

# Use Case for RPH in Responses

draft-gunn-sip-req-for-rph-in-  
responses-00

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# Background

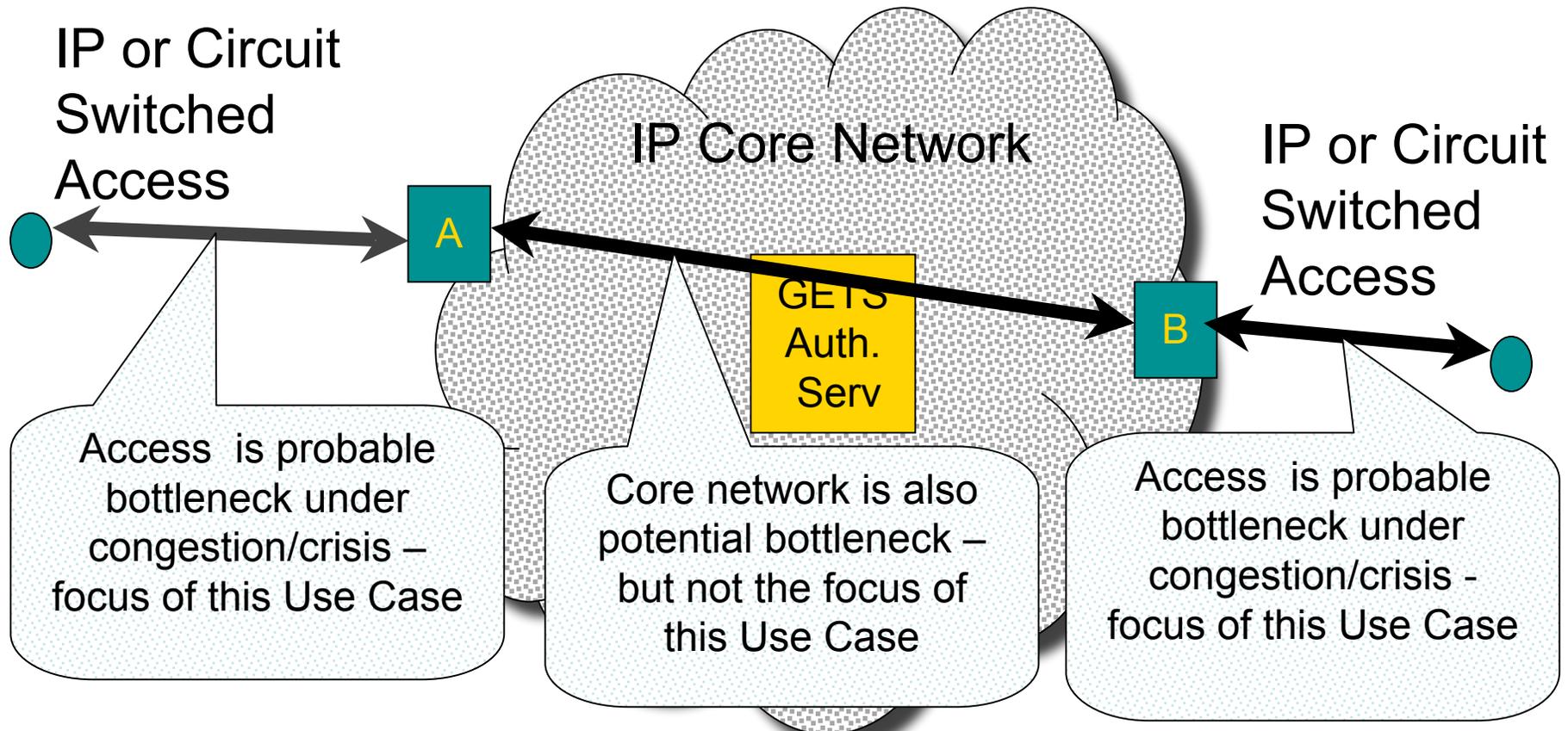
- RFC4412 defines the Resource-Priority Header “RPH”, but is ambiguous about the use of RPH in responses
- As currently interpreted, any RPH header in a SIP response is ignored, but is not prohibited
- draft-polk-sip-rph-in-responses-00 “Allowing SIP Resource Priority Header in SIP Responses” describes a modification to RFC4412 to permit RPH in responses
- Discussion on the SIP list indicated a need for more detailed discussion of the Use Case motivating RPH-in-responses
- This Use Case focuses on elevated priority for access to media resources

