Customized Configuration for Controlling Subscription Messages over N10

Feature Summary and Revision History

Summary Data

Table 1: Summary Data

Applicable Product(s) or Functional Area	SMF
Applicable Platform(s)	SMI
Feature Default Setting	Disabled – Configuration Required
Related Changes in this Release	Not Applicable
Related Documentation	Not Applicable

Revision History

Table 2: Revision History

Revision Details	Release
First introduced.	2020.03.0

Feature Description

The SMF introduces new RAT type configuration options with the existing configuration **authorization local** in the DNN profile. With this optional configuration, the SMF stops the Subscription Data Management (SDM) messages from sending over N10 interface towards Unified Data Management (UDM).

How it Works

This feature works with the customized RAT-type configuration in the DNN profile configuration.

When the SMF skips UDM subscription, then it stops sending Fetch-Subscription and Subscribe-for-Notification during session establishment.

When the SMF skips the UDM subscription, then it stops sending Unsubscribe-to-Notification during session release. The SMF sends Unsubscribe-to-Notification only when the UDM receives the UECM messages.

The SMF supports dynamic change for UDM subscription skip configuration. That is, new configuration is applicable for the new session getting established. The existing sessions continue as per the old behavior of configuration.

For information on the complete configuration commands, see the following section.

Configuring Options for Controlling SDM Messages

This section describes how to configure this feature for controlling SDM messages over the N10 interface.

Configuring RAT-type in DNN Profile

To configure the RAT-type with the local authorization under the DNN profile, use the following commands:

```
configure
  profile dnn dnnprofile
    authorization local rat-type [ nr | eutra | wlan ]
    end
```

NOTES:

- **authorization local**: This command skips the SDM messages for EPS sessions only. Upon configuring this command under the selected DNN profile, the SMF skips the UDM interaction for fetch subscription. The SMF uses the values received in the 'Create Session Request' message. The SMF skips the UDM interaction to receive 'Subscribe-for-Notification' from the UDM.

- **rat-type [nr | eutra | wlan]**: This keyword skips the following SDM messages based on the specified RAT-type.

  - udm subscription-fetch

  - subscribe-to-notification

  - unsubscribe-to-notifications

Upon configuring the RAT-type with **authorization local** command in the selected dnn-profile, then for sessions on that RAT-type, the SMF skips the following interactions:

- the UDM interaction for 'UDM fetch subscription' during session establishment

- the UDM interaction to 'subscriber-for-notification' during session establishment

- the UDM interaction to 'unsubscribe-for-notification' during session release

- **no authorization local rat-type [nr | eutra | wlan]**: Disables the local authorization under the DNN profile.