Problem Statement and Requirements for SIP Call Control UUI

draft-ietf-cuss-sip-uui-reqs-00

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CUSS WG IETF-79

Recent Changes

- draft-johnston-cuss-sip-uui-reqs-00 was adopted by WG and used as basis for this document
- Editorial edits from Keith incorporated
- Removed Figure 5 Not Recommended Call Flow may move to mechanism document
- Edits to REQ-2, REQ-4, REQ-7, REQ-8, and REQ-9
- Added new REQ-10, REQ-11, and REQ-12
- Rewrite of Security Considerations
- Two Open Issues identified in document

- Changed to:
 - REQ-2: The mechanism will allow UAs to insert and receive UUI data in SIP dialog terminating requests and responses.

- Changed to:
 - REQ-4: The mechanism will allow UUI to be able to survive proxy retargeting or any other form of redirection of the request.

- Changed to:
 - REQ-7: The mechanism will support interworking with call control related DSS1 information elements or QSIG information elements or ISUP parameters.

- Changed to:
 - REQ-8: The mechanism will allow the inserter of UUI to be sure that the UAS understands the call control UUI mechanism.

This could be useful in ensuring that a request destined for the PSTN is routed to a gateway that supports the ISDN UUI service. This mechanism is related to REQ-10.

- Changed to:
 - REQ-9: The mechanism will allow proxies to remove a particular type of UUI information from a request or response.
- Removed:
 - or to block requests based on the presence of a particular type of UUI

New REQ-10

- REQ-10: The mechanism will provide the ability for a UA to discover which types or application usages of UUI another UA understands or supports
- OPEN ISSUE: For the ISDN Service, is there value in extending this down the protocol discriminator, which is the first octet of the ISDN UUI information?

New REQ-11

 REQ-11: The solution MUST provide a mechanism of transporting at least 128 octets of user data and a one octet protocol discriminator, i.e. 129 octets in total.

New REQ-12

 REQ-12: The recipient of UUI MUST be able to determine the entity that inserted the UUI. It is acceptable that this is performed implicitly where it is known that there is only one other end UA involved in the dialog. Where that does not exist, some other mechanism will need to be provided.

OPEN ISSUE in REQ-6

- REQ-6: The mechanism will minimize reliance on SIP extensions or uncommon SIP behavior.
- OPEN ISSUE: Does this requirement need to be reworked, or does it not provide any useful value?

New Security Considerations

UUI information can contain sensitive information. UUI transported over SIP may need integrity protection, confidentiality, and the ability to determine the identity of the source of the UUI.

Since the security requirements and key management of the UUI information are likely to be quite different from the SIP signaling transport, applications using this mechanism to transport information requiring confidentiality will likely perform their own encryption at the application layer before being passed to SIP for transport.

Next Steps

- Confirm decisions on list
- WGLC soon?