Basic Network Policy

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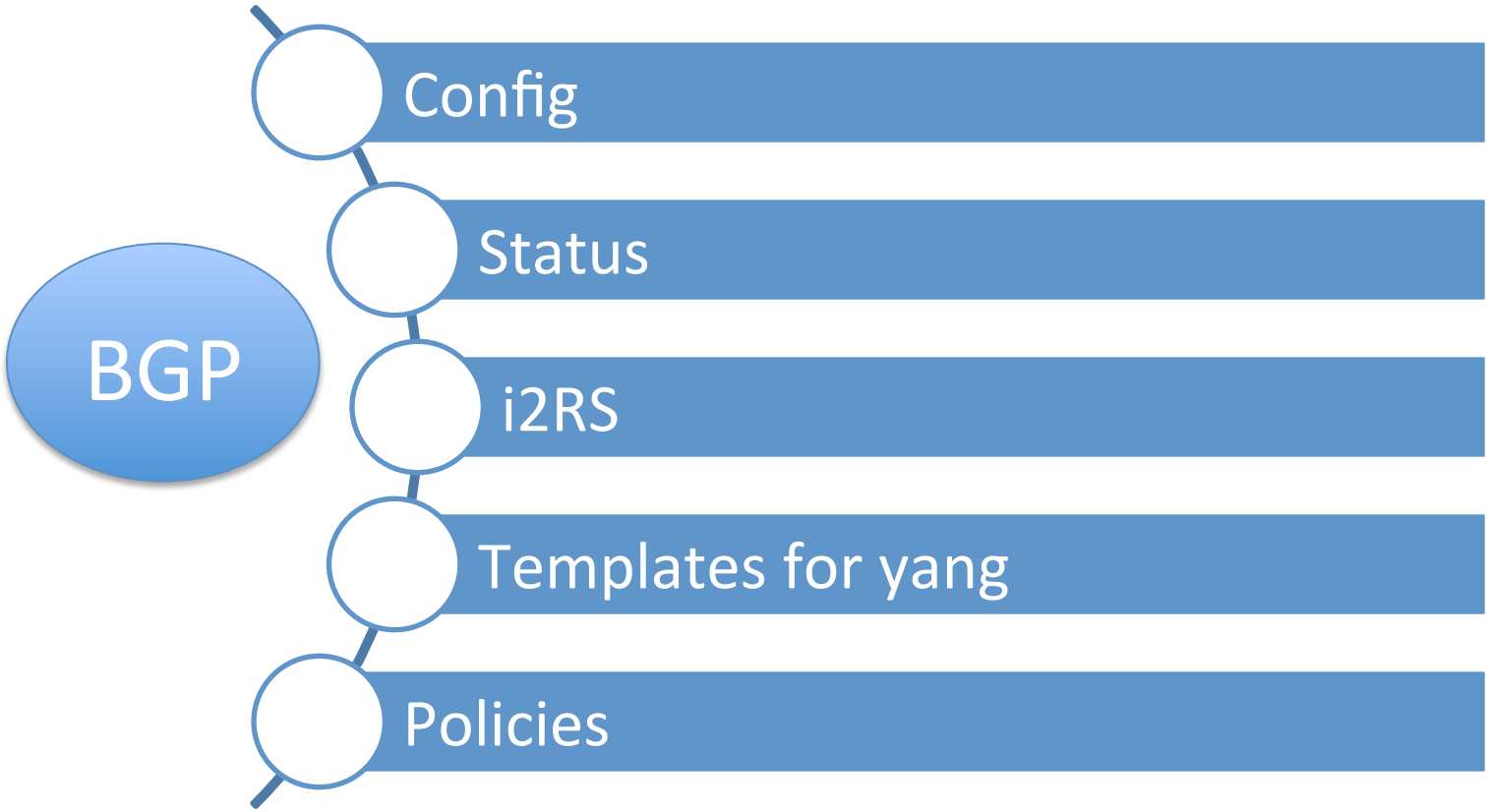
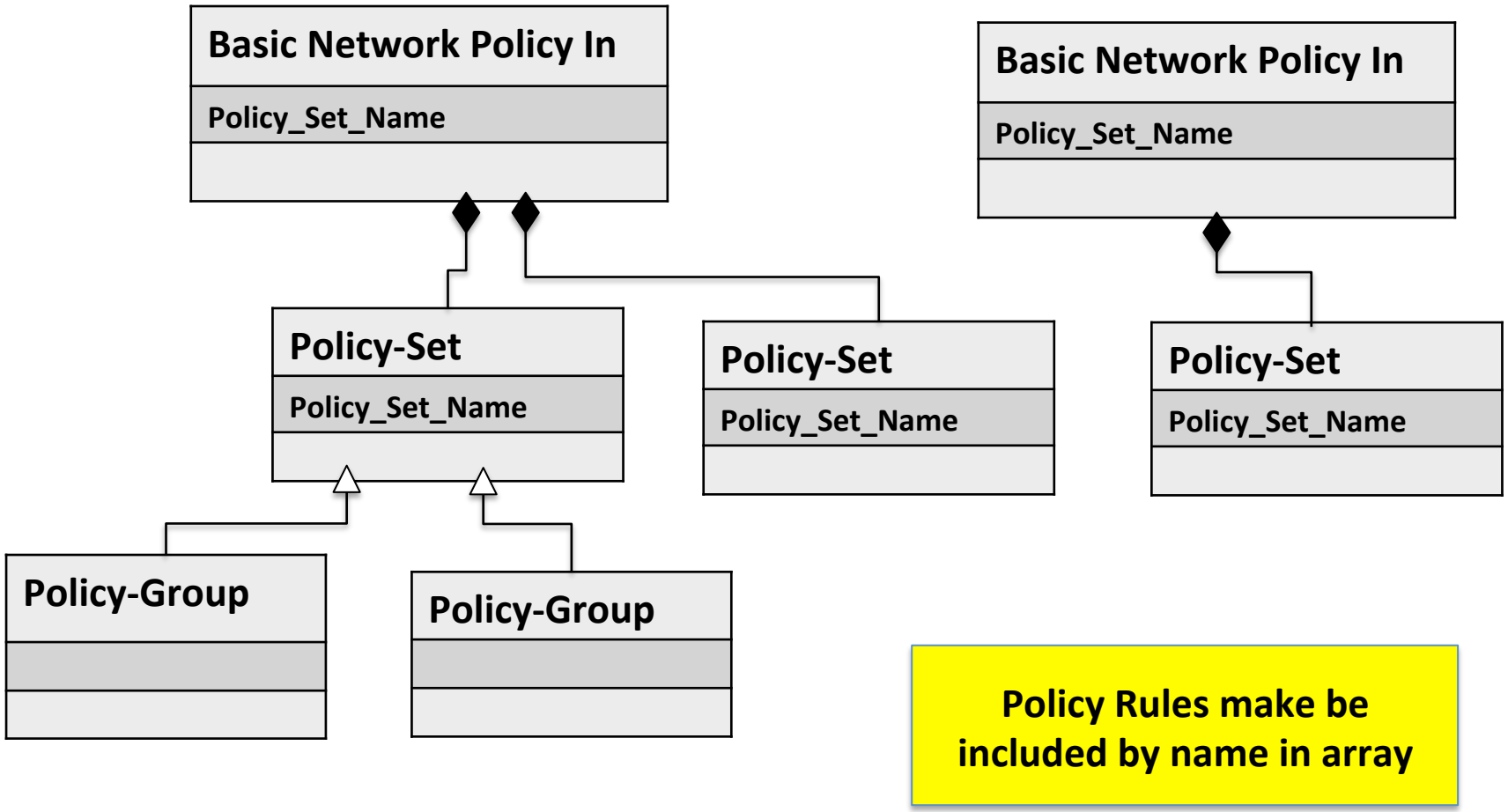
Basic Network Policy

