

Yang data model for TACACS+

draft-ietf-opsawg-tacacs-yang-01

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TACACS+ YANG model

- Existing `ietf-system.yang` [RFC 7317] covers local and Radius authentication
- TACACS+ data model extends system user authentication methods to support `tacacsplus` authentication configuration

Current Tree

```
module: ietf-system-tacacsplus
augment /sys:system:
  +-rw tacacsplus {tacacsplus}?
    +-rw server* [name]
      +-rw name          string
      +-rw server-type?  enumeration
      +-rw address        inet:host
      +-rw port?          inet:port-number
      +-rw shared-secret  string
      +-rw (source-type)?
        | +-:(source-ip)
        | | +-rw source-ip?    inet:ip-address
        | +-:(source-interface)
        |   +-rw source-interface? if:interface-ref
    +-rw vrf-instance?
      | -> /ni:network-instances/network-instance/name
    +-rw single-connection?  boolean
    +-rw timeout?           uint16
    +-ro statistics
      +-ro connection-opens?  yang:counter64
      +-ro connection-closes? yang:counter64
      +-ro connection-aborts? yang:counter64
      +-ro connection-failures? yang:counter64
      +-ro connection-timeouts? yang:counter64
      +-ro messages-sent?     yang:counter64
      +-ro messages-received? yang:counter64
      +-ro errors-received?  yang:counter64
      +-ro sessions?         yang:counter64
```

Changes since -00 (IETF 105)

- Refinement to introduction text, data model design section and YANG module based on comments received from John Heasley
- Added the TACACS+ Protocol draft as normative reference
- Added Tacacs+ session counter
- Added ‘tacacsplus’ identity to allow ‘system-authentication’ enable tacacsplus authentication

Issue: system authentication order

- System-authentication can be only configured with local authentication and radius authentication.

ietf-system@
2014-08-06.yang

```
container authentication {  
    ...  
    leaf-list user-authentication-order {  
        type identityref {  
            base authentication-method;  
        }  
        must '(. != "sys:radius" or ../../radius/server)' {  
            error-message  
                "When 'radius' is used, a RADIUS server"  
                "+ \" must be configured.\";  
            description  
                "When 'radius' is used as an authentication method  
                a RADIUS server must be configured.";  
        }  
        ordered-by user;  
    }  
    ...
```

Next Steps

- Resolve remaining issues