YANG Data Model for DHCPv6 Configuration

draft-cui-dhc-dhcpv6-yang-01

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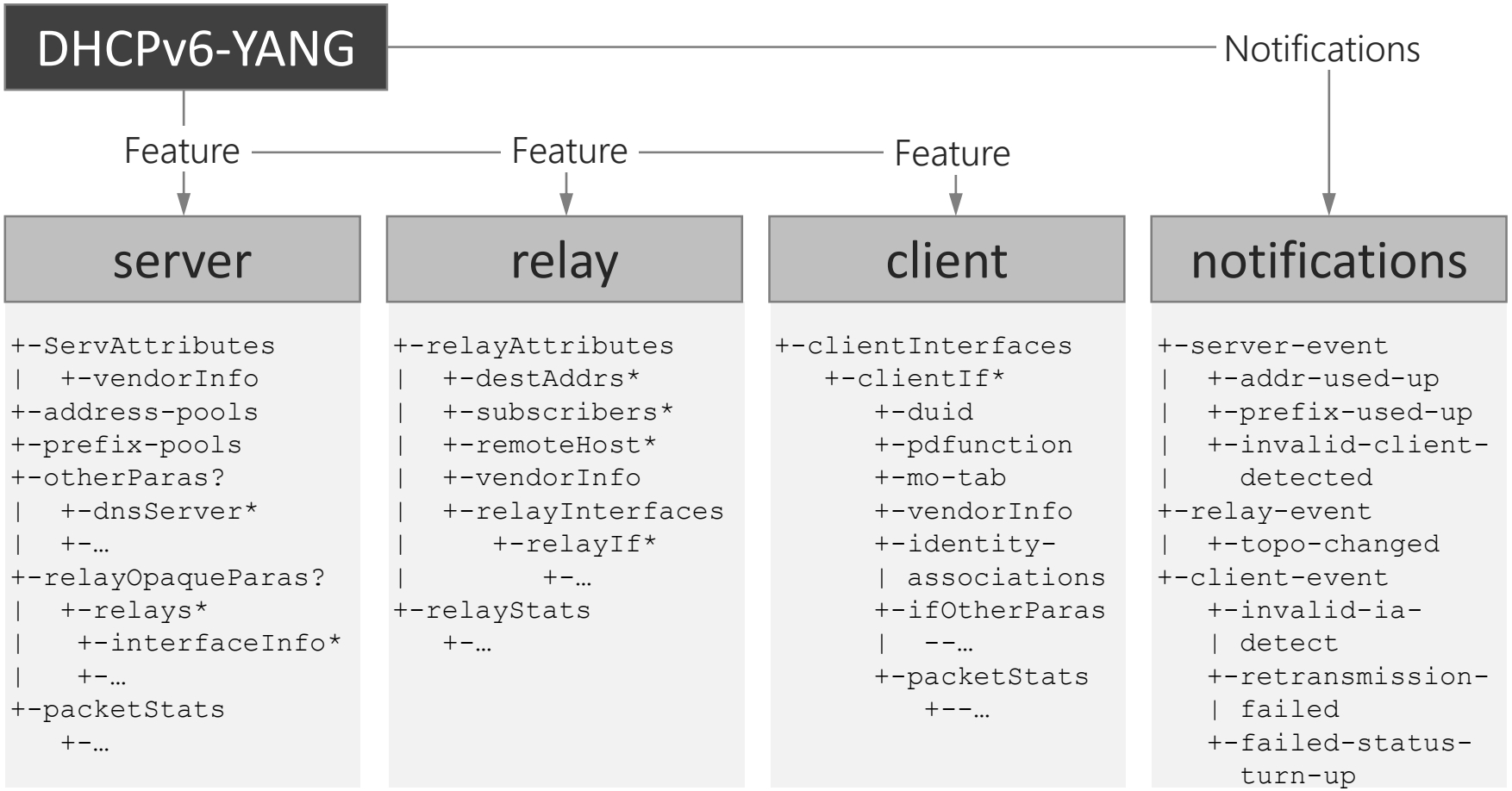
Motivation

