Protocol Independent Data Models

Sue Hares

Protocol Independent Topologies

Abstract topology		

L1 topology	L2- topology	L3 topology	PBR Topology	TE Topology	Service topology
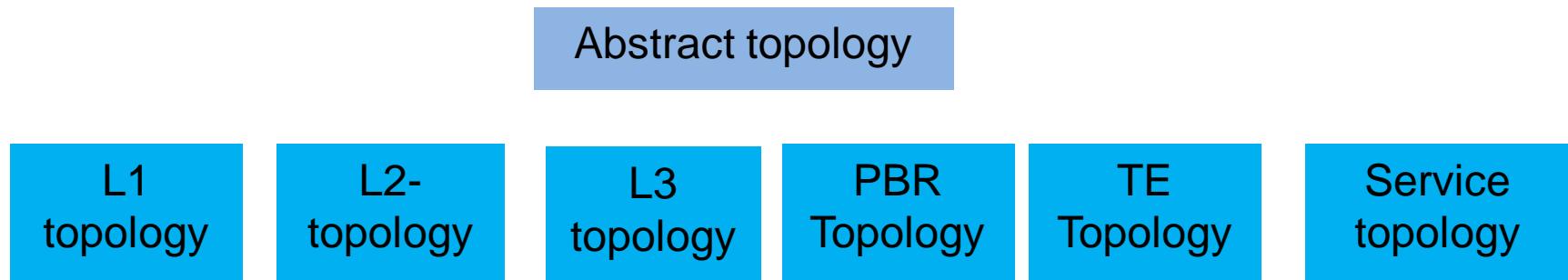
- ″ draft-sraft-clemm-i2rs-yang-network-topo-02
- ″ draft-clemm-i2rs-yang-network-topo
- ″ draft-clemm-i2rs-yang-l3-topo
- ″ draft-liu-yang-abstract-te-topo
- ″ draft-dong-i2rs-l2-network-topology

Protocol Dependent Topologies

Protocol

L1 topology	L2 Protocols	L3 Protocols	App Protocols
	TRILL topologies	ISIS topologies	ALTO
	802.1 topologies	BGP topologies	
	802.11 topologies	OSPF topologies	
	802.15 topologies	SPRING topologies	
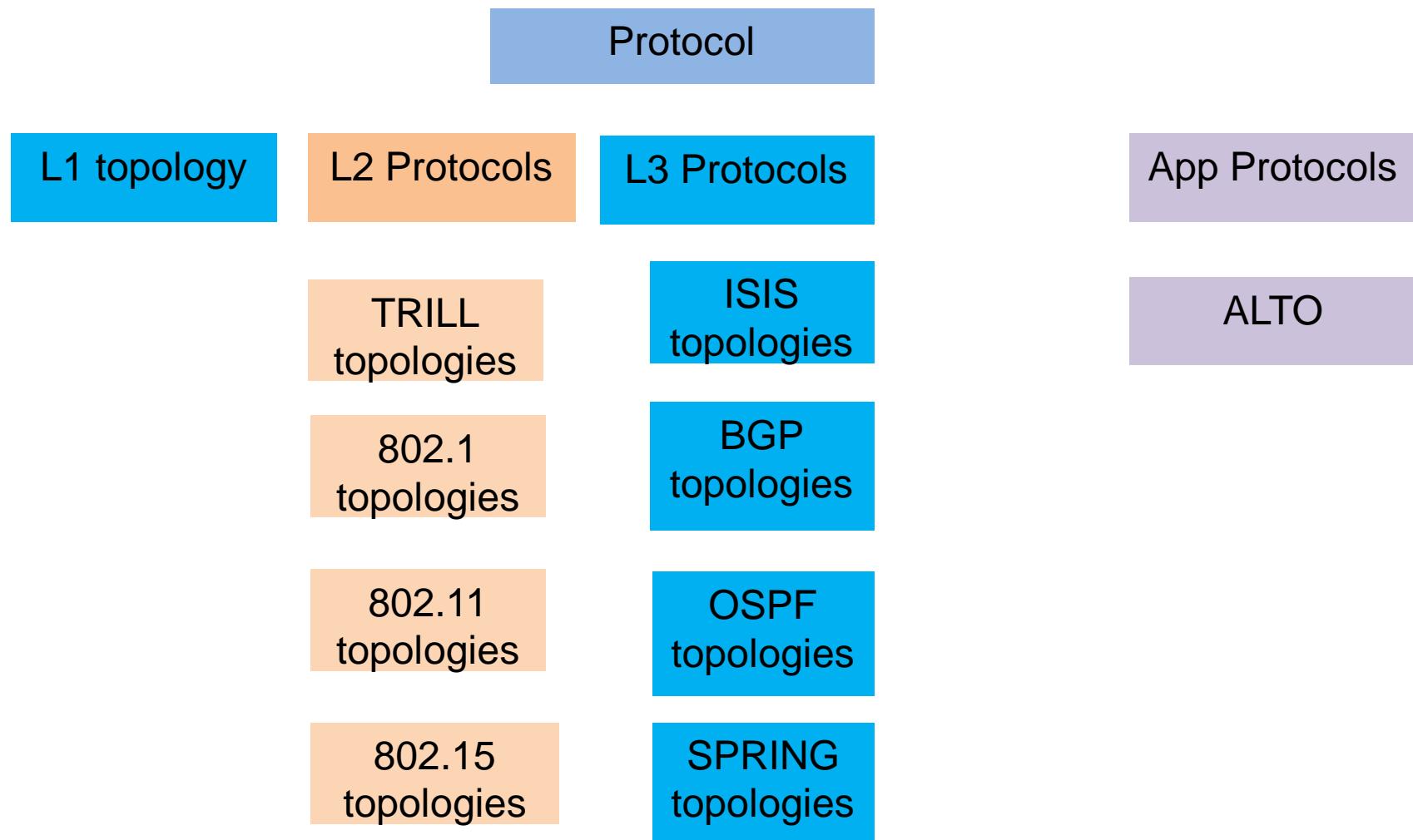
PRB

