Yang Model for PCEP

draft-pkd-pce-pcep-yang-01

Dhruv Dhody	
Rohit Pobbathi	Huawei
Vinod Kumar S	
Jonathan Hardwick	Metaswitch

Introduction

A YANG data model for the management of PCEP
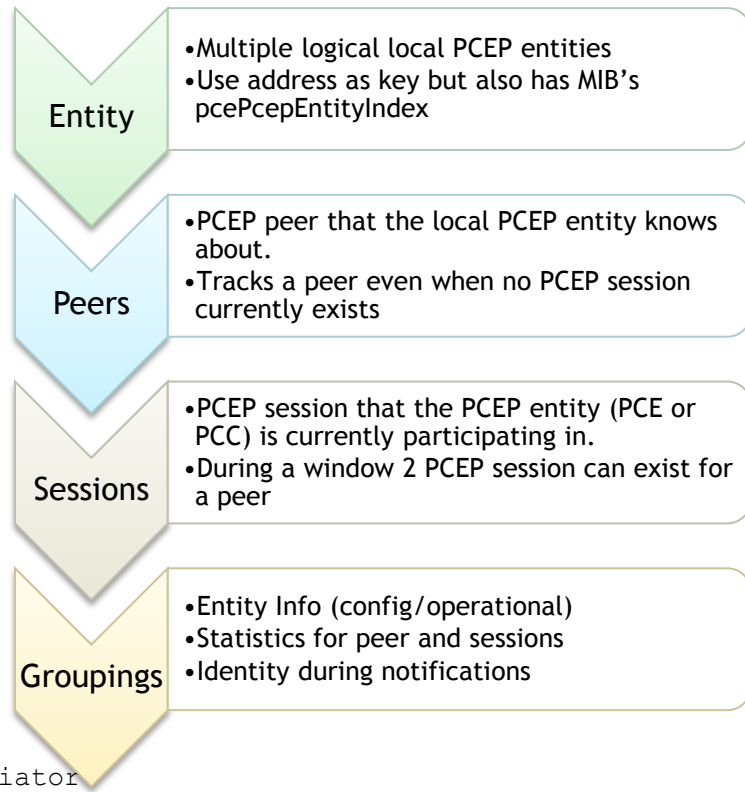- Includes configuration data and state data

Base PCEP specification as per RFC 5440
- Mapped to PCEP-MIB

Will augment the base data model for advanced PCE features.

PCEP Data Model

```
module: ietf-pcep
   +--rw pcep
   |  +--rw entity* [addr-type addr]
   |     +--rw addr-type                    inet:ip-version
   |     +--rw addr                         inet:ip-address
   |     +--...
   |     +--rw peers
   |        +--rw peer* [addr-type addr]
   |           +--rw addr-type       inet:ip-version
   |           +--rw addr            inet:ip-address
   |           +--rw description?    string
   +--ro pcep-state
      +--ro entity* [addr-type addr]
         +--ro index?                      uint32
         +--ro addr-type                   inet:ip-version
         +--ro addr                        inet:ip-address
         +--...
         +--ro peers
            +--ro peer* [addr-type addr]
               +--ro addr-type                    inet:ip-version
               +--ro addr                         inet:ip-address
               +--...
               +--ro sessions
                  +--ro session* [initiator]
                     +--ro initiator                 pcep-initiator
                     +--ro state-last-change?        yang:timestamp
                     +--ro state?                    pcep-sess-state
                     +--...
```

Entity
- Multiple logical local PCEP entities
- Use address as key but also has MIB's pcePcepEntityIndex

Peers
- PCEP peer that the local PCEP entity knows about.
- Tracks a peer even when no PCEP session currently exists

Sessions
- PCEP session that the PCEP entity (PCE or PCC) is currently participating in.
- During a window 2 PCEP session can exist for a peer

Groupings
- Entity Info (config/operational)
- Statistics for peer and sessions
- Identity during notifications

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Next Steps

Immediate Work

- PCE Capability, Domain, Scope etc
  - *Related to PCE-Discovery*

Advanced Feature

- Follow the order of standardization or jump to stateful PCE
- Separate document or same?

Call for collaboration

- Need for a design team?

Thanks!