# Simplified GETS/WPS Paradigm

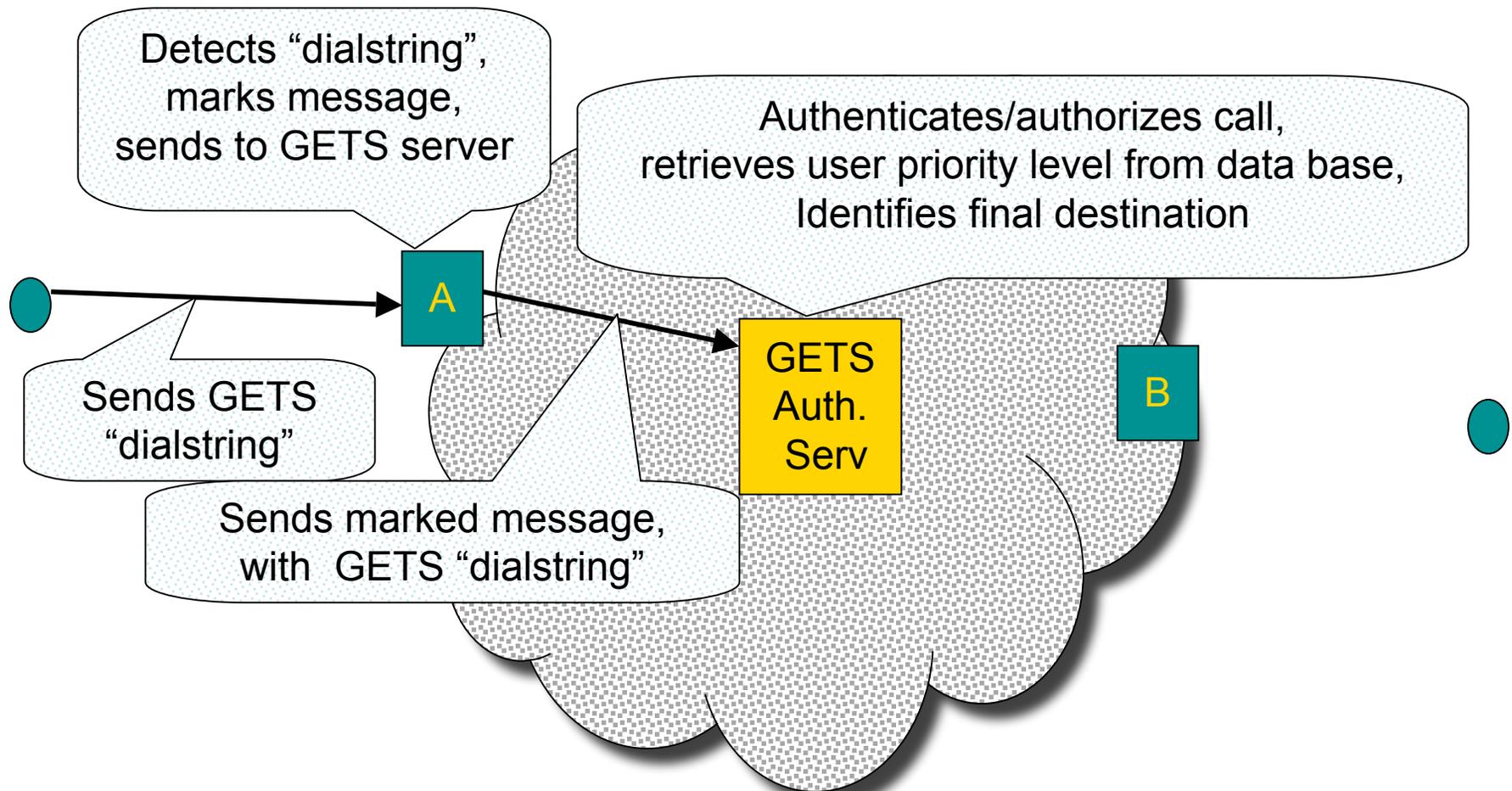
Each authorized user is assigned a priority level- which is stored in a database

