# MARTINI: Mailing List Problems

Martini Virtual Interim II

January 26, 2010

Adam Roach

# Contact Routing vs. Domain Routing

- REGISTER has historically created AOR => Contact mappings. The value of the Contact varies from AOR to AOR in order to allow the registered UA to tell the difference among several AORs.

- The further we drift from this mode of operation, the less REGISTER makes sense.

- The only way to perform "Domain Routing" (in which the R-URI does not change) means we must say "ignore DNS, and use an alternate mechanism to convert domain names to IP addresses."

# Domain Responsibility

- Fundamentally: who can retarget a URI?
  - "A proxy MUST NOT add additional targets to the target set if the Request-URI of the original request does not indicate a resource this proxy is responsible for."
  - "If the domain of the Request-URI indicates a domain this element is not responsible for, the Request-URI MUST be placed into the target set as the only target, and the element MUST proceed to the task of Request Forwarding "
- Who has TLS certs to assert they are "foo.com"?

# AORs: To Enumerate or Not to Enumerate

- Intermediaries (P-CSCFs, SBCs, others) make policy decisions based on registrations.

- Most common case is "do I let this call go through?," although others are possible.

- Enumeration allows detection of misconfiguration that would otherwise be very difficult to track down.

- Would reg event package help here?
  - How would the reg event package represent the list of registered AORs?
  - Does it really make sense for everyone to subscribe to the reg event package?

# Multiple AORs: Implicit or Explicit?

- Discussion has been based on IMS-style "implicit registration"
  - Which inherently pertains to exactly one human, not many.
- Who determines which AORs a REGISTER applies to?
  - Provisioned at registrar (how to detect mismatches?)
  - Requested by registrant?

# Contacts: To Map or Not To Map?

- Three general approaches have been floated:
  - The incoming R-URI corresponds to the PBX domain, so it does not get rewritten
  - The incoming R-URI corresponds to the SSP domain, and is rewritten by swapping the SSP domain for the PBX domain (i.e., the user is unique within the SSP for all customers)
  - The incoming R-URI corresponds to the SSP domain, and is rewritten according to a more complex set of rules
- My old VSP used sip:+12143290491@…; our new one uses sip:2143290491@… Should I have to renumber my PBX, or would it make more sense to push a mapping out to fix the problem?

# REGISTER Applied to Multiple Humans

- User vs. Route Authentication (See Dean's explanation: path and service-route don't "just work" with REGISTER)

- Policy decisions at proxies who don't know about MARTINI extensions will not be applied properly

- Can be fixed by adding "Proxy-Require" to REGISTER, to ensure these intermediaries will do the correct thing (or, at least, fail safe)

# Transport: Is UDP a requirement?

- Discussions around request size are predicated on the use of UDP for transport.

- Current pressure for this precise work is from SIP Forum, which has already mandated TCP for the relevant work.

- Can we make our jobs easier by eliminating a "requirement" that doesn't seem to apply to the target market?