- Sets of Policy used by
  - Policy-Based Routing (PBR) IM
  - I2RS Local Policy (LP) IM
  - BGP IM
  - Traffic Steering Model
  - SFC Model
- No templates in netmod work
  - Wish there were

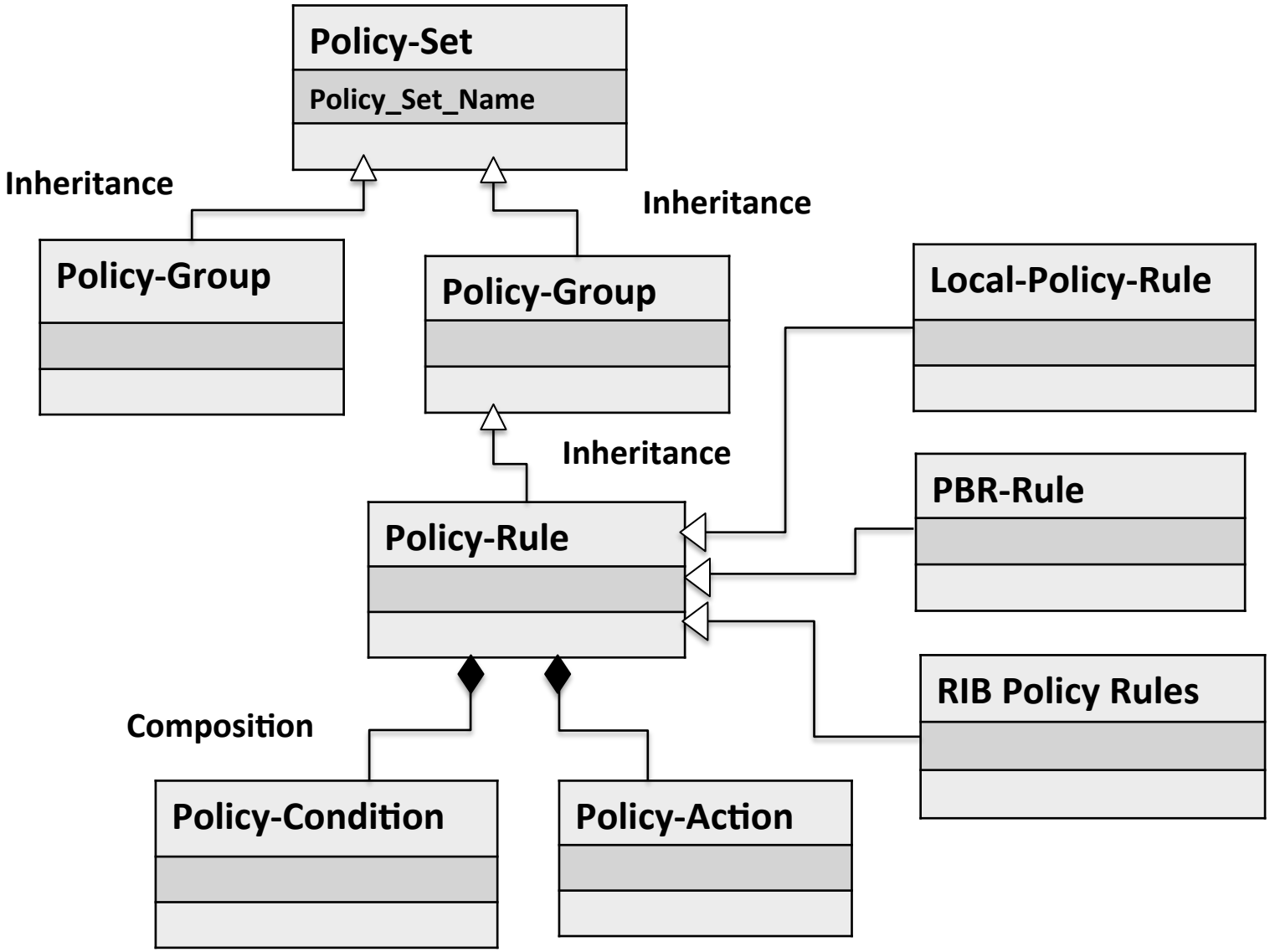
Data Stores



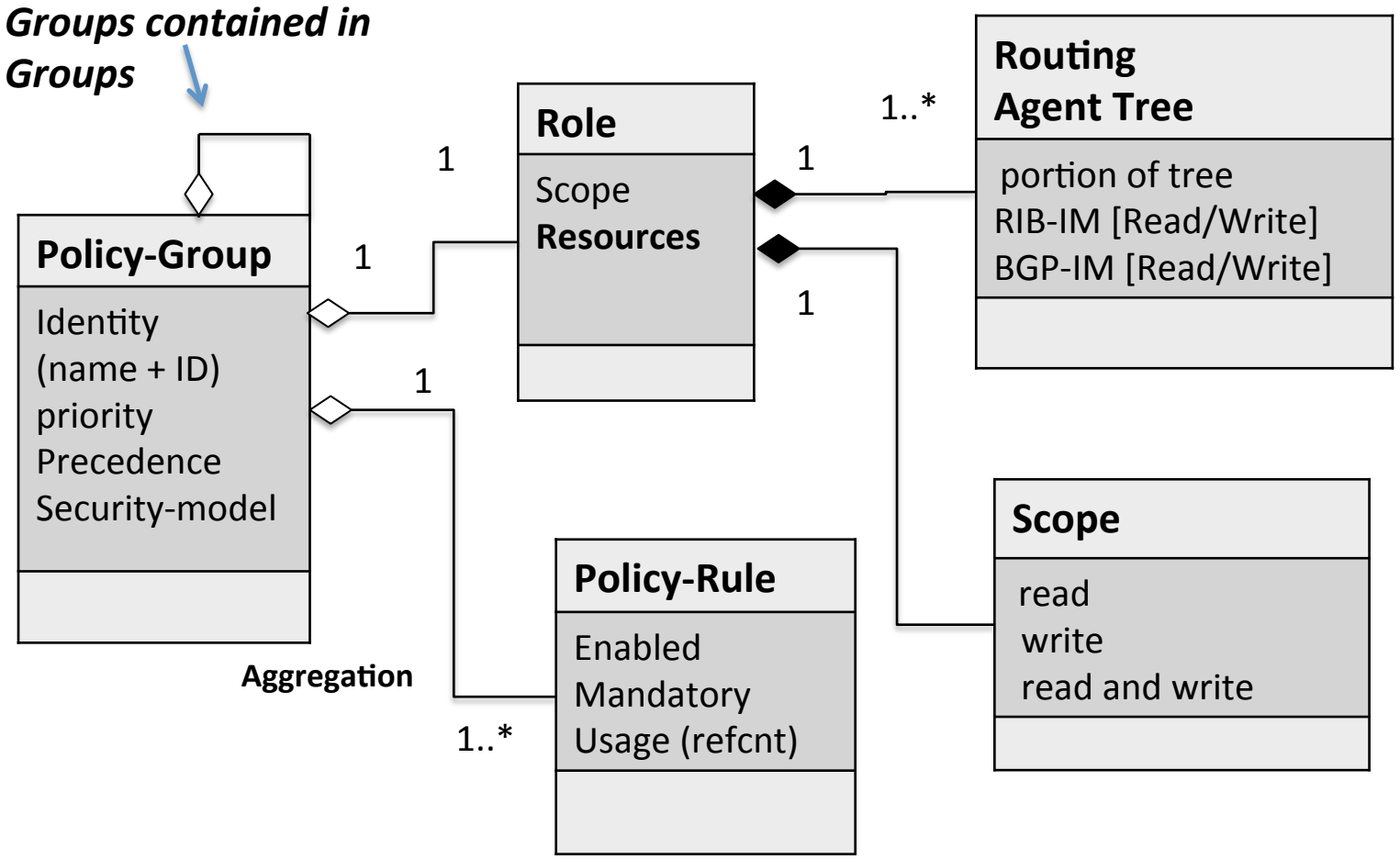
Policy sets collect policy groups



Basic Network Policy (BNP) IM

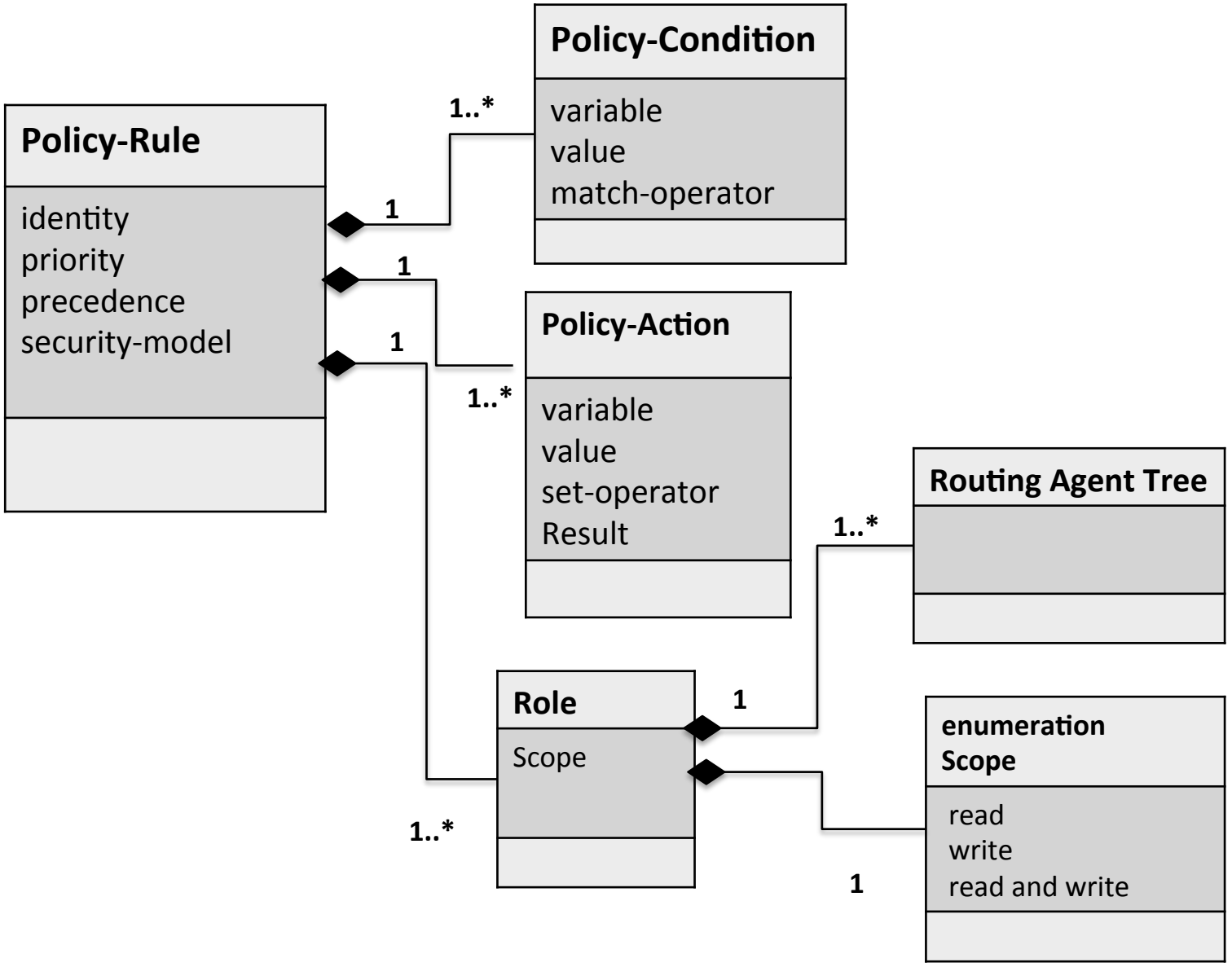


