

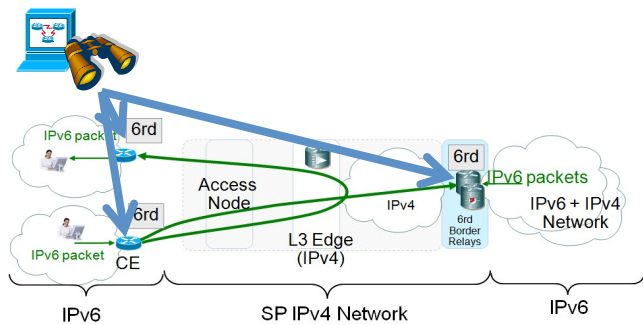
Definitions of Managed Objects for 6rd

draft-cai-softwire-6rd-mib-01

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Abstract

- This draft definition of MIB for 6rd devices.
- 6rd is stateless tunnel technologies, therefore IP-MIB(RFC4293) and IP-FORWARD-MIB (RFC4292) are useful for device and traffic monitoring purpose.
- IP TUNNEL MIB(RFC4087) provides tunnel provisioning capability by SNMP.

6rd[rfc5969] Parameter

- parameter to provisioning 6rd devices

1. for CE

- tunnel type
- BR address
- IPv4MaskLen
- 6rdPrefixLen
- 6rdPrefix
- tunnel source

2. For BR

- tunnel type= 6rd
- IPv4MaskLen
- 6rdPrefixLen
- 6rdPrefix
- tunnel source

existing IP Tunnel MIB[RFC4087] parameter

- **tunnelfEncapsMethod =>6rd**
- tunnelfHopLimit
- tunnelfSecurity
- tunnelfTOS
- tunnelfFlowLabel
- tunnelfAddressType
- **tunnelfLocalIpAddress =>tunnel source**
- **tunnelfRemoteIpAddress =>BR address for CE?**
- tunnelfEncapsLimit

