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UNLEASHING  
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SIP wg Items

Jonathan Rosenberg

dynamicsoft

# Caller Preferences: Changes

- Discussion of Redirects
  - Previous draft only proxy
  - Nothing different for redirect except to not rule it out
- scheme parameter
  - Redirects only
  - indicates allowed schemes:  
  
`Accept-Contact: *; scheme="http"`
    - very useful for services that span heterogeneous devices
- Option tag changed to “pref”
  - Aligns with new policy of short option tags
- Added support for extension parameters
  - consist of any UTF8-TOKEN
  - UTF8-TOKEN any UTF-8 character but separators, CTL, LWS
  - Internationalization important, as these are descriptive

# Caller Preferences: Changes

- Case Matching
  - Now case sensitive
  - Why: internationalization - UTF8 case insensitive matching nearly impossible
  - Diverges from rules for scheme, language-tag. That OK?
- URI matching rules aligned with rfc2543bis
- Removed service parameter
  - was: POTS, ISDN, IP,...
  - not clear how to use it
- CPL Interaction
  - CPL directly invokes caller preferences operation
- General cleanup

# What next?

- No open issues
- Needs:
  - pseudo-code to real code with a simulation to verify it works
  - Review!!!!
- After last calls on session timer and reliable provisional, this will go next

# Supported Draft

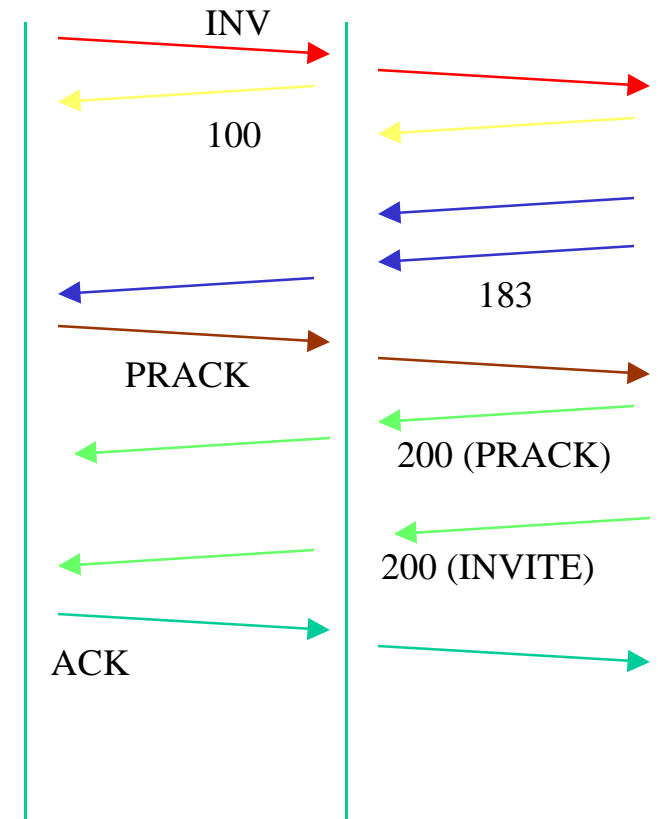
- Major overhaul
  - Removed negotiation
  - Clients send any request except CANCEL with all extensions in Supported header
  - Server/proxies reject with 421 code if something is needed, w/ Require header listing whats needed
  - If UAS applies feature, Require MUST be included indicating applied features
  - Supported returned in OPTIONS response
- One more change needed
  - SHOULD return Supported in all responses
  - Useful for determining what features for re-INVITEs and other things

# Next Steps

- Sent it to IESG already but somehow not on their agenda...
- Will add minor change immediately after IETF, and resubmit to IESG
- Several other extensions depend on this one

# Reliable Provisional Responses

- Major Overhaul
- Reliability now end to end
  - Needed for both 183 and DCS
- New PRACK method
  - Used to acknowledge provisional responses
  - Contains sequence number of provisional being acknowledged
- PRACK like any other request within a call leg
  - Is responded to
  - Can be cancelled
- Can send multiple provisionals w/o PRACK after 1st





# Open Issues

- Cumulative ACK
  - PRACK is cumulative
  - Little more work for UAS
  - Useful for provisionals that are sent in rapid succession
  - Not clear what application is
  - keep/remove?
  - Proposal: keep
- Response to PRACK
  - Not needed for reliability purposes
  - However, makes PRACK a normal request
  - Proxy handling much easier
- Layered implementation of transactions
- Proposal: keep
- CANCEL for PRACK
  - Not really useful
  - There for generality
  - Should we just disallow? (yes)
- PRACK as a method name
  - Not the most exciting name...