- User may not know his/her priority level
- UAC does not know the user's priority level
- User can not request a particular priority level
  - User requests priority call and gets the assigned priority level
  - This is NOT like MLPP
- Priority level is only available AFTER authentication /authorization, which includes checking the data base. (wps.y)
- Priority is invoked on a “call by call” basis, by special “dialstrings”
  - Other invocation methods possible in the future
- Two tiered priority scheme
  - GETS “treatment” without known priority level (uses ets.0)
  - Priority within GETS treatment (uses wps.y)

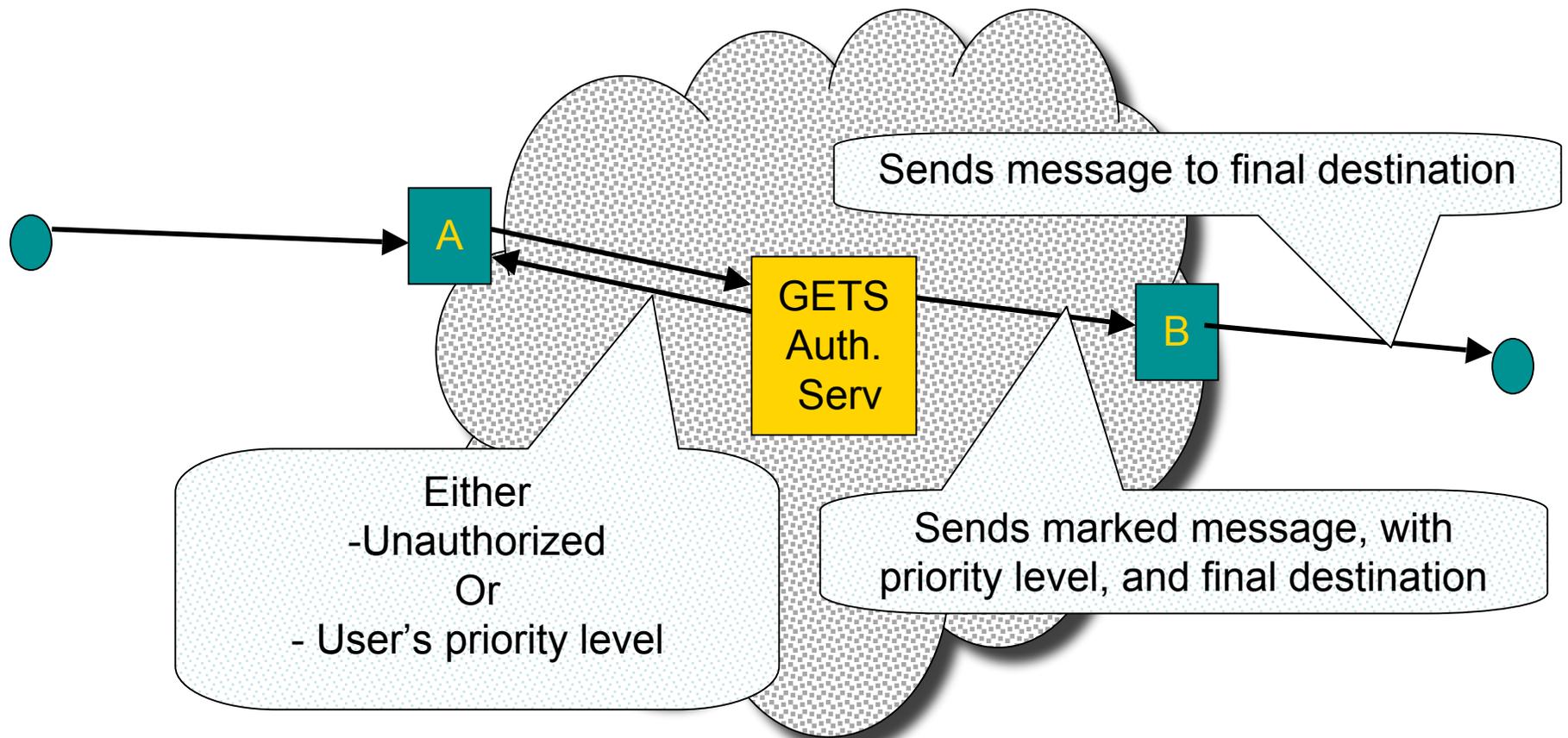
# Conceptual Network View



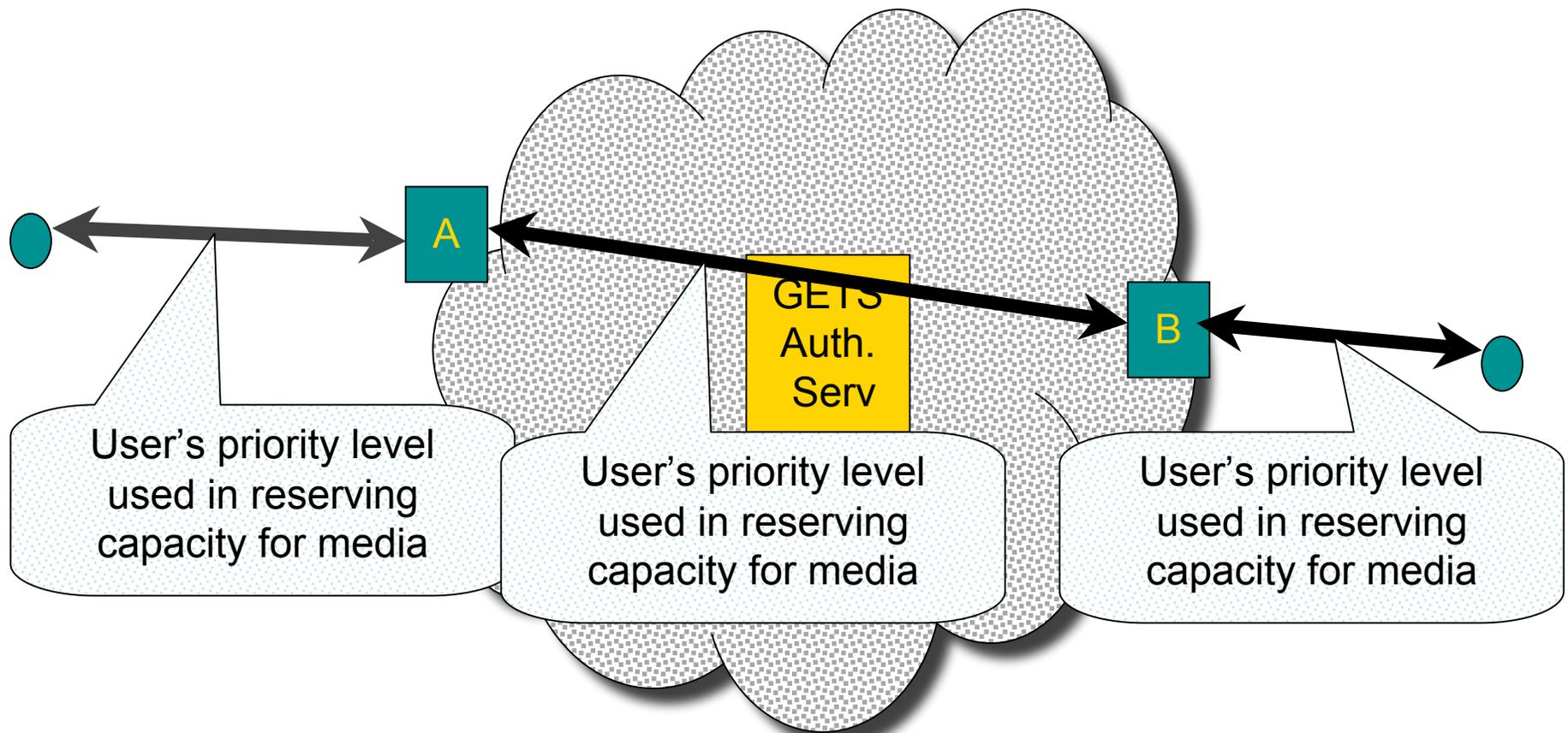
# Conceptual Signaling Call Flow



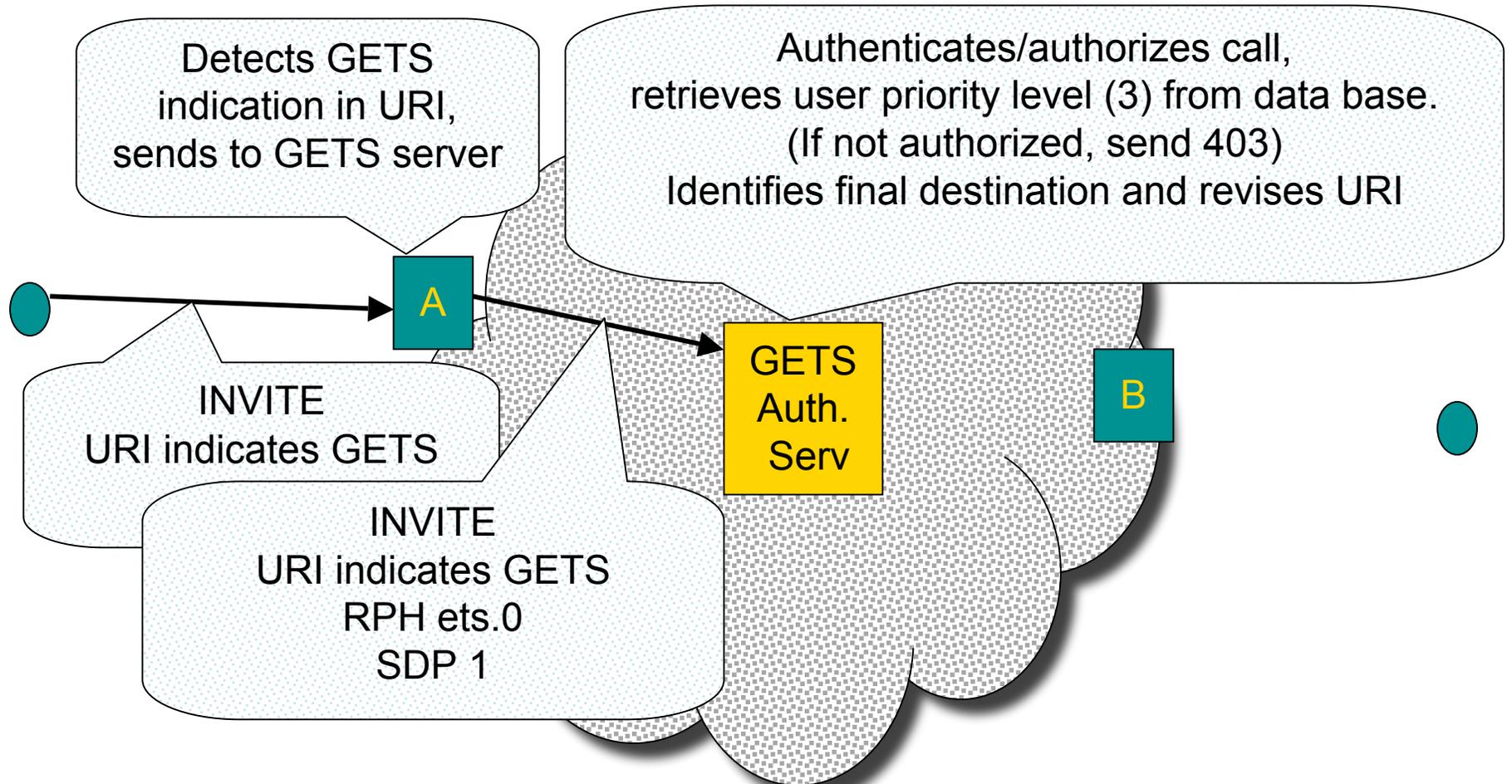
# Conceptual Signaling Call Flow



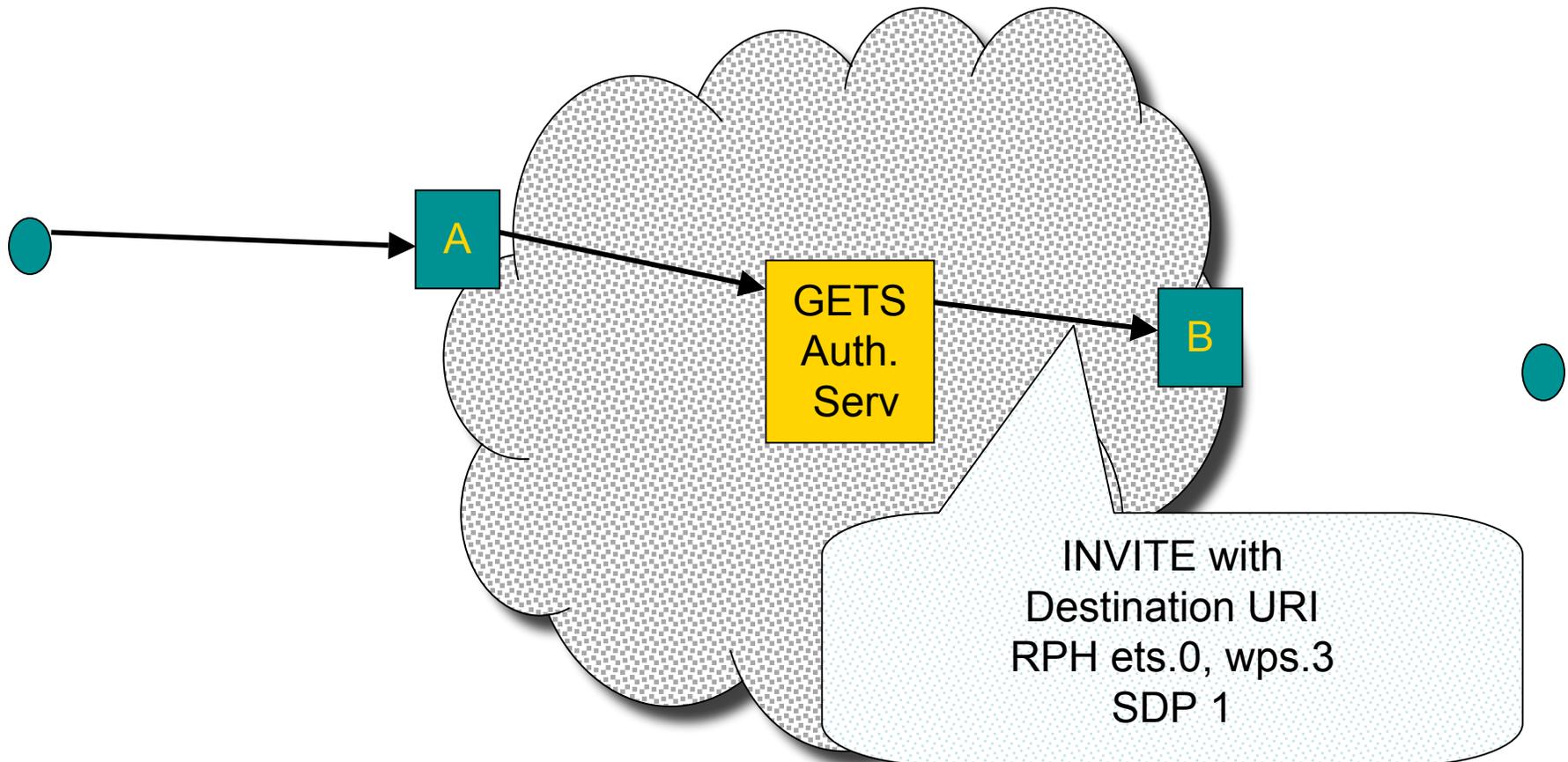
