Open Issues in SIP from the List

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Open Issues

- **Supported, Unsupported, Desired**

- **CANCEL vs. BYE**

- **Content-Disposition vs. Content-Function**

Supported

- **Problem Definition**

  - Clients ask for features with Require

  - What if server wants to ask for a feature?

  - Need some way for client to indicate supported features

- **Don't want to list *all* supported features in request**
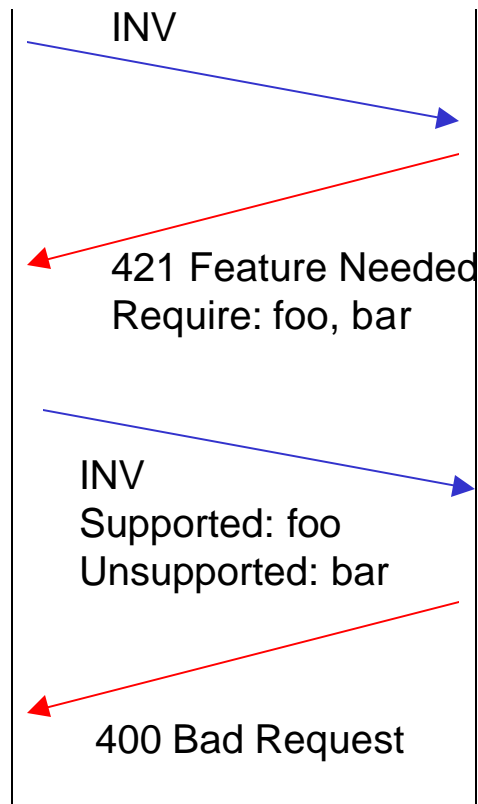
  - Caching list of commonly asked for features

- **Idea: Unsupported**

  - Client lists features it cannot support

- **Other uses**

  - Server can send Supported header in OPTIONS response

Transaction Example

INV

421 Feature Needed
Require: foo, bar

INV
Supported: foo
Unsupported: bar

400 Bad Request

- **Client sends INV, no Supported**

- **Server sends 421 listing needed features**

- **Client resubmits request with Supported, Unsupported**

- **Server has two options**

  - Reject request if client doesn't support feature

  - Process request without feature

Open Issues

- **Two Options**

  - Desire Header

    - With Desired, client resubmits request even if feature not supported

    - With Require, client doesn't resubmit request

  - Require only

    - Same semantics as Desired above

- Pros/Cons

  - Servers should be forgiving for interoperability

  - KISS - need two headers?

  - Extra messaging
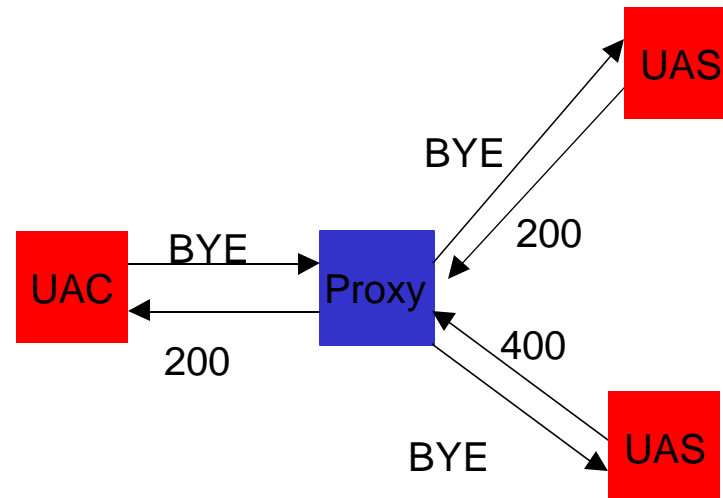
- **Proxy-Require vs. Require**

  - Need one or two?

CANCEL vs. BYE

- **Problem**

  - Want to hang up before receiving 200 OK

  - Send a CANCEL, or send a BYE?

- **Issues**

  - Before 200 OK, no Route established

  - BYE may not reach same set of recipients for INVITE

  - BYE forking - don't know if ALL recipients got it!

UAS

BYE

200

UAC — BYE → Proxy

200

400

BYE

UAS

BYE vs. CANCEL

- **Bodies**

  - May need BYE to contain a body (ISUP)

  - Can't put bodies in CANCEL (?)

- **Cleanness**

  - Would be nice to have one way to hang up call

- **Are race conditions an issue?**

  - Only occurs when there is forking plus dynamic call logic

  - Inconsistent call state eventually detected by user

- **Proposal**

  - Allow CANCEL or BYE

  - dumb phones probably only BYE

    - can use caller prefs to stop forking

  - CANCEL in UA for original purpose - stop search

Content-Disposition vs. Content-Function

- **Problem Definition**

  - Bodies can be used for many purposes

    - billing data

    - display

    - session description

    - end system specific signaling

  - MIME type not sufficient to know

    - Want application/uri-list

    - SIP bad for transport..

- **New header to indicate semantic purpose of body**

- **Content-Disposition**

  - defined already

  - used to indicate whether content should be displayed inline or saved, for http

- **Question**

  - Should we reuse, or define a new header?