DS-Lite Open Issues

draft-dupont-pcp-dslite-01
(draft-ietf-v6ops-6204bis-08)

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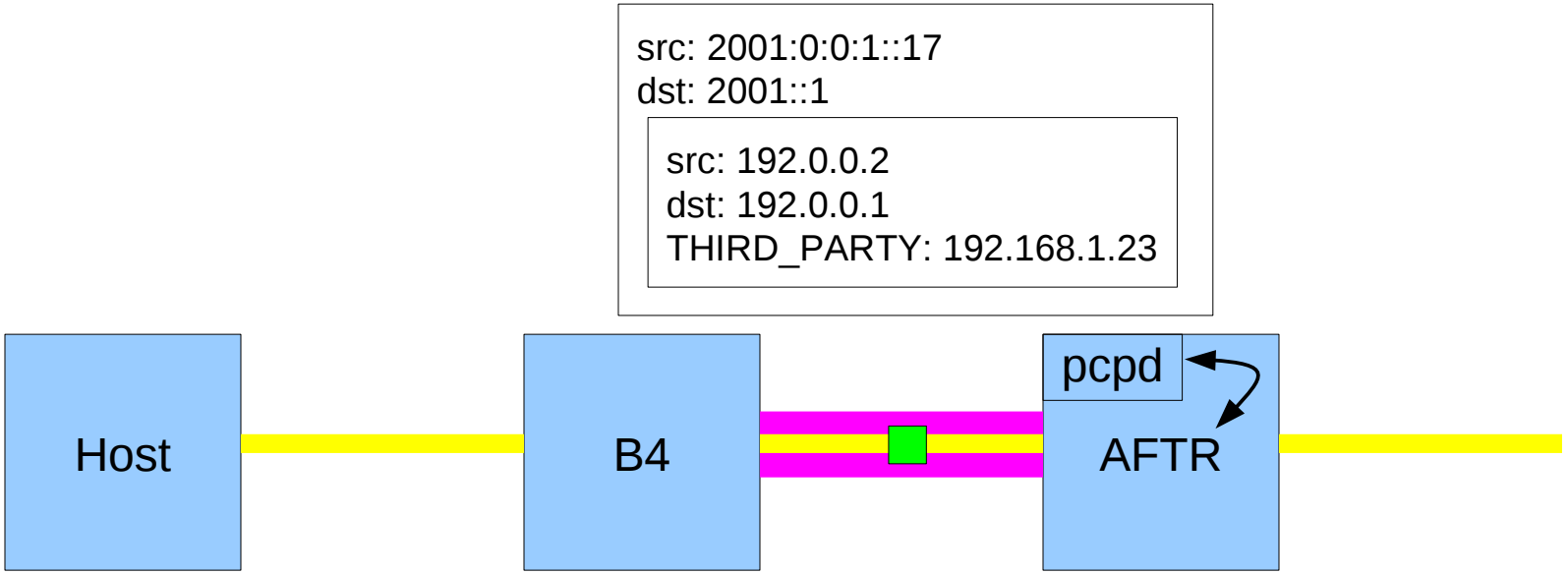
Encapsulation mode



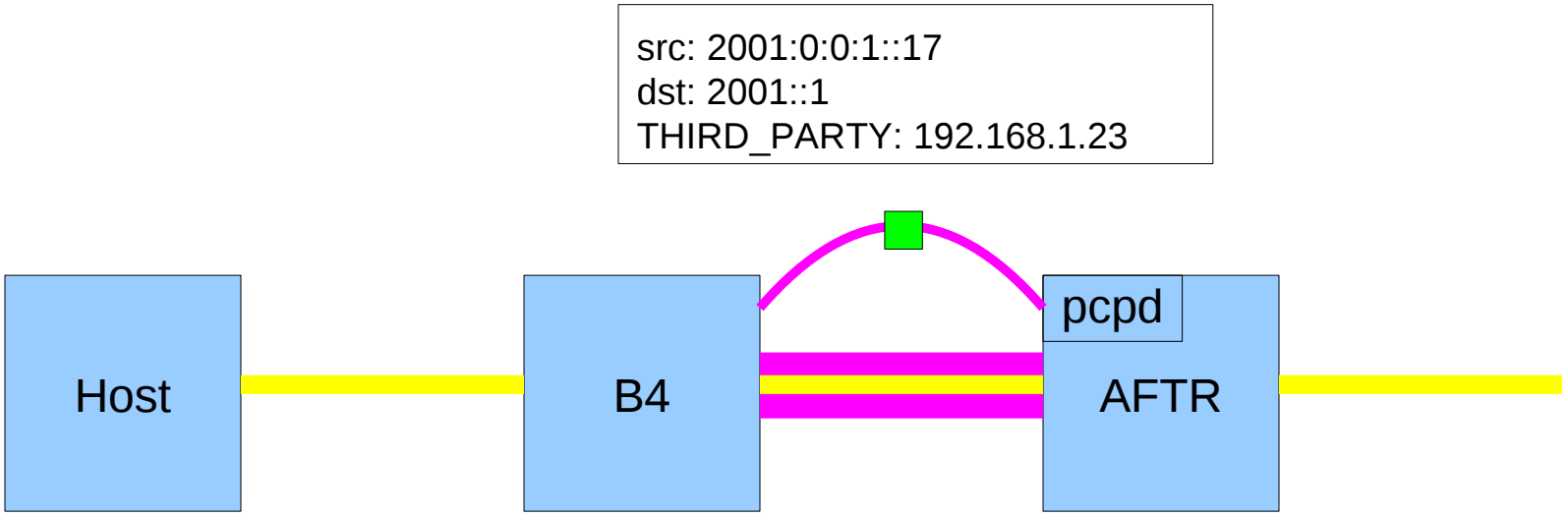
Pro:

- Works equally well for host-initiated and B4-initiated requests

Con:

- More processing on the server side ("ALG" for local delivery)
- Client could bypass local security policy

Plain IPv6 mode



Pro:

- Less processing on the server side (no ALG)

Con:

- Only works with B4-initiated requests (proxy or IWF)

Security Considerations

- If the host can initiate requests directly to the server, the B4 can't apply local security policy.
  - But the host can do that anyway, unless the B4 wants to inspect every packet before encapsulating it.
- Easier to enforce security policy on the server side - e.g. ACL only 192.0.0.0/29, if that's what you want to do.

Discovery

- 6204bis requirement W-7 (unpublished -08):

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W-7:  In DS-Lite context, if PCP messages are exchanged using native
      IPv6 (i.e., IPv4-in-IPv6 is not used) and no PCP server is
      configured, the PCP client MUST use the address of the AFTR as
      its PCP server.
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- See pcp-base-24 section 8.1
  - For encapsulation mode, 192.0.0.1 can be considered the configured address
  - For plain mode, the AFTR tunnel endpoint address can be considered the default router address
- Recommendation: v6ops should remove this
  - Also remove from draft-dupont-pcp-dslite?

Discuss.