# Conceptual Media Call Flow



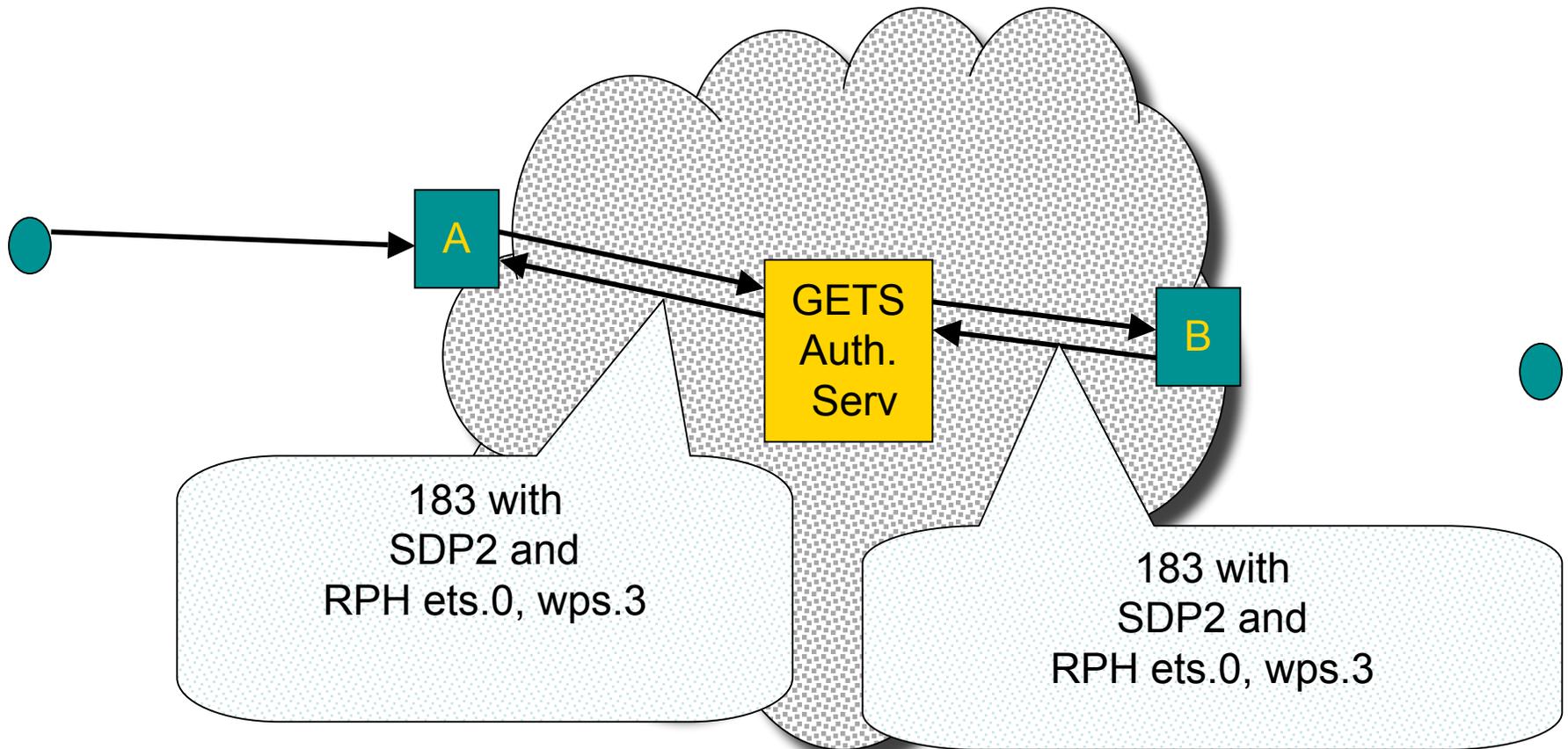
# SIP Call Flow



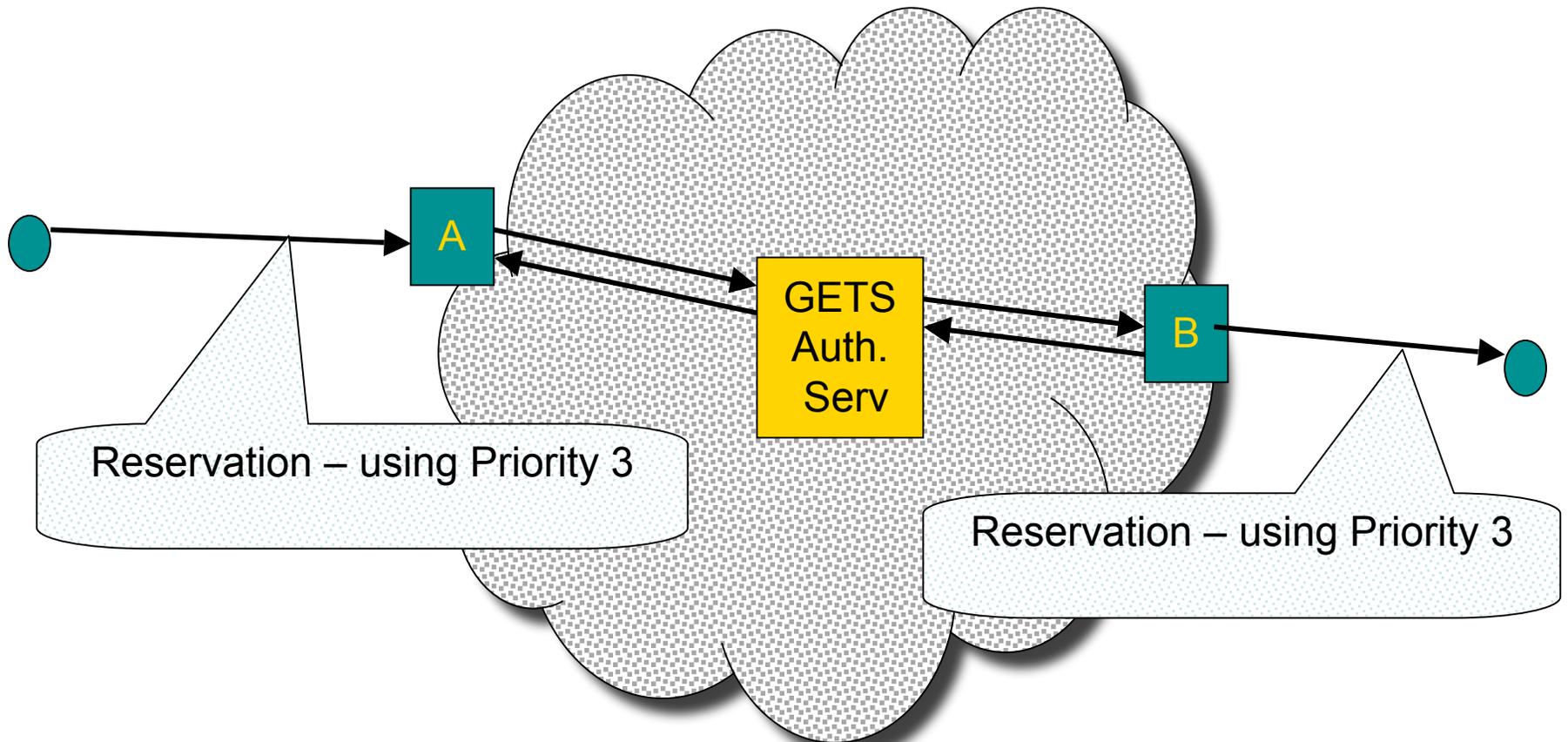
# SIP Call Flow



# SIP Call Flow



# SIP Call Flow





# Security Concerns

- How does “A” know if the RPH in a response is legitimate?
  - After sending INVITE to GETS AS, “A” is expecting either a 403 or a 183 with RPH
    - Will ignore RPH in responses associated with other dialogs
  - “A” is expecting RPH in responses from specific sources, based on local policy,
    - Will ignore RPH in responses from other sources,
    - Will ignore RPH in responses if cannot trust identity of source, based on local policy (e.g., IPSec Tunnel)

# Conclusion

- Objective- apply user's priority to reservation process
  - With RPH in responses, it is straightforward to apply the user's priority in reservations at both ends
  - Without RPH in responses, it is complicated to apply the user's priority on the originating leg