### 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 occured
  - 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!