Group Communication for the Constrained Application Protocol (CoAP)

draft-ietf-core-groupcomm-bis-10

IETF 118, Prague, November 2023

Esko Dijk – IoTconsultancy.nl (presenting)

Co-authors:
  M. Tiloca
  C. Wang
Recap & Goal – Groupcomm-bis

› Normative successor of experimental RFC 7390
  – Obsoletes RFC 7390, Updates RFC 7252 / RFC 7641

› New standard reference for implementations now based on RFC 7390

› Scope
  – CoAP IP multicast group communication, including latest features:
    Observe/Blockwise/Security …
  – Unsecured & group-OSCORE-secured
  – Definition of group types & Secure group configuration
Main Updates Since -05 (@IETF-112)

› New ...
  – proxy subsection 3.5.3 Single Group Request to Multiple Proxies
  – section 3.9.2 on UDP/IPv6 Multicast Transport over 6 LoWPAN

› Clarified ...
  – exceptional cases where CoAP NoSec can be used
  – Terminology (e.g. “Group URI”)

› More details ...
  – in security sections
  – how RFC 7252 is being updated
  – in Group Discovery section
  – for the 3 different group types; and how they’re named.
Recent Update -10 (Oct ‘23)

› Recent CoRE interim discussion about 4 of John’s review comments. Items are now (hopefully) resolved.

– 1. Using experimental/obsolete protocol from RFC 7390
   ⇒ reworded; experiment concluded

– 2. Is there concrete use anywhere of unsecured discovery?
   ⇒ added the “device onboarding discovery” use case

– 3. “Sensitive and mission-critical” applications ⇒ reworded

– 4. CoAP Group – are address/port optional or mandatory?
   ⇒ clarified it’s mandatory for a CoAP group, but *optional* in the Group URI.
Next Steps

› **Last update -10 based on review by John**
  – waiting for John & WG to confirm that comments were addressed!

› **WGLC was done in April 2022 on -06**
  – review comments by Carsten were addressed in -07
  – waiting for confirmation that comments were addressed!
Open Issues / PRs – Github

› https://github.com/core-wg/groupcomm-bis

› 0 issues open

› 1 PR open – editorial
  – most items already included in version -10
  – needs one final pass for the remaining items (minor / editorial)
Thank you!

Comments/questions?

https://github.com/core-wg/groupcomm-bis
core@ietf.org
https://iotconsultancy.nl/