

Extended Packet Header for radius

Draft-chen-radext-extended-header-00

Enke Chen, Naiming Shen

IETF 96, Berlin

Problem Statement

- One-octet “Identifier” field in RADIUS packets
- Only 256 outstanding requests
- Well-known limitation
- Workaround:
 - Parallel sessions (i.e., multiple source ports)

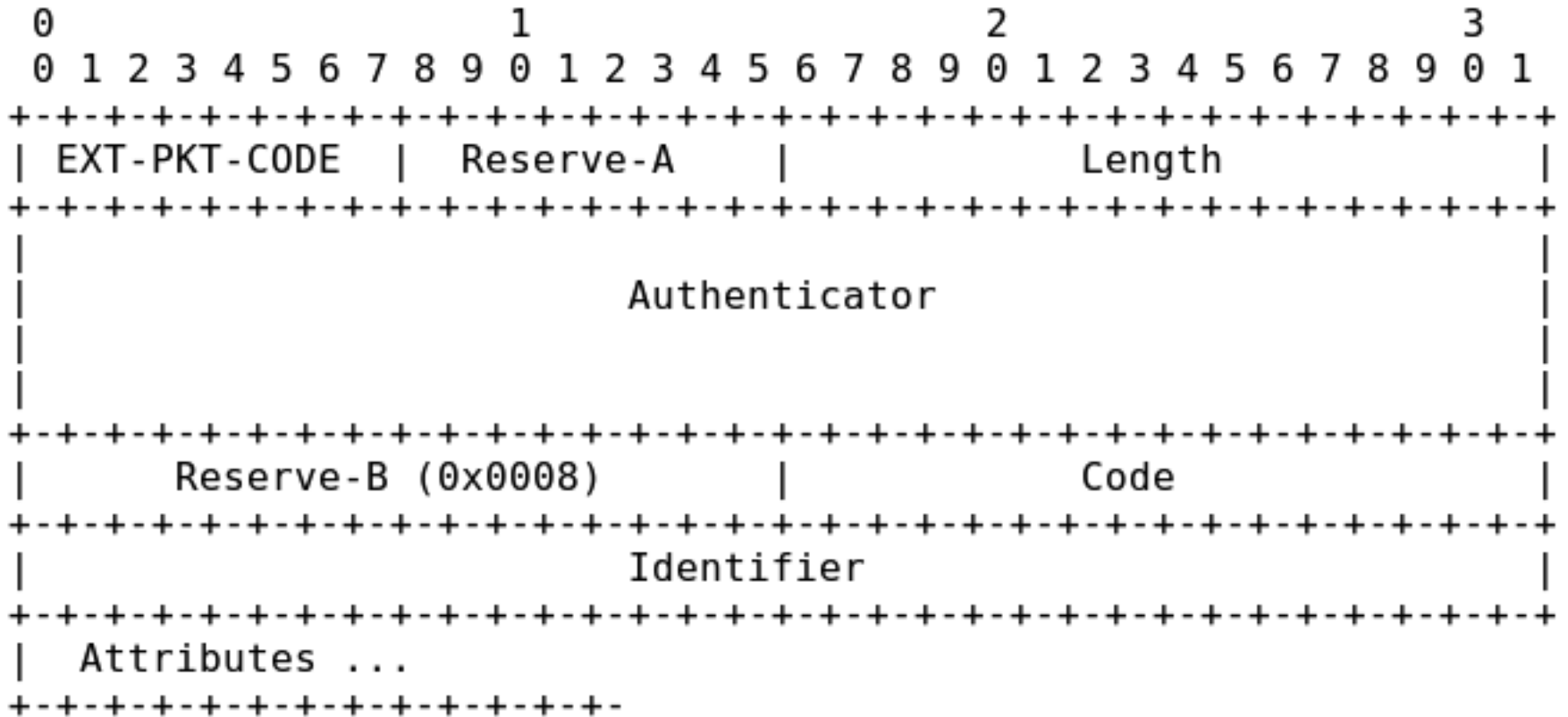
Problem Statement – cont

- Large number of “parallel sessions” in some apps, e.g., “wireless controller”
 - Hundreds to thousands
- Challenges
 - Resources, e.g., local ports
 - Efficiency
 - Session management (for TCP in particular)
 - Operational complexity

Protocol Extension

- Extended packet header
 - Larger “Identifier” field
 - Larger “code” field as well
- Reserve a packet code as “carrier” for the extended header
- Capability discovery using Status-Server Msg
 - New attribute

Extended Packet Header



- Semantics unchanged for Code, Identifier, Length
- Reserved fields for backward compatibility

Operations

- Capability discovery using Status-Server /Cfg
 - Always use the “standard header”
- Recommendation
 - 0-255 as “Identifier” for “standard header”
 - 256+ as “Identifier” for “extended header”
- Can use the “extended header” after discovery