BNP - Policy Group Component

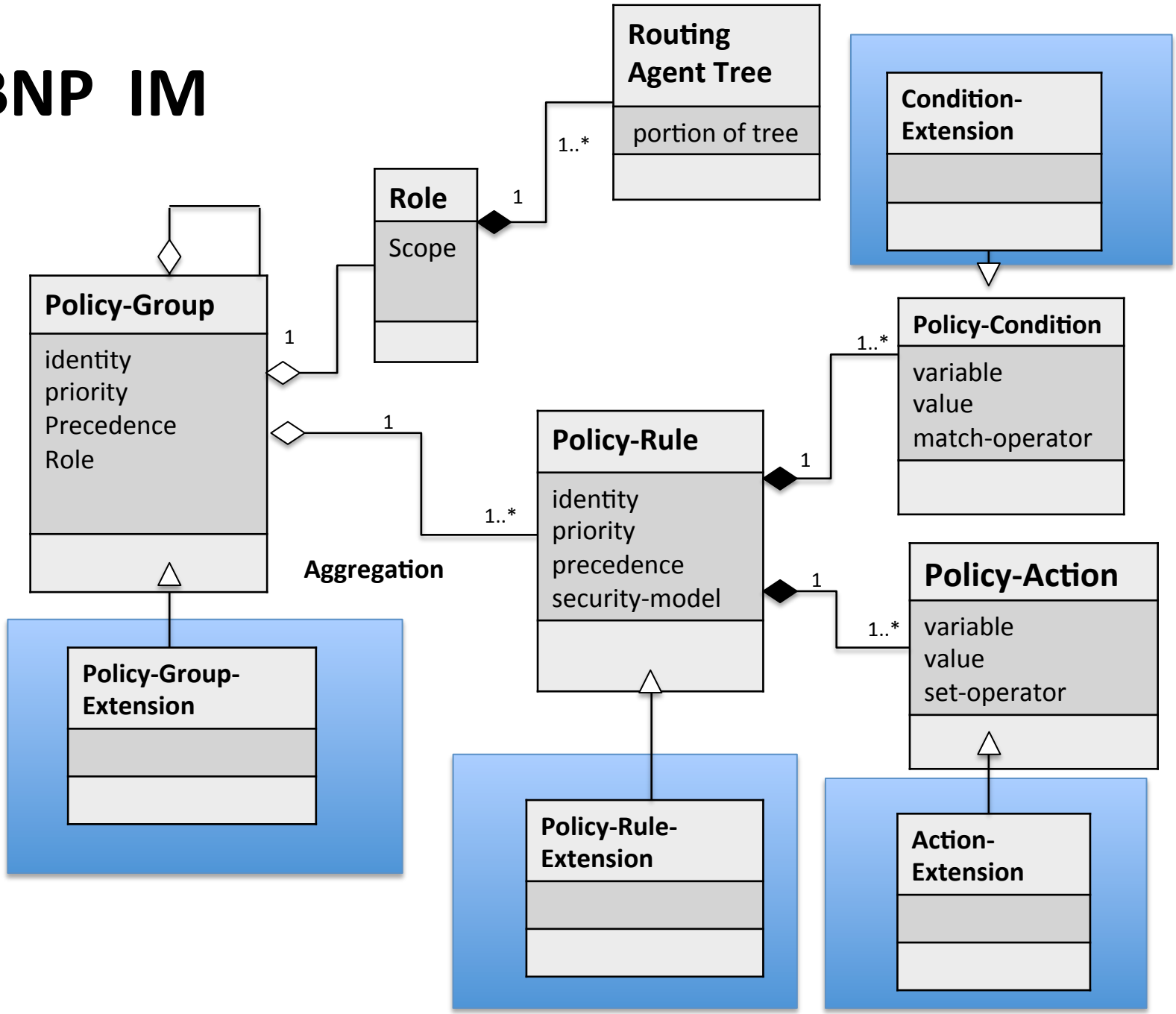


Identity – name plus version id
Resource – how much memory or other resources will take to write the policy (5 ACLs vs 300K ACLs)