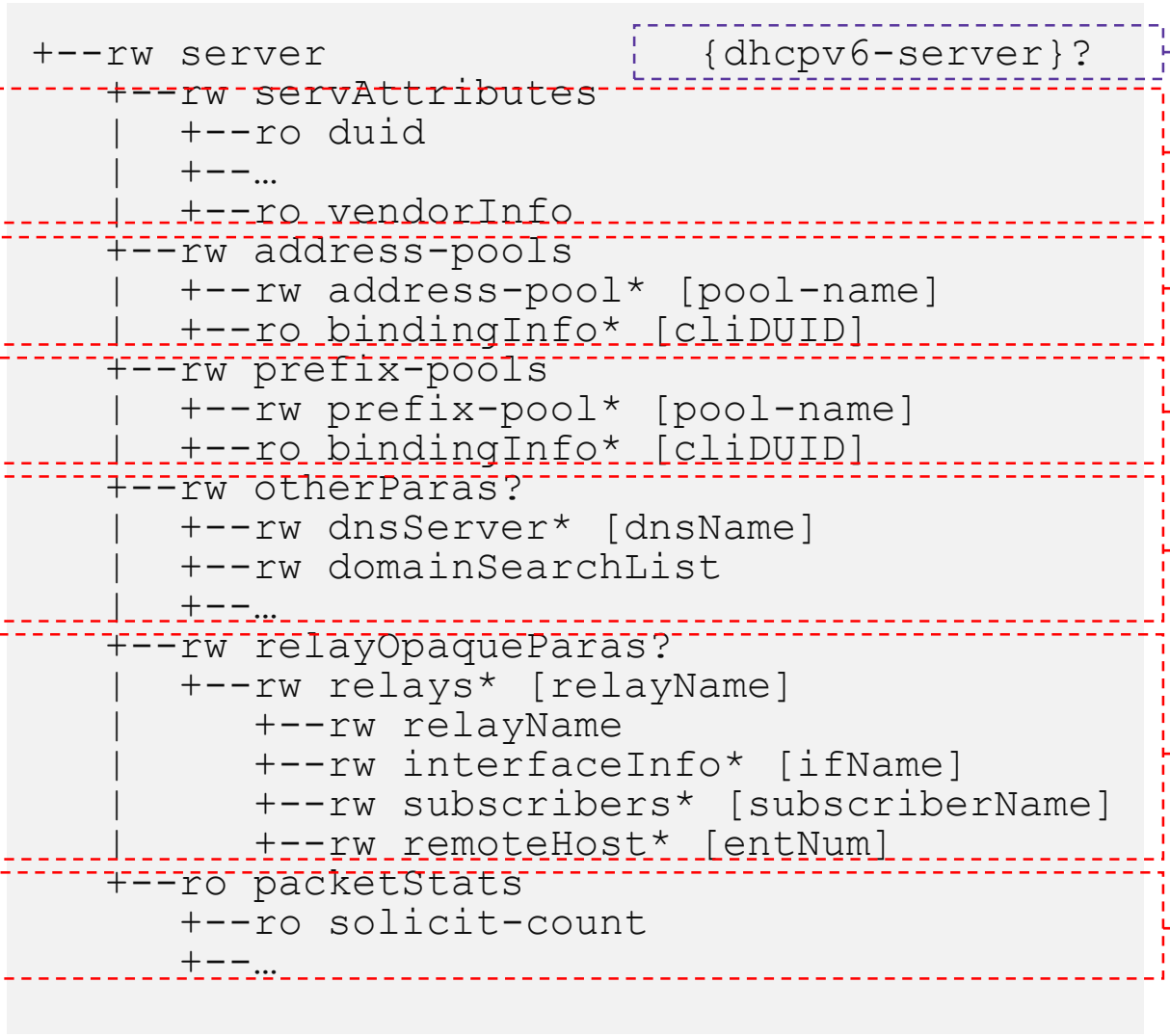
- To provide a unified method to configure DHCPv6 servers, relay agents and clients.
- Better for ISP to configure and manage various DHCPv6 entities in a vendor-neutral way.

Model Structure



- Brief nodes of the YANG model, details in the end.

DHCPv6 Server Sub-Model



Feature

Basic attributes of a DHCPv6 server, such as duid, name, vendor information…

Describe the DHCPv6 server's address pools.

