PROXY FEATURES

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draft-holmberg-sipcore-proxy-feature
WHAT IT IS ABOUT

› SIP intermediaries/proxies being able to indicate support of capabilities - in the same way as SIP UAs.
USE-CASE: IMS Service Continuity (1/2)

› Handover of Packet Switched (PS) sessions to Circuit Switched (CS).
› Can be performed by a Service Centralization and Continuity Application Server (SCC AS), or by a SCC AS together with an Access Transfer Control Function (ATCF), that acts as a SIP proxy.

› Use-case: Indication support of ATCF capability

– SCC be performed by a Service Centralization and Continuity Application Server (SCC AS), or by a SCC AS together with an Access Transfer Control Function (ATCF), that acts as a SIP proxy
– If an intermediate with ATCF support is present, it needs to indicate support of the SCC capability to the AS during registration.
Use-Case: Determining which sessions were handed over from Packet Switched (PS) sessions to Circuit Switched (CS):

- UA might have several sessions, out of which only some are anchored in the Service Centralization and Continuity Application Server (SCC AS).
- When handover occurs, UA transfers only the anchored sessions.
USE-CASE: Dual-direction route based on Path (1/2)

– The Path address information can by definition only be ensured to work in the registrar-to-UA direction.
– Service-Route can be used to establish route in the UA-to-registrar direction
  › Problem 1: Intermediaries not recommended to insert S-R
  › Problem 2: Can not be assumed that the registrar have information about all intermediaries, in order to generate a S-R that includes all those intermediaries
  › Problem 3: Registrar can not use Path in order to generate Path, based on the direction issue.
USE-CASE: Dual-direction route based on Path (2/2)

› Intermediaries that inserts Path indicates that the Path address information can be used for requests in both directions.
  – Registrar can generate S-R using Paths with indication
  – UAs can generate route using Paths with indication
Feature tags and SIP today

› Feature tag can be used by any type of entity to indicate support of a capability

› SIP currently only specifies capability indication, using feature tags, for User Agents (UAs)
  – Contact header field (RFC)
Draft in a nutshell

› The rr-param rule defined in RFC 3261:

\[
rr-param = generic-param
\]

› …is extended to:

\[
rr-param = generic-param / feature-param
\]

› …where feature-param is defined in RFC 3840.

› Path, Record-Route, Route and Service-Route.

› **Backward compatible**: feature-param is a subset of generic-param
WHAT PROXY-INSERTED FEATURE TAGS DO

› Feature tags indicate support of a capability – same as for UAs.

› Feature tags ARE NOT the proxy equivalent to Require/Proxy-Require

› Feature tags DO NOT put a requirement on the receiver to understand the semantics of the feature tag
PROs/CONs

› Makes it more difficult for intermediaries to remove Record-Route header fields
  – Good say some people, bad say others…
THANK YOU FOR LISTENING!

QUESTIONS?

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