# From here...

- Need to update to reflect latest Supported draft
- Final cleanup
- Incorporation of resolution of open issues
- QUICKLY move to proposed
  - Submit to IESG by mid-April
- Several dependencies on this one too
- Dependent on Supported draft

# Guidelines for Authors of SIP Extensions

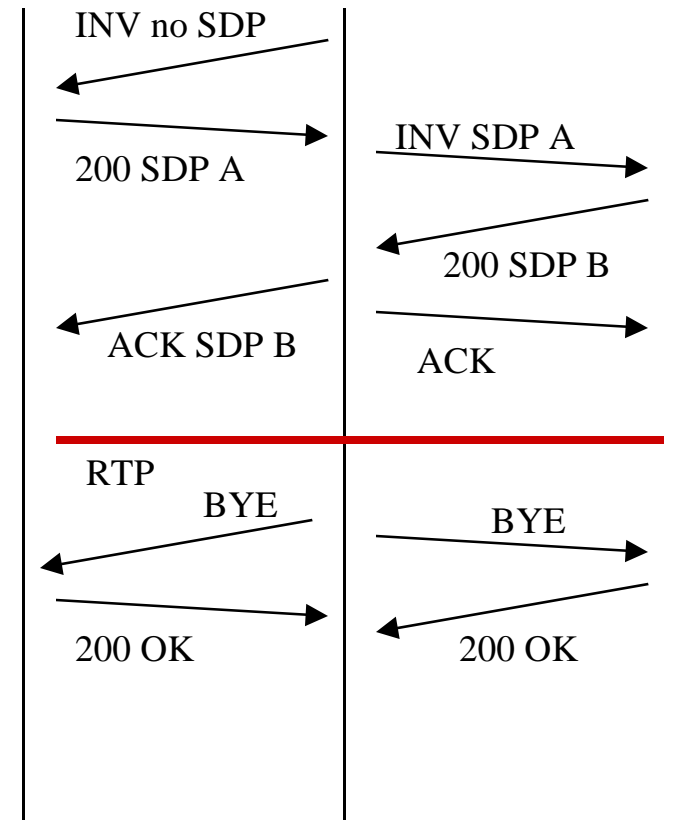
- Problem:
  - Lots of extensions to SIP in the works
  - Sometimes extensions aren't appropriate uses of SIP
  - Extensions often miss important issues to address
  - Extensions often don't handle backwards compatibility well
  - Lessons from past extensions not incorporated
- Solution:
  - Document a set of guidelines
  - What is an appropriate SIP extension?
  - What should extensions worry about?
    - Tag, CANCEL, Record-Routing
    - Require/Supported issues
    - Examples

# From here?

- Proposal: Adopt as a SIP wg item
- Target: Best Current Practice
- Timescale: not for a long time!
  - Sometime in late 2001
  - Why?: Would like to continue to accumulate lessons as we gain experience
  - Can point people to draft version as they write their extensions
  - Since its not a protocol, no need for wide distribution or “completion”

# Third Party Call Control

- Many services depend on one entity establishing, maintaining, modifying calls between others
  - Click to dial
  - Mid-call announcements
  - Timed conference initiation
- Several models of control
  - Controller asks other entities to send SIP messages, no feedback
  - Controller asks other entities to send SIP messages, w/ feedback
  - *Controller acts as intermediary for signaling and sends messages itself*



# From here?

- Not actually a SIP Extension!
- Merely a usage
- Several open issues
  - Security
  - Values of From headers
- Level of interest from group? Feedback is solicited....