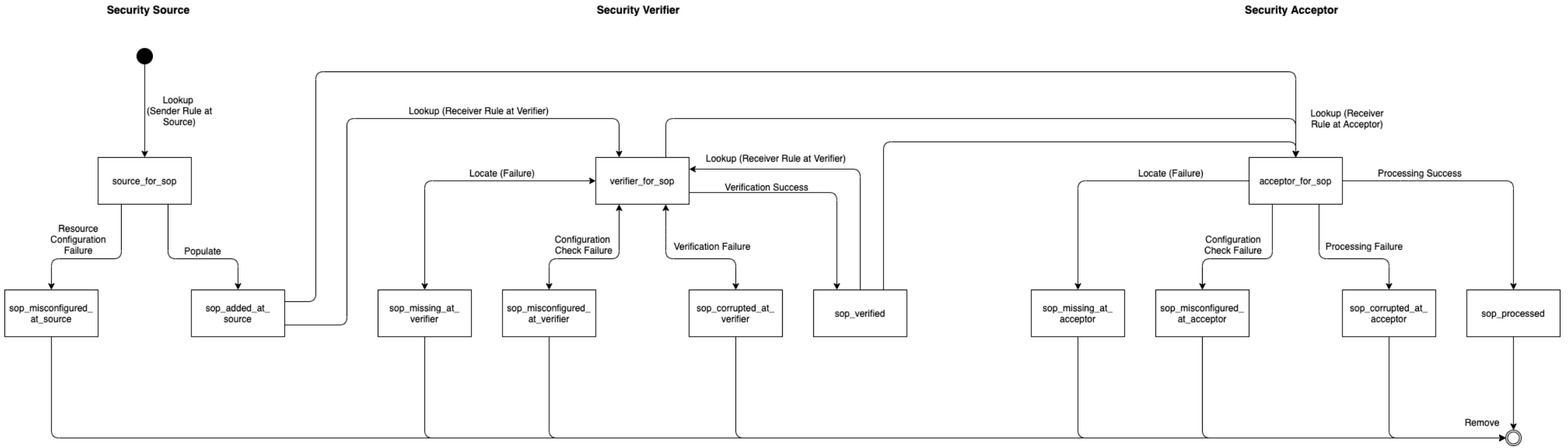
- Enabled by:
  - Security policy
  - Actions associated with policy
- Required to:
  - Provide coherent, consistent reactions to security events
  - Process security services

Defining Security Policy

- Security policy is the set of configurable reactions for a security operation event
  - Consistent behavior in response to security events
  - Context necessary for processing security
  - Identification of required security operation(s)
- Consistent behavior requires coherent action in response to events

Security policy provides a configurable reaction to events

Security Operation Lifecycle



Security operation events are universal policy points

Proposed Action

- The security operation lifecycle is a series of events which are **finite** and **unchanging**
- Propose documenting this lifecycle for BPSec
- Provide a common language which enables the discussion and definition of policy among different BPSec implementations