http://www.gruu.com

GRUU

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Top 10 Reasons why GRUU is like a Whale

1. Its big and heavy
2. It seems like its been around for a long time
3. It looks friendly but can swallow you whole
4. Kind of cute, but not really
5. Misunderstood
6. Lives a really long time
7. Continues to consume resources to support its huge size
8. Blows hot air every once in a while
9. Rumored to be intelligent but cannot be confirmed
10. Can get beached, during which it moves very little

What Happened?

- Review Team was assembled
- Many significant comments were raised
- Result was a substantial change in GRUU functionality and a sizeable rewrite of the document
- Specification got shorter (removed 5 pages) and hopefully clearer
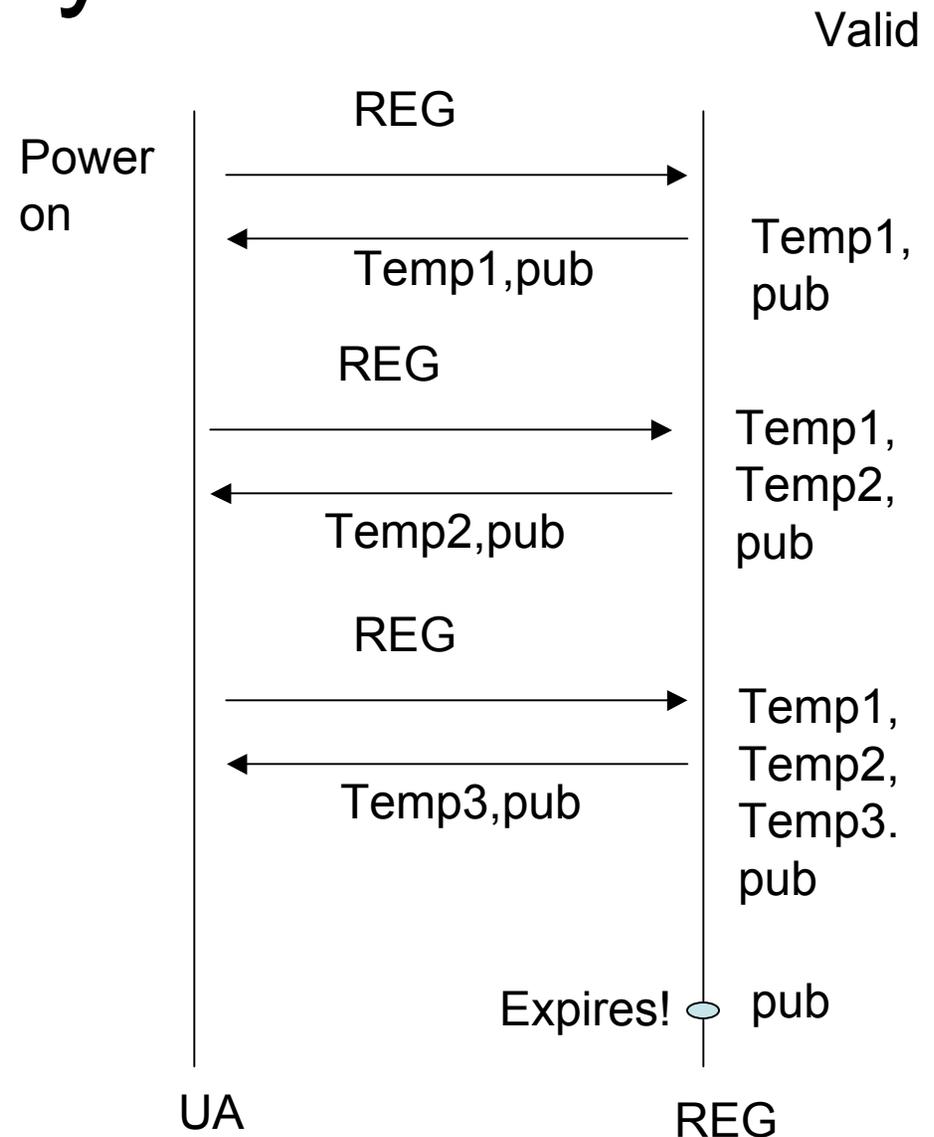
High Level Changes

- Temporary GRUU
- Parameter Renaming
- GRID removal
- SIPS removal

Temporary GRUU Motivations

- GRUU didn't address privacy, and made RFC 3261 privacy even worse when used

- Requirements for privacy in Europe in particular would make GRUU unusable without more features

- Desire was to add just enough privacy to meet "RFC3261 equivalence"

Temporary GRUU

- Temporary and "Public" GRUU both returned in REGISTER response

- Each refresh provides a new temporary GRUU

- All accumulated temporary GRUU remain valid till registration ends

- Temporary GRUU are uncorrelateable to each other and AOR or instance ID

Valid

REG

Power on

Temp1,pub

Temp1, pub

REG

Temp2,pub

Temp1, Temp2, pub

REG

Temp3,pub

Temp1, Temp2, Temp3. pub

Expires! ⊖ pub

UA

REG

Notes on Temporary GRUU

- UA can remember zero, one or more temporary GRUU

- UA can use a different temporary GRUU in each call or the same one

- There is no forced invalidation mechanism
  - UA can reject incoming requests if it wants
  - UA can use other mechanism (consent framework) to ask network to block

Parameter Renaming

Old Name	New Name
"gruu" URI param	"gr"
"gruu" Contact param	"pub-gruu" and "temp-gruu"
"gruu" option tag	"gruu"

GRID Removal

- EKR observation that the general problem and mechanism was equally applicable to AOR
  - Insert a cookie into an AOR or GRUU, get it back when its de-referenced
- Viewed as a secondary requirement for GRUU
  - Endpoint conference was one motivator – can actually use temporary GRUU now for that
- Proposal for mechanism in UA loose route (later)

SIPS Removal

- Whatever we have in here would be
  - Wrong in the worst case
  - Vague in the best case, in order to not conflict with sips guidelines

Other Changes

- Removed URI properties discussion
- New introduction by EKR
- Removed UML model
- Added "self-made" GRUU
- Originating proxy verifies GRUU in INVITE vs. identity of requestor

- Record-Routing requirements relaxed in home proxies
  - Originating:If the request has a GRUU in Contact and Record-Routes
  - Terminating: If request is to a contact that has a GRUU, and there is a Path
- Added tel URI handling rules

Other Changes

- Removed normative requirements on having different contact for each AOR

- Registrar rejects registration if contact equals AOR (i.e., its my GRUU)

- Added network design considerations for using GRUU

Open Issues

- Objection to the anonymous mechanism
  - No URI invalidation
  - Default lifetime too long – should expire like normal
  - Temporary is a bad name
  - No need to get both – should be able to ask for one or the other

- Objection to removal of GRID

- GRUU and AOR equivalence is broken