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Brocade], Qin Wu (Huawei),
Dean Bogdanovic (Juniper)

Protocol Dependent Topologies

Routing_instance

| Interface list | PBR_RIB* List | PBR Default RIB |

PBR Policy Set

BNP Policy Group

BNP Policy Rule
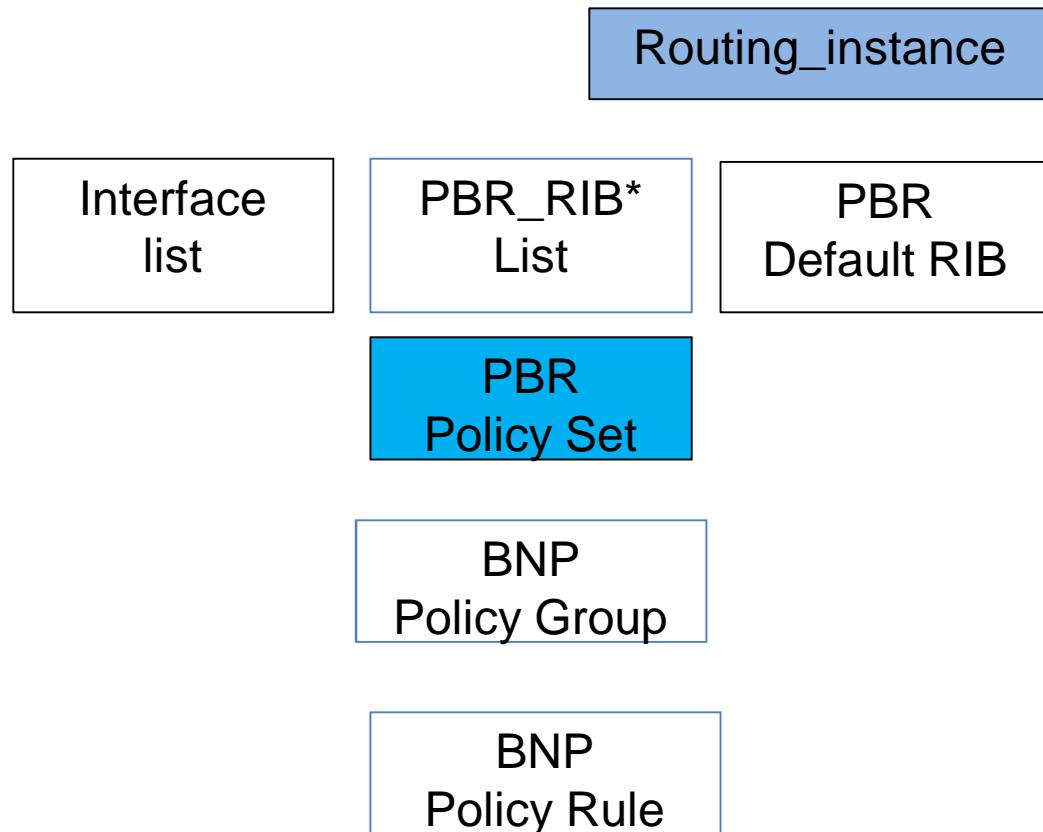
Top-level yang diagram for PBR

```
module: PBR
    +--PRB-RIB-module
       +--rw pbr-instance-name
       +--rw pbr-router-id uint32
        +--rw pbr-interface*
        |    +--rw pbr-interface interface-ref-id
       +--rw PBR-Default-RIB
       +--rw PBR-RIB
          +--rw PBR-RIB-Name
          +--rw PBR-RIB-AFI
           +--rw PBR-RIB-intf*
           +--rw PBR-status-info
           | +--rw pbr-update-ref uint64
        +--rw PBR-Ordered-Route-Policy
           +--rw pbr-group-policy* [group-pplicy-ref]
              ….
           +--rw probr-policy-set [policy-set-name]
```

```
+--rw pbr-group-policy* [group-policy-ref]
| +--rw group-policy-ref uint16
  | +--rw group-policy-name string
  | +--ro group-policy-status-info
  | | +--ro group-policy-status
  | | +--ro group-policy-inactive-reason
  | +--rw policy-rule* [policy-rule-ref]
  | | +--rw policy-rule-ref
  | | +--ro policy-rule-status-info
  | | | +--ro policy-rule-status enumeration
  | | | +--ro policy-rule-inactive-reason
  | | +--rw pbr-match-filter* [nr-policy-match]
  | | | +--rw pbr-match-term
  | | | | +--rw pbr-match-condition
  | | | | | +--rw nr-policy-match
  | | | | | +--rw pbr-ipv4-matches
  | | | | | +--rw pbr-ipv6-matches
  | | | | | +--rw pbr-transport-matches
  | | | | |  +--rw pbr-combo-operator
  | | | | +--rw pbr-rule-action
  | | | | +--rw pbr-forwarding action

+--rw prb-rule-action
| +--rw pbr-QOS-acts [nbr-act]
| +--rw npbr-act
|  +--rw set-in-ipv4-packet
|  +--rw set-in-ipv6-packet
|  +--rw set-vendor

+--rw pbr-forwarding-actions
|  +--rw pbr-std-fwd enumeration
|  +--rw pbr-vendor-fw enumeration
```