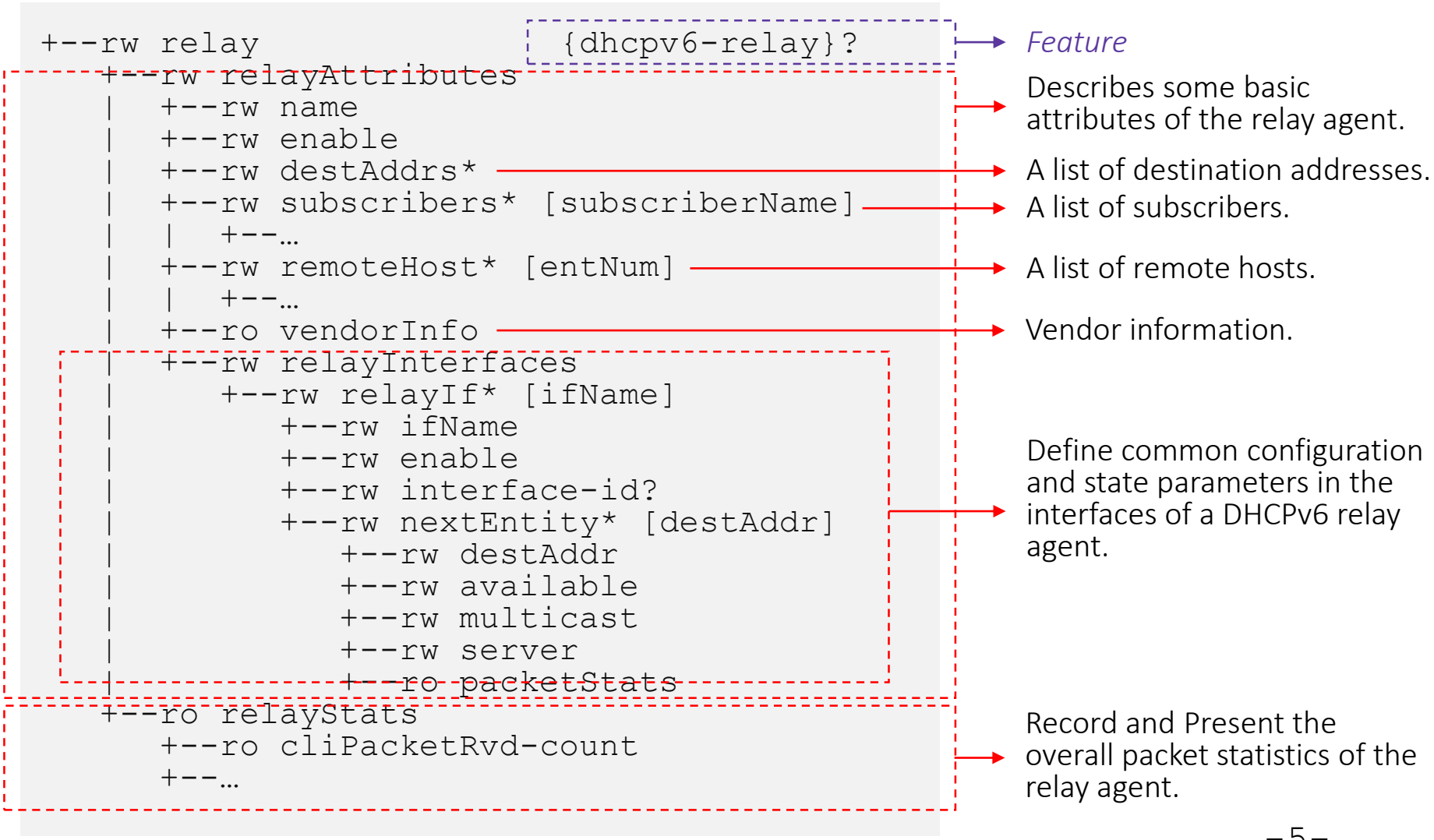
Define the delegating router's prefix pools (If server support PD function).

Define extra configuration parameters provided by the DHCPv6 server.

