

# **NETCONF ACCOUNTING**

## **DRAFT-MAHESH-NETCONF-ACCOUNTING-01**

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# INTRODUCTION

- Last A(ccounting) in AAA
- Defines YANG model for Accounting

# RADIUS/TACACS(+)

- Protocol Agnostic
- RFC 2866 – Radius Accounting
- draft-ietf-opsawg-tacacs – TACACS+ Protocol

# RADIUS

- Network Access Server and Accounting Server
  - Aspects of Serial lines and modem pools
  - Packet format for exchange of accounting records
  - Over UDP
- Attributes (Section 5)
  - 40 – Acct-Status-Type (Acct–code)
  - 44 – Acct-Session-Id (session-id)

# TACACS(+)

- Accounting Attributes (Section 7.2 of draft-ietf-opsawg-tacacs)
- Task\_id (task-id)
- Status (status)
- Privilege Levels (user/groups)

# ACCOUNTING RECORD

Acct-code	Date-time	Src-ip	Session-id	Task-id	user	groups	action	rule	status
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- Adapted for NETCONF/RESTCONF
- NACM (RFC 6536)
  - Rule to define access to accounting record
- No accounting record for <get> of accounting record

# NEXT STEPS

- **To be added**
  - default-deny-all attribute
  - Attribute values as 'anydata'
  - Examples for <edit-config> and <get>

# TREE DIAGRAM

```
module: ietf-netconf-am
  +-ro nam
    +-ro accounting-record* [task-id]
      +-ro task-id uint32
      +-ro session-id? nc:session-id-type
      +-ro acct-code enumeration
      +-ro date-time yang:date-and-time
      +-ro src-ip inet:ip-address
      +-ro group nacm:group-name-type
      +-ro user? nacm:user-name-type
      +-ro path nacm:node-instance-identifier
      +-ro action nacm:access-operations-type
      +-ro rule? string
      +-ro status? nacm:action-type
```

# Q&A