

Generic Notification Message for Mobile IPv4

Major update since IESG Last Call

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Usage case updating

- http://www.3gpp2.org/Public_html/Specs/X.S0054-100-0_v2.0_080909.pdf Shall we refer to this? No
- Others: (already in the text)
 - the PPP resource on the CDMA side has to be removed on the FA (PDSN) to avoid over-charging subscribers, anyway existing Registration Revocation RFC 3543 is a one way to do this
 - HA switch over (before HA decide to go offline it would like to notify the MNs to register with another candidate HA)
 - NEMO prefix changes(MN is notified by HA about NEMO prefix changes and service or billing related events, which is an operational requirement)
 - Load balancing(HA wants to move some of the registered MNs to other HAs)
 - Service Termination(due to end of prepaid time)
 - Service Interruption(due to system maintenance)

Usage case text (cont.)

- For now, none of these above future semantics are supported except that the Generic String Extension is supported for informational purposes. There should be minimum requirements given here for adding additional extension types to the allowed set and defining their semantics.

Generic

- Sri: All these are tied to MIP session state that was created using MIP protocol. These events/notifications have to be carried over MIP. HA is terminating a MN's binding. HA will send the notification as MIP message.
- Brian: The other motivation is to simplify development of any new messages. Since these messages would use the GNM framework, they only have to specify their message layout and operation, not the transmission, receipt, retry and acknowledgement mechanisms that GNM defines.

Generic (proposed text in section 1)

- There are two motivations to design the notification message by the way of generic: Firstly all these notifications are tied to MIP session state that was created using MIP protocol. These events/notifications have to be carried over MIP. For example HA is terminating a MN's binding and will send the notification as MIP message. The other motivation is to simplify development of any new messages. Since these messages would use the GNM framework, they only have to specify their message layout and operation, not the transmission, receipt, retry and acknowledgement mechanisms that GNM defines.

Remove subtype

- Already done in ver 14 draft

- Peter:

The extensions are self-identifying, because they follow the format defined in RFC3344bis sections 1.9, 1.10, and 1.11. Each extension has its own "Type" field as the first field of the extension. In particular, RFC4917 assigns the number 145 to the Message String Extension.

I think we want to have the flexibility to include multiple extensions in the GNM and GNAM. Putting just one number in a subtype field in the header seems to preclude that.

Specification required

- Need help to add this

The use case for mobile device

- Sebastian: Network as the referee, filter based on policy
- Peter: IESG review seemed to indicate that we want to have some control over new extensions (and associated new semantics) for these messages, so these new uses would need to be documented with IETF-consensus documents.
- Result: Sebastian proposed text in future section

Alexey Melnikov

- Many editorial, thanks

After one more update by including above, shall we
move to IESG again?