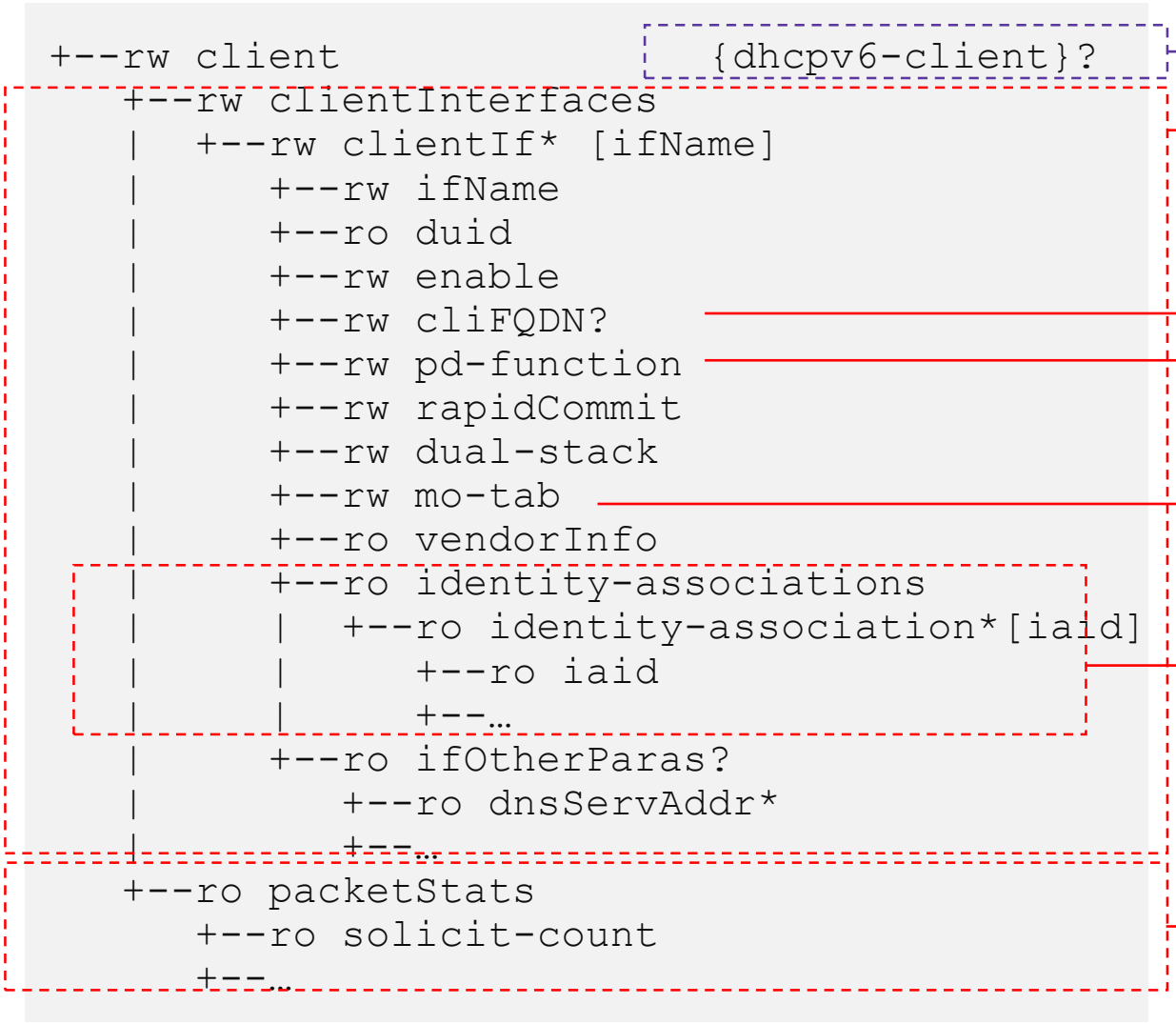
Contain some opaque values in Relay Agent options that need to be configured on the server side only for value match.

Present the packet statistics related to the DHCPv6 server.

DHCPv6 Relay Sub-Model



DHCPv6 Client Sub-Model



Feature

Include configuration and state data of a DHCPv6 client in a per-interface manner.

