

# SIP Session Policies

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# New Draft Structure

- Session Policy Framework Draft
  - Session-specific and session-independent policies.
  - Model, overall architecture and protocol components.
  - Merges:
    - draft-hilt-sipping-session-spec-policy-03
    - (Parts of) draft-ietf-sipping-session-indep-policy-03
- Event Package for Session-Specific Policies Draft
  - Mechanism for subscribing to session-specific policies.
- Media Policy Data Set Draft
  - XML format for media policies.
  - Replaces (parts of):
    - draft-ietf-sipping-session-indep-policy-03

# Media Policy Data Set Draft

draft-ietf-sipping-media-policy-dataset-00

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# Status & Changes

- Few changes/additions to the XML format.
- Draft is stable with dependencies on UA profile data set framework.
  - XML schema structure.
  - Common attributes.

# Changes to Media Policy Format

- `<codec>`
  - New sub elements `<mime-type>` and `<mime-parameter>`
  - Defines codecs more precisely than using the codec name only.
  - Mirrors the MIME type definition.
    - Example: `<mime-type>audio/PCMA</mime-type>`
- `<media-intermediaries>`
  - Individual sub elements for each intermediary type.
    - `<configured-intermediary>`, `<turn-intermediary>`, `<ipinip-intermediary>`, `<iploose-intermediary>`,...
  - Elements for intermediaries can define their own sub elements.
    - Example: credentials for TURN servers.
  - More extensible and flexible than previous approach.
- `<local-ports>`
  - Specifies a range of local ports a UA should use for media.

# Session Policy Framework Draft

draft-hilt-sipping-session-policy-framework-00

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# Status & Changes

- Merged
  - draft-hilt-sipping-session-spec-policy-03
  - Parts of draft-ietf-sipping-session-indep-policy-03
- Added model descriptions and clarifications.
- Reference to session-specific policy event package as the policy channel protocol.

# Event Package for Session-Specific Policies

draft-hilt-sipping-policy-package-00

Volker Hilt

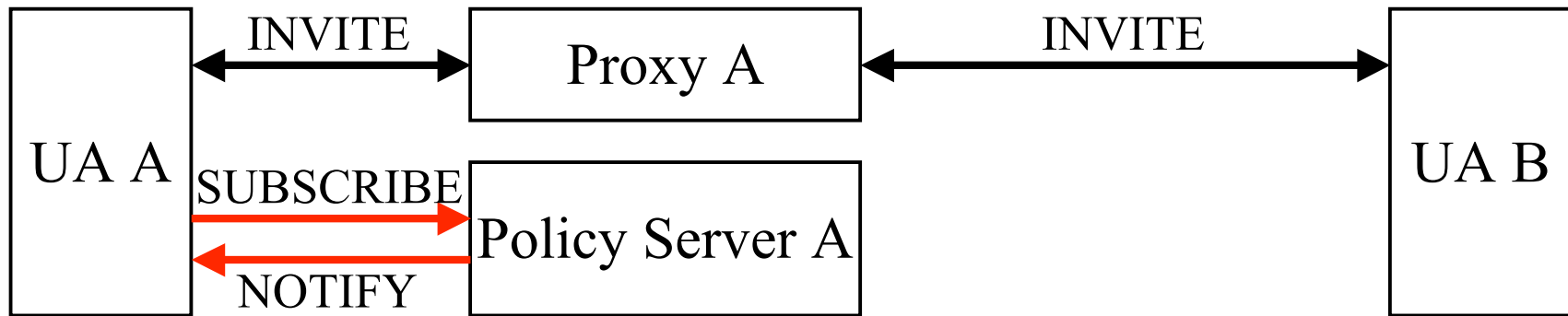
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# Session-Specific Policies



- Session policy framework draft defines a mechanism for discovering policy server URIs in INVITE transactions.
- This draft defines an event package for subscriptions to session-specific policies.

# Model

- Steps in setting up session-specific policies:
  1. UA submits a session description to the policy server and asks if this session is permissible.
  2. Policy server creates a policy decision for this session and returns it to the UA.
  3. UA applies the policy decision.
  4. Policy server updates the policy decision if necessary.
- Possible policy decisions:
  - a) Reject the session.
  - b) Propose changes with which the session is acceptable.
  - c) Accept the session as proposed.

# Event Package Definition (1)

- UA subscribes to session-specific policies.
  - Session description is submitted in the SUBSCRIBE body.
- The notifier (policy server) uses the body to generate the resource (policy decision) the subscription is for.
  - Policy decisions are generated on the fly based on the session description and potentially other information.
  - Policy decisions are maintained by the policy server.
  - Changes in the policy decision trigger a NOTIFY.
- SUBSCRIBE body format: application/sdp
- UA may submit local and remote session description.
  - New content disposition type identifies "local-description" and "remote-description".

# Event Package Definition (2)

- The policy server returns the policy decision via a NOTIFY.
- The policy decision consists of a (possibly modified) version of the submitted SDP announcements.
  - Returned SDP announcement reflect the current policies.
  - Can directly be used by the UA to set up a session.
  - Example: G.711 is disallowed by removing it from the SDP announcement returned in the NOTIFY.
- An unmodified announcement accepts a session.
- An empty body rejects a session.
- NOTIFY body format: application/sdp

# Open Issues

- SUBSCRIBE/NOTIFY mechanism?
- Which format for policy decisions?
  - SDP, patch to SDP or XML policy format
- Security Model
  - Prevent submission of illegal policies to the UA.
  - Prevent illegal downloads of policies from the policy server.
  - Mutual authentication needed.