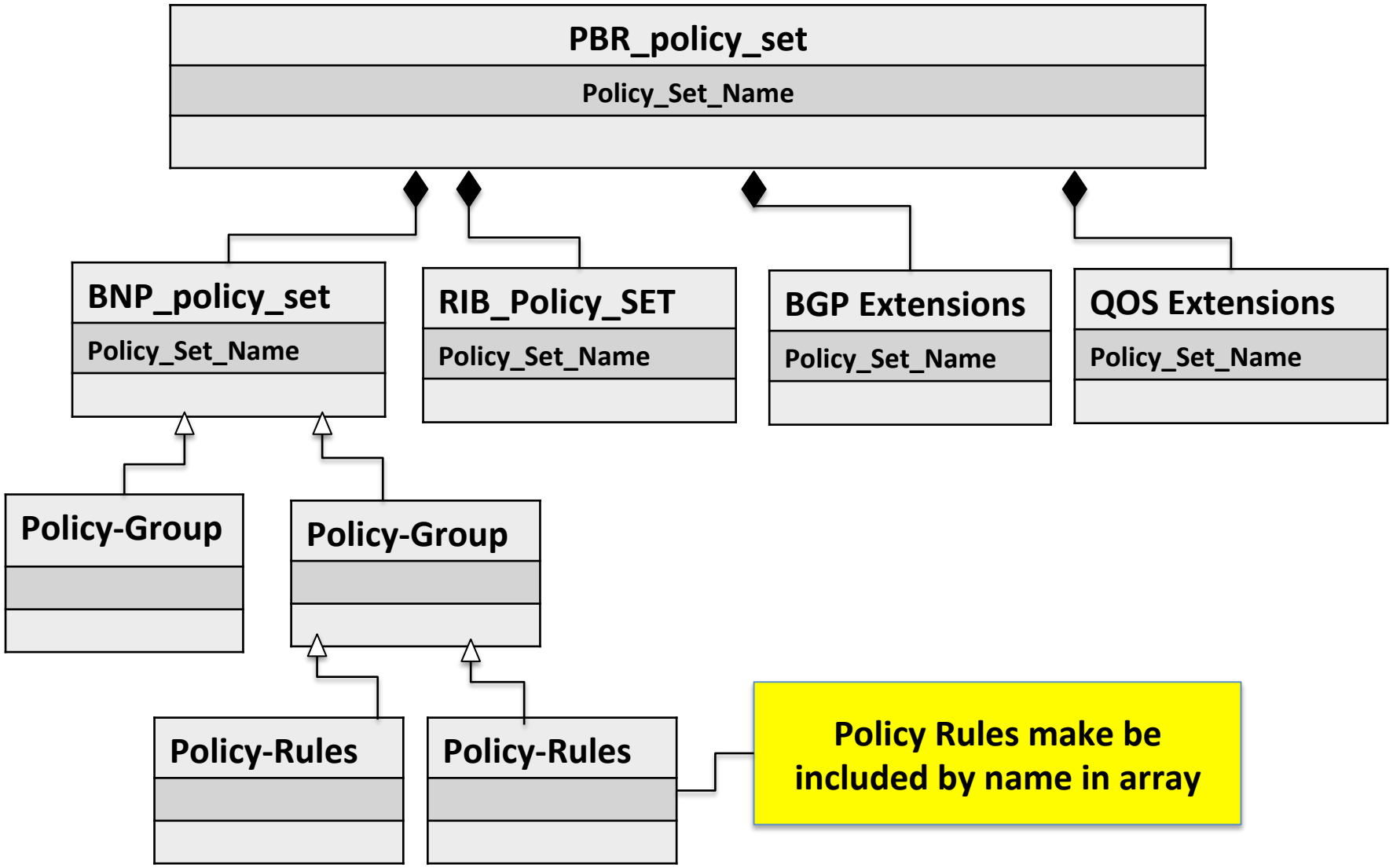
BNP Policy Rule



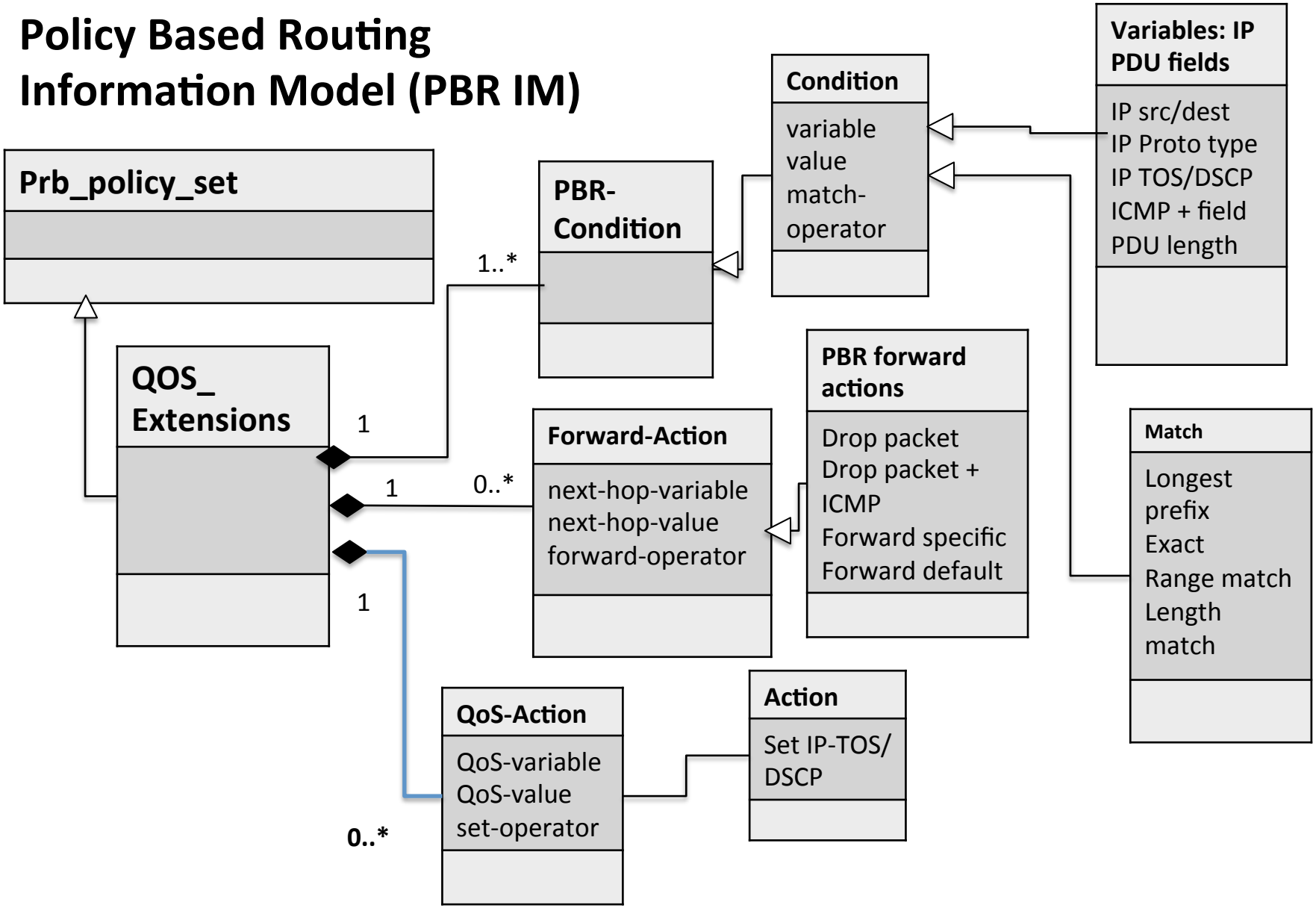
BNP IM


Routing Agent Tree
portion of tree
1..*
1
Role
Scope
Condition-Extension
Policy-Group
identity
priority
Precedence
Role
1
1
1..*
Policy-Condition
variable
value
match-operator
Policy-Rule
identity
priority
precedence
security-model
1
1..*
Aggregation
1
1..*
Policy-Action
variable
value
set-operator
Policy-Group-Extension
Policy-Rule-Extension
Action-Extension

