199
Status update and open issues
draft-ietf-sip-199-02

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RESOLVED ISSUE #1: Sending 199 reliably

• **CONCLUSION**: Allow sending of 199 reliably, but it may also be sent unreliably even if 100rel has been required
RESOLVED ISSUE #3: SIP information in 199

• Should the 199 response contain information (SIP headers, final response code etc) from the final response which triggered the 199?

• **CONCLUSION**: The usage of sipfrag in 199 is outside the scope of the draft.
RESOLVED ISSUE #4: 199 option-tag

• Do we need an option-tag to indicate support of 199, so that 199 is not sent towards UACs not supporting it?

• CONCLUSION:
  – We define an option-tag ("199").
  – 199 is not sent unless the UAC has indicated support
  – We need to clarify usage of the option-tag in Require
OPEN ISSUE #2: UAS sending 199

• Should an UAS be allowed to send 199?
• May not be useful for a UA to send 199, but could be useful for B2BUA type-of entities
UAS sending 199: Proposal alternatives

1. UAS never sends 199
2. UAS always sends 199
3. UAS sends 199 if forking proxy does not support 199
4. UAS sends 199 once procedures have reached a certain state
5. UAC and UAS negotiate sending of 199 once the early dialog has been established
6. Other alternatives?
Alt 1: UAS never sends 199

• What about Require: 199?
Alt 2: UAS always sends 199

• **Pros**
  - 199 will be sent even if forking proxy does not support 199

• **Cons**
  - 199 will be sent even if forking proxy supports 199
  - 199 will be sent even in case of no forking – which probably means most of the calls
Alt 3: UAS sends 199 if forking proxy does not support 199

• **Pros**
  - 199 will be sent even if forking proxy does not support 199

• **Cons**
  - Requires protocol element for proxy to indicate support of 199
  - 199 will not be send if forking proxy closest to terminating UAs don’t support 199

• What about Require: 199?
Alt 4: UAS sends 199 once procedures have reached a certain state

- **Pros**
  - 199 would not be sent until certain actions have taken place on an early dialog
    - Example: preconditions have been indicated as met
    - Example: SDP answer has been sent
  - Can be combined with alternative 3

- **Cons**
  - Extensions would have to define at what point 199 would be sent
Alt 5: UAC tells UAS to send 199 when multiple early dialogs have been established

(Basically possible already, if the UAC sends Supported: 199 in PRACK/UPDATE)

• **Pros**
  - UAS will know that forking has occurred
  - UAC can request 199 on a particular dialog based on local resource status

• **Cons**
  - Extra signalling may be required (unless PRACK or UPDATE is sent for other reasons)
OTHER TO-DOs

• Editorial work
  – Add text to security section
  – Clarifications
  – etc

• See e-mail from Robert Sparks
THANK YOU!