PROXY FEATURES

IETF 79

Christer.Holmberg@Ericsson.com

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: IMS Service Continuity (2/2)

- 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?

christer.holmberg@ericsson.com