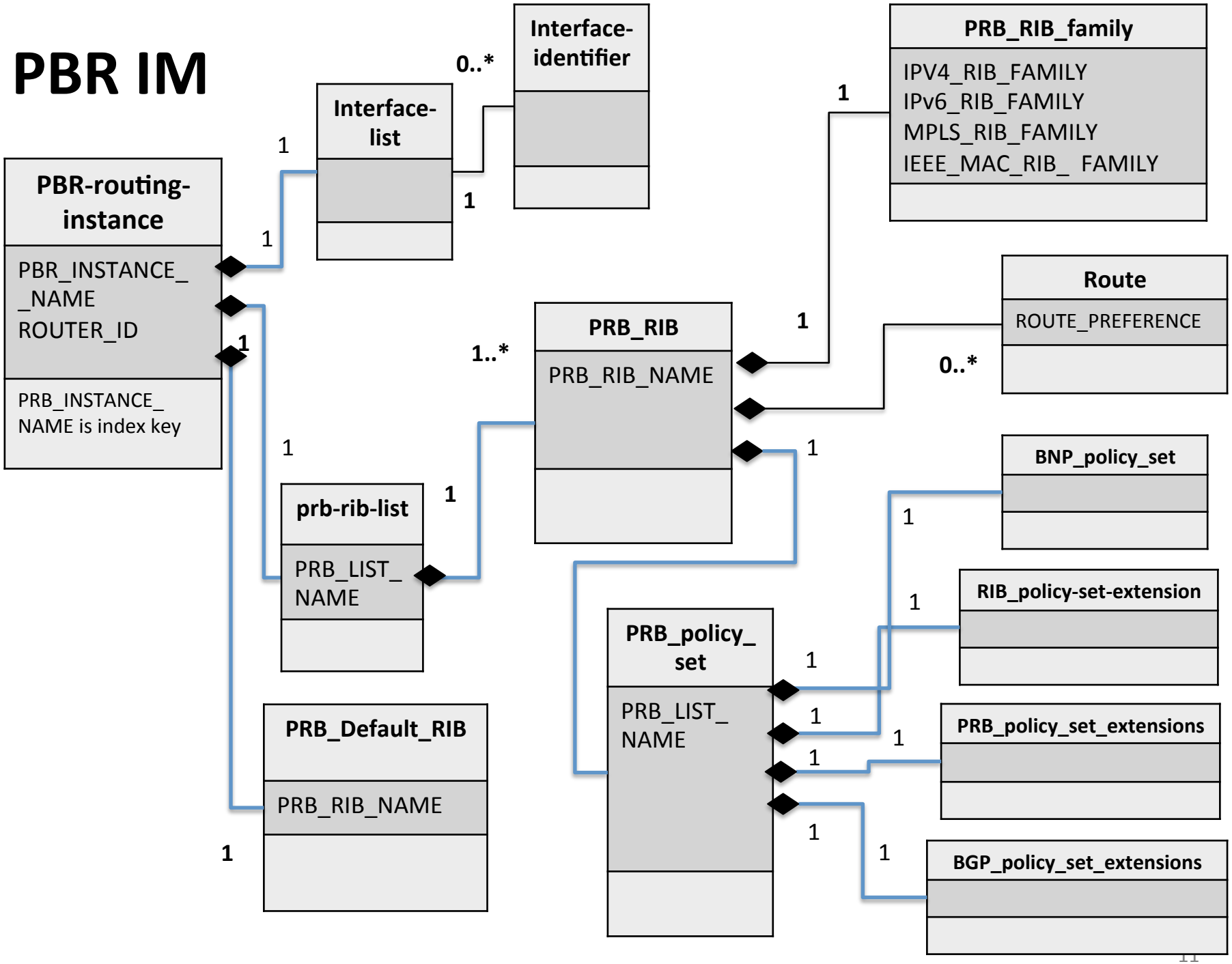
PBR policy set



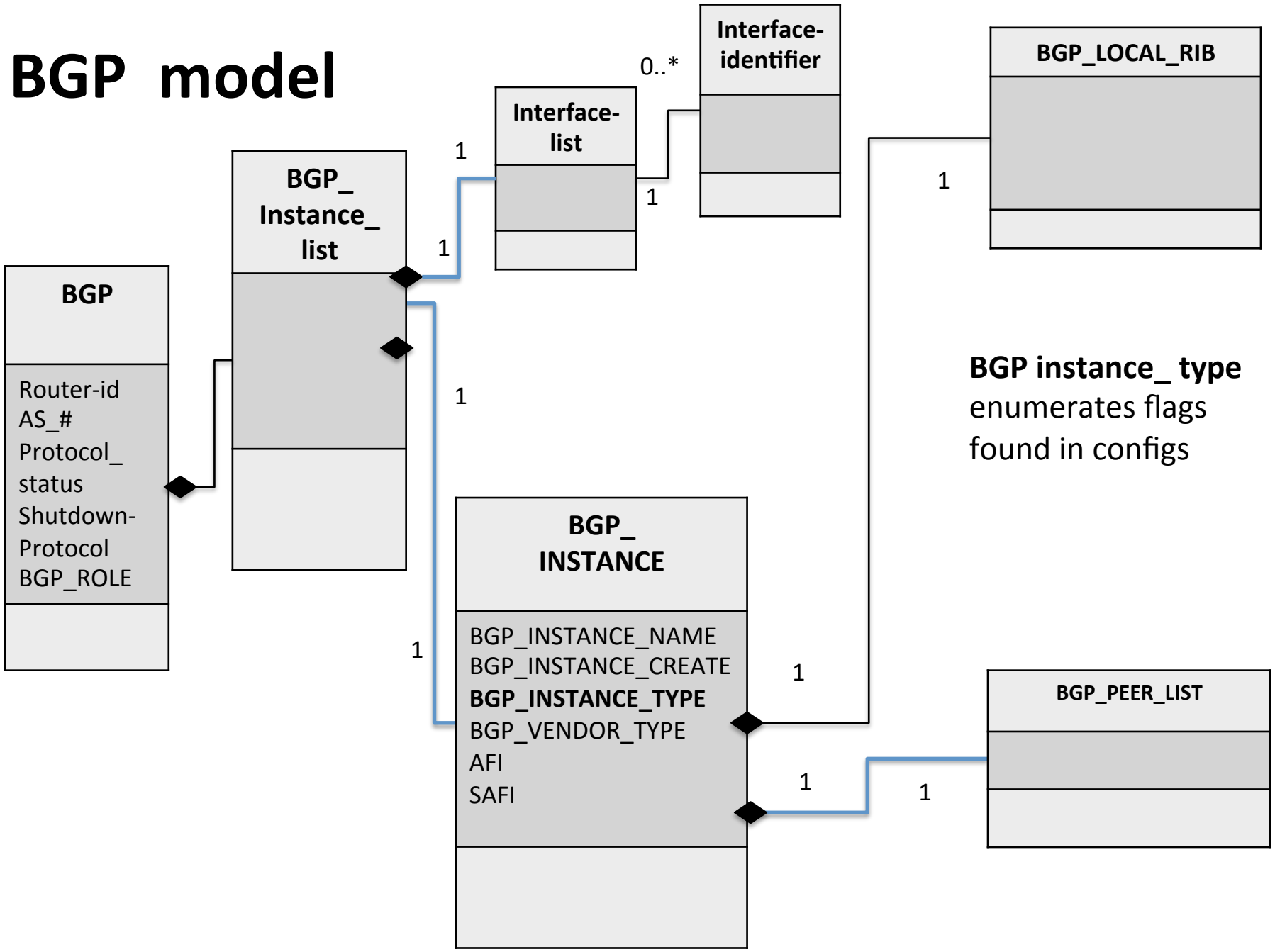
Policy Based Routing Information Model (PBR IM)



PBR IM


Interface-identifier
0..*
Interface-list
1
1
PRB_RIB_family
IPV4_RIB_FAMILY
IPv6_RIB_FAMILY
MPLS_RIB_FAMILY
IEEE_MAC_RIB_ FAMILY
1
PBR-routing-instance
PBR_INSTANCE_ _NAME
ROUTER_ID
PRB_INSTANCE_ NAME is index key
1
1
1
Route
ROUTE_PREFERENCE
0..*
1..*
PRB_RIB
PRB_RIB_NAME
1
1
BNP_policy_set
1
prb-rib-list
PRB_LIST_ NAME
1
1
RIB_policy-set-extension
1
PRB_policy_ set
PRB_LIST_ NAME
1
1
1
1
PRB_policy_set_extensions
1
PRB_Default_RIB
PRB_RIB_NAME
1
1
1
BGP_policy_set_extensions

BGP model



BGP instance_ type enumerates flags found in configs

What's next

- Thank you for input – Tom Petch, Dean Bogdanovic, Jeff Haas, Keyur Patel
- Best if this is aligned with PBR netmod and some templates
- Want to do this as weekly Discussion Group and drafts on github
- Any input taken ..