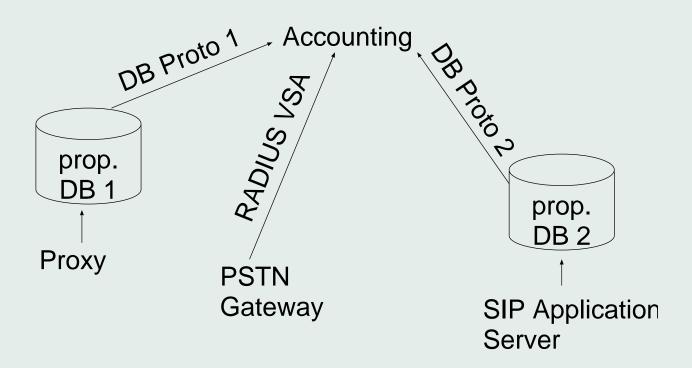
# **RADIUS** and SIP

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# How is it done today?



# What attributes are required?

- Overall requirements in draft-ietf-sipping-aaa-req
- draft-schulzrinne-sipping-radius-accounting defines a set of attributes
- vendors have defined some additional attributes
- Accounting of media resources is undefined yet.

#### Re-used / Overloaded Attributes

- User-Name
- NAS-IP-Address, NAS-Port
- Service-Type
- Called-Station-ID, Calling-Station-ID
- Acct-Status-Type, Acct-Session-Id, Acct-Authentic, Acct-Session-Time, Acct-Terminate-Cause
- Event-Timestamp

# **SIP-specific Attributes**

- Sip-Method, Sip-Response-Code
- Sip-Translated-Request-URI
- Sip-CSeq
- Sip-To-Tag, Sip-From-Tag
- Sip-Branch-Id
- Sip-Source-IP-Address, Sip-Source-Port

### **Open Issues**

- The draft consumes 9 attribute types from the limited attribute number space.
- Should there be a general mechanism to put contents of certain SIP headers into the accounting record?
- Which WGs need accounting of media resources? SIP, MMU-SIC, others?

### **Next Steps**

- collect input from MMUSIC and SIPPING on the topic of media component accounting
- make the draft consistent with the SIPPING requirements draft
- add missing attributes and enums
- decide how to cope with limited attribute number space
- make the draft consistent with the work of RADIUSEXT

draft-sterman-aaa-sip-00

#### The Problem

**CHAP:** MD5(seqnum, user-password, nonce)

**HTTP-Digest, MD5:** MD5(unq(username-value) ':' unq(realm-value) ':' password)

**HTTP-Digest, MD5-sess:** MD5(unq(username-value) ':' unq(realm-value) ':' password ':' unq(nonce-value) ':' unq(cnonce-value))

(taken from the IETF 49 proceedings, B. Byerly and D. Williams)

# **Properties**

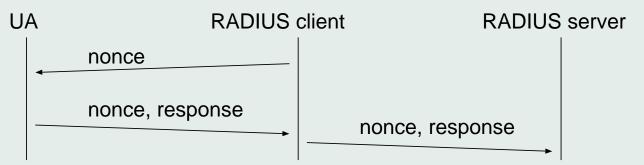
- moves response calculation from NAS to the RADIUS server (like CHAP)
- requires no changes in SIP phones
- there is running code: SER, FreeRADIUS, Cisco IOS, Radiator,
  ...

### **User-specific Settings**

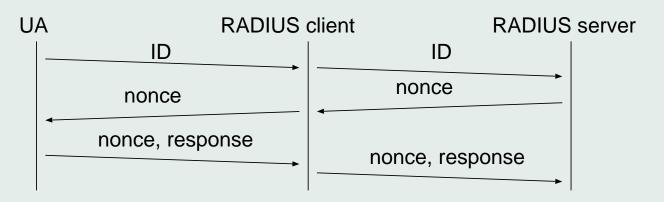
- Idle-Timeout RTP / RTCP timeout
- Session-Timeout SIP session timer
- CPL script as RADIUS attribute?
- draft-belinchon-aaa-diameter-mm-app-01 proposes a transparent User-Data attribute
- use SIPPING profile notification instead?

#### **Pre-computed responses**

• In draft-sterman-aaa-sip-00, the RADIUS client itself generates the nonce and sends it to the SIP UA and the RADIUS server.



• Some authentication systems use pre-computed challenges.



### **Open Issues**

- The draft uses attribute numbers from experimental number space
- Security Considerations section
- Is the installed base already to large to change things?