**3GPP TSG SA WG-4 Meeting #121 S4-221556**

**Toulouse, France, 14-18 November 2022**

Title: DRAFT Reply LS on the usage of DC application identifier in SDP

Response to: S2-2209617

Release: Rel-18

Work Item: FS\_NG\_RTC

Source: SA4

To: SA2

Cc: CT1

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Attachments: -

**1. Overall Description:**

At SA4#121 meeting, SA2 questions to SA4 in S4-221243/S2-2209617 were discussed and SA4 would like to give the following answers:

*1. SA2 is considering to support scenarios where a UE downloads multiple DC applications from a DC Server within one MMTel session. From SA4 perspective, how can the DC server in such a scenario associate the requested application DC with the corresponding DC application?*

Answer: When multiple, simultaneous DC applications are opened and if more than one of them make use of application DC, an application binding to related application DC will be necessary. No explicit binding is described by existing text.

*2. How can information related to the DC application that was downloaded by the originating UE be signalled to the peer UE allowing the peer UE to download the same application with the assumption in bullet 1?*

Answer: There is no need to signal this explicitly to the peer UE. Both UE are connected to the same DC Server that is assumed to be aware of the call context and relates local and peer applications through their bootstrap DC streamID in that context. This is already described by TS 26.114 Table 6.2.10.1-2 that lists two application sources, the network provider (streamID 0 and 100) and the user (streamID 10 and 110), and by Figure 6.2.10.1-3 that highlights the use of streamIDs 10 and 110 in that way.

*3. If multiple Data Channels are to be established by a DC application, how can the DC Server identify each Data Channel for the purpose of policy selection as indicated above?*

Answer: The existing TS 26.114 text leaves up to the DC Server to set the network DC media address conveyed to the local and peer UEs. For the UE-to-UE application DC, the address conveyed to a UE would be an address that is routable to the other UE. For the UE-to-network application DC, the address conveyed to a UE would be an address that is routable to a network-based peer. It is expected that one endpoint of an application DC will always be the UE but the other endpoint is application-dependent and can reasonably only be decided by the DC application itself. Considering that the DC Server has information on which DC application that is used in the session, the DC Server could also be assumed to have application metadata information on what application DC endpoint(s) that DC application makes use of. In that case, it may strictly not be necessary for the UE to also convey that information. However, it seems that a network-based application DC endpoint must be identified and addressed by the DC application, for the DC Server to provide a routable DC media address to it, which is currently not described. For the case where multiple application DC are used by the same DC application and where those application DC endpoints are different (potentially multiple, different network server addresses or the address representing the peer UE), there is some uncertainty in how those are mapped to SDP m= lines and thus which m= line that should get which address.

SA4 will work to amend the text with a solution to the above and will inform SA2 when ready.

**2. Actions:**

**To SA2 group.**

**ACTION:** SA4 kindly requests SA2 to take the above answers into account.

**3. Date of Next TSG SA WG4 Meetings:**

TSG-SA4 Meeting #122 20-24 February 2023 Athens, GR

TSG-SA4 Meeting #123 17-21 April 2023 TBD, US