Fully Qualified Domain Name

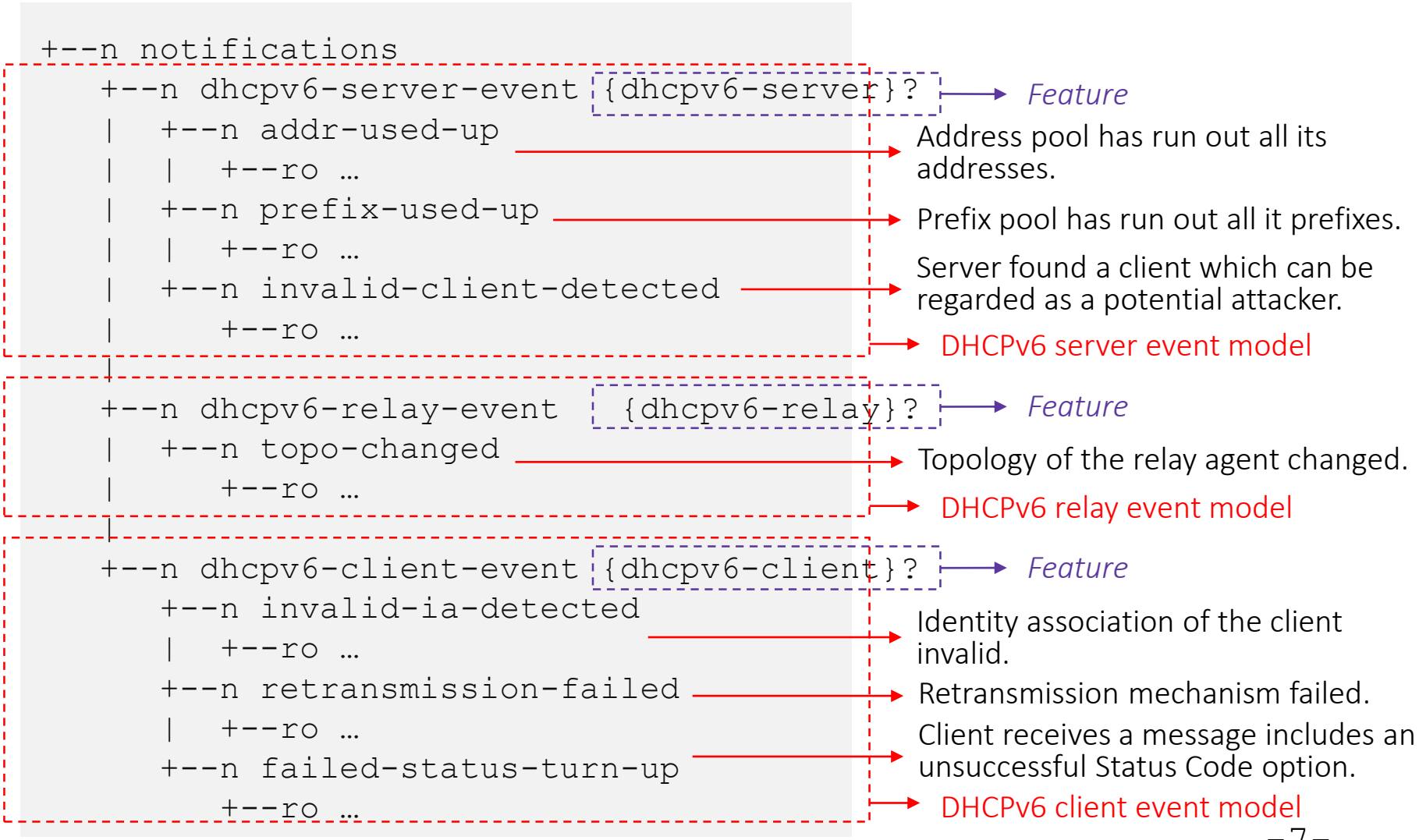
Client can act as a requesting router to request prefixes using prefix delegation.

Indicate the operation mode of the DHCPv6 client.

IA is a construct through which a server and a client can identify, group, and manage a set of related IPv6 addresses.

Record all the packet status information of a specific interface.

DHCPv6 Notifications Sub-Model



Next Steps

- Update the tree diagrams with comments.
- Welcome your advise?
- Move forward in the WG?