Need new definition for **IPv4MaskLen/6rdPrefixLen/6rdPrefix**

solution for 6rd MIB

- the draft describes 2 approach

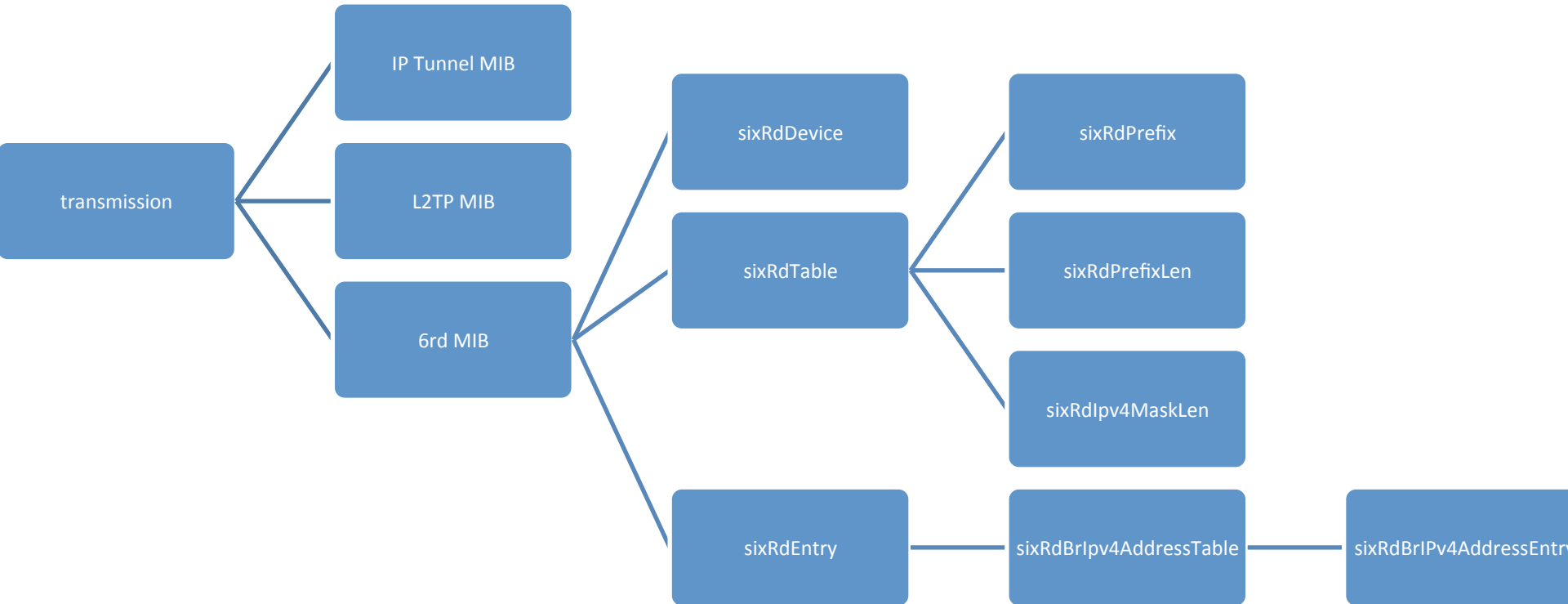
1. sixRdMIB

New MIB create like a L2TP MIB[RFC3371]
sixRdMIB under the "transmission" subtree.

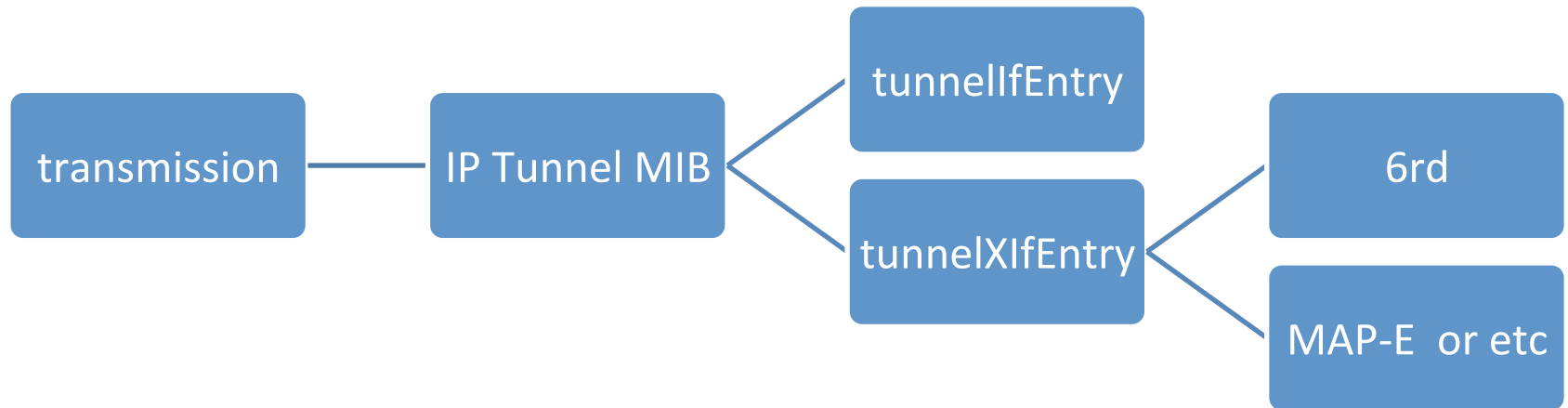
2. "tunnellfXTable"

extended tunnelfTable of IP Tunnel MIB[RFC4087]
with additional tunnel type [like 6rd and MAP-E]

sixRdMIB



tunnelfXTable



security consideration

- This document does not introduce any new security concern in addition to what is discussed in Section 6 of [RFC4087].

appendix.

history of IP Tunnel MIB

- rfc2667 for only over IPv4 network
- rfc4087 for over IPv4 and IPv6 networks

Question

- Which is better approach for 6rd mib?
 - create new 6rd MIB
 - extended / obsolete IP Tunnel MIB