A Realization of RFC XXXX Network Slices for 5G Networks Using Current IP/MPLS Technologies: Updates & Next Steps

draft-ietf-teas-5g-ns-ip-mpls-01

IETF#118, Prague
November 2023

K. Szarkowicz (Juniper), R. Roberts (Juniper), J. Lucek (Juniper), M. Boucadair (Orange), L. M. Contreras (Telefonica)
Summary of Issues & Resolution (1)

• Assess which/whether some of the material in the "Network Slice Mapping" Section should be maintained in this draft or moved to the application I-D

  – Sync with the authors of the application I-D
  – The outcome is to keep the text in the realization I-D + Add NEW Scope text to both I-Ds to help decide if similar issues are raised in the future
  – Proposed fix shared on the list (October 04, 2023): https://mailarchive.ietf.org/arch/msg/teas/4QifnnGAcnQcCTXRLSJtQ1SArLA/
  – Removed the editor note used to flag the issue from draft-ietf-teas-5g-ns-ip-mpls-01
This document focuses on the **mapping between 5G Slices and underlying Transport Networks.** Specifically, the document describes **how RFC XXXX Network Slice Services can be derived in the context of a 3GPP Slice Service.** To that aim, the document explores how and whether 3GPP Slice Service **parameters are mapped to parameters that are exposed in IETF service data models** (mainly, IETF Network Slice Service Model, Attachment Circuits'-'as-a-Service (ACaaS), and bearers). **It is out of scope of this document to elaborate on the realization of RFC XXXX Network Slices.** These considerations are discussed in [I-D.ietf-teas-5g-ns-ip-mpls].
This document focuses on the **technical realization of RFC XXXX Network Slices**. The realization is typically triggered by Network Slice Service requests. **How a Network Slice Service request is placed for realization, including how it is derived from a 5G Slice Service request, is out of scope.** Network Slice Service mapping considerations (e.g., mapping between 3GPP to IETF service parameters) are discussed in [I-D.ietf-teas-5g-network-slice-application].

*NEW Scope text added to draft-ietf-teas-5g-ns-ip-mpls*
Summary of Issues & Resolution (2)

• Assess whether we need to maintain the "First 5G Slice vs Subsequent Slices" Section
  – Updated the text to clarify why this is relevant to the realization
  – Proposed fix shared on the list (October 06, 2023)

• Clarify the use of inter-AS option B/C to model the AC between CE and PE
  – Updated the text to insist on the specifics of this model compared to distributed and managed CE models
  – Change to “service-aware CE”
  – Proposed fix shared on the list (here) (October 06, 2023)

• Further discuss whether the TN slice in the customer site is covered or is out of the scope of Network Slice
  – We agree that statement is ambiguous and, more importantly, does not bring much. What is important in that section is to describe the various orchestration domains.
  – We deleted that statement
  – Proposed fix already shared on the list (October 06, 2023)
Other Changes

• Added a NEW Section to cover « inter-AS Option C » considerations

• ... And many other edits to enhance readability
Next Steps

• The authors think that the content is almost stable
  – 12 revisions so far

• **Proposal**: Target WGLC by March 2024
  – Request early directorate reviews right after IETF#118, especially
    • rtg, opsdir, tsvart (QoS part), & intdir (addressing part)
  – Seek external reviews on specific sections
    • We received some ACKs to review
    • Contacted tsvwg for feedback: Received so far feedback from Ruediger Geib (no issue with the approach in the draft)

• Comments are welcome
  – Issues and PRs can be issued at [https://github.com/boucadair/5g-slice-realization](https://github.com/boucadair/5g-slice-realization)