Yang data model for Terminal Access Controller Access Control System Plus
draft-zheng-opsawg-tacacs-yang

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Why this draft is needed?

Motivations
- ietf-system.yang [RFC 7317] only covers Radius as the centralized authentication mechanism.
- This draft defines TACACS+ client YANG model based on the TACACS+ Protocol draft to augment the system YANG.
  - TACACS+ authentication method which is widely used;
  - the authorization and accounting properties is missing.
- Having a standardized model makes life much easier for operators

Draft background
- Initially proposed in Netmod
- Model re-structure based on comments received from Netmod list.
Tacacs+ client model Overview

- Augments RFC 7317 (system management)
- The data model for configuration of the TACACS+ client has the following structure:

### Parameters applied to all servers:
- Timeout
- quiet-time
- shared-key
- source-ip

### Parameters applied to one server

- **Server type:** Authentication, Authorization, Accounting
- **Configuration parameters:** name, server-IP, server-port, shared-key, single-connection
- **Status parameters:** connected-num, disconnected-num, reqs-num, rspi-num, error
Solicit help from WG

• Please read and comment whether this model can cover your Implementation requirement of Tacacs+ client Netconf configuration.
Backup slides
Current Structure
(system augmentation)

module: letf-tacacs
  augment /sys:system:
    +--rw tacacs {tacacs}?
      +--rw enable?    boolean
      +--rw tacacs-servers
        +--rw timeout?    uint32
        +--rw quiet-time?  uint32?
        +--rw shared-key?  password-extend
        +--rw source-ip?   inet:ip-address
        +--rw tacacs-server* [name]
          +--rw name   string
          +--rw server-ip?  inet:ip-address
          +--rw server-type? server-type
          +--rw network-instance? -> /ui:network-instances
                                      /network-instance/name
          +--rw server-port? uint32
          +--rw single-connection? boolean
          +--rw server-state? server-state
          +--ro current-srv?  boolean
          +--rw shared-key?   password-extend
          +--ro authen-srv-connected-num? uint32
          +--ro authen-srv-disconnected-num? uint32
          +--ro authen-reqs-num? uint32
          +--ro authen-rsps-num? uint32
          +--ro authen-errors?  uint32
          +--ro acct-reqs-num?  uint32
          +--ro acct-rsps-num?  uint32
          +--ro acct-srv-connected-num? uint32
          +--ro acct-srv-disconnected-num? uint32
          +--ro account-rsp-err? uint32

rpcs:
  +--x rest-all-statistics
  +--x reset-authen-statistics
  +--x reset-author-statistics
  +--x reset-account-statistics
  +--x reset-common-statistics