A proposal for a lightweight GRASP

Sheng JIANG
ANIMA@IETF 119@Brisbane
Beijing University of Post and Telecommunications
Lightweight GRASP (Issues)

GRASP is a *generic and extensible* protocol for management and operation, covers all generic operation behaviors without depending on any specific objectives

- Discovering on certain objective
- Request and response for information

It is **build on TCP and IPv6/IPv4**

- Both are heavy for resource-constrained devices
- TCP does not perform well when the network connections are dynamic changed
- TCP is time-consumption for create the connection
Lightweight GRASP (Proposal)

Lightweight GRASP

• Shorten the fixed fields

• Remove TCP dependency, instead by optional embedded reliability check & response model

• Remove IP dependency, extensible to combine with any other protocols, Layer2 protocols, UDP, QUIC, etc.

• Intent for EXPERIMENTAL
Lightweight GRASP (Next)

• Is this proposal in charter of ANIMA WG?

• If yes, is ANIMA WG interested in it?

• If answer for any one of above question is negative, we will change to be "lightweight generic signaling protocol" for general operation & management