

Access Control List Model
draft-ietf-netmod-acl-model
(draft-bogdanovic-netmod-acl-model-02)

IETF 91 Honolulu

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Agenda

- Status
- Philosophy
- Design
- Models
- How can you contribute ?

Draft Status

- <https://datatracker.ietf.org/doc/draft-ietf-netmod-acl-model/>
- Brocade, Juniper, Cisco
- Adopted as NETMOD Working group Item

Philosophy

- Simple, Short
- Limited YANG Features
- Allows proprietary augmentations
- Proprietary augmentations are considered for standard model
- Address ACL management issues
 - ace insertion
- Mappable to existing implementations
 - In some cases, may need to update implementations

Design

- ietf-acl
 - base model
 - ACL container
 - ACL oper data container
 - ACE List
 - » Match container
 - » Action container
- packet-fields
 - Used in ACE Match container
- newco-acl
 - Example of vendor specific extensions of base model
 - augments the base model
- route-filter
 - Example of route-filter augmentation

Design cont'd

```
module: ietf-acl
  +--rw access-list
    +--rw acl-name
      +--rw acl-oper-data
      | ...
      | ...
    +--rw access-list-entries
      |
      | +--rw matches
      | | +--rw (ace-type)
      | | ...
      | | ...
      | +--rw actions
      | | ...
      | | ...
    +--rw default-actions
      +--rw deny? empty
```



Operation data:
counter, targets, etc



Matches container:
packet-header-fields
meta data filters



Actions container

ACL YANG Model

- Git repository

<https://github.com/YangModels/yang/tree/master/experimental/ietf/>

- Base Model

<https://github.com/YangModels/yang/blob/master/experimental/ietf/ACL-MODEL/ietf-acl.yang>

- Proprietary augmentation example

<https://github.com/YangModels/yang/blob/master/experimental/ietf/ACL-MODEL/newco-acl.yang>

How can you contribute ?

- Read the draft
- Comment on the netmod alias
- Map to existing acl implementations
- Create proprietary augmentations
- Submit pyang --ietf compilable augmentation to netmod alias
 - Is augmentation common among vendors ?
 - Is augmentation needed by customers ?
- Target – type string
 - Where is the ACL applied ? Interface + direction, qos, ...
 - Explore common targets
 - Propose target augmentation