

IPoC: IP over CCN for seamless 5G mobility

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Concept

- Use CCN as the forwarding plane for a Mobile Core Network
- Support existing IP services via an “IP over CCN” protocol – replacing LTE-EPC (GTP Tunnels) for IP Mobility
- Enable deployment of native CCN applications, preserving the benefits

Draft Status

- July 21 ICNRG Interim: Individual draft presented for adoption
 - <https://datatracker.ietf.org/meeting/interim-2019-icnrg-03/materials/slides-interim-2019-icnrg-03-sessa-ipoc-ip-over-ccn-for-seamless-5g-mobility>
- July 24-26: Adoption confirmed on mailing list
- August 2: RG draft submitted

Changes in RG draft 00

- Added reference to:
 - Shannigrahi, S., Fan, C., and G. White, "Bridging the ICN Deployment Gap with IPoC: An IP-over-ICN protocol for 5G Networks", SIGCOMM NEAT Workshop , August 2018, <<https://dl.acm.org/citation.cfm?id=3229575>>.
- Updated references to:
 - **[RFC8569]** Mosko, M., Solis, I., and C. Wood, "Content-Centric Networking (CCNx) Semantics", RFC 8569, DOI 10.17487/RFC8569, July 2019, <<https://www.rfc-editor.org/info/rfc8569>>.
 - **[RFC8609]** Mosko, M., Solis, I., and C. Wood, "Content-Centric Networking (CCNx) Messages in TLV Format", RFC 8609, DOI 10.17487/RFC8609, July 2019, <<https://www.rfc-editor.org/info/rfc8609>>.

Open Items

- Consider including a comparative discussion of Mobile IPv6 (RFC 6275) and Multicast Mobility (RFC 5757).