Network-Initiated Deregistration Request

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Feature Summary and Revision History

Summary Data

Table 1: Summary Data

Applicable Product(s) or Functional Area	AMF
Applicable Platform(s)	SMI
Feature Default Setting	Enabled - Always-on
Related Documentation	Not Applicable

Revision History

Table 2: Revision History

Revision Details	Release
First introduced.	2021.04.0

Feature Description

AMF marks the UE state as DE-REGISTERED when it receives Deregistration Request from any of the following:

- UE
- AMF CLI admin (Clear Subscribe Request)
- IDT Timer expiry (implicit detach procedure)

AMF prepares the Deregister Accept (N1-Downlink message) towards the UE and waits for the Deregister Complete message from the UE. During this process AMF performs the following functions:

- Checks the configured purge time value.
- Unsubscribes the PCF for am-policy data.
- Completes the UE Context Release Request towards N1.

AMF starts CDL purge timer and holds purging of subscribers data until the timer expires. When the purge timer expires AMF performs the following actions:

- Pushes the CDL timer expiry notification on REST-EP.
- Stops the purge timer.
- Starts purging procedures such as Unsubscribe Or Deregister towards UDM.

Note

- This feature doesn't support the Emergency registration, and the non-3GPP trusted or untrusted scenarios.
- If UE with existing SUPI performs re-registration while purge timer is running, the purge timer gets reset when the UE triggers re-deregistration.

How it Works

This section describes how this feature works.

Call Flows

This section describes the key call flow for this feature.

Purge of Subscriber Data Call Flow

This section describes the Purge of Subscriber Data in AMF call flow.

Figure 1: Purge of Subscriber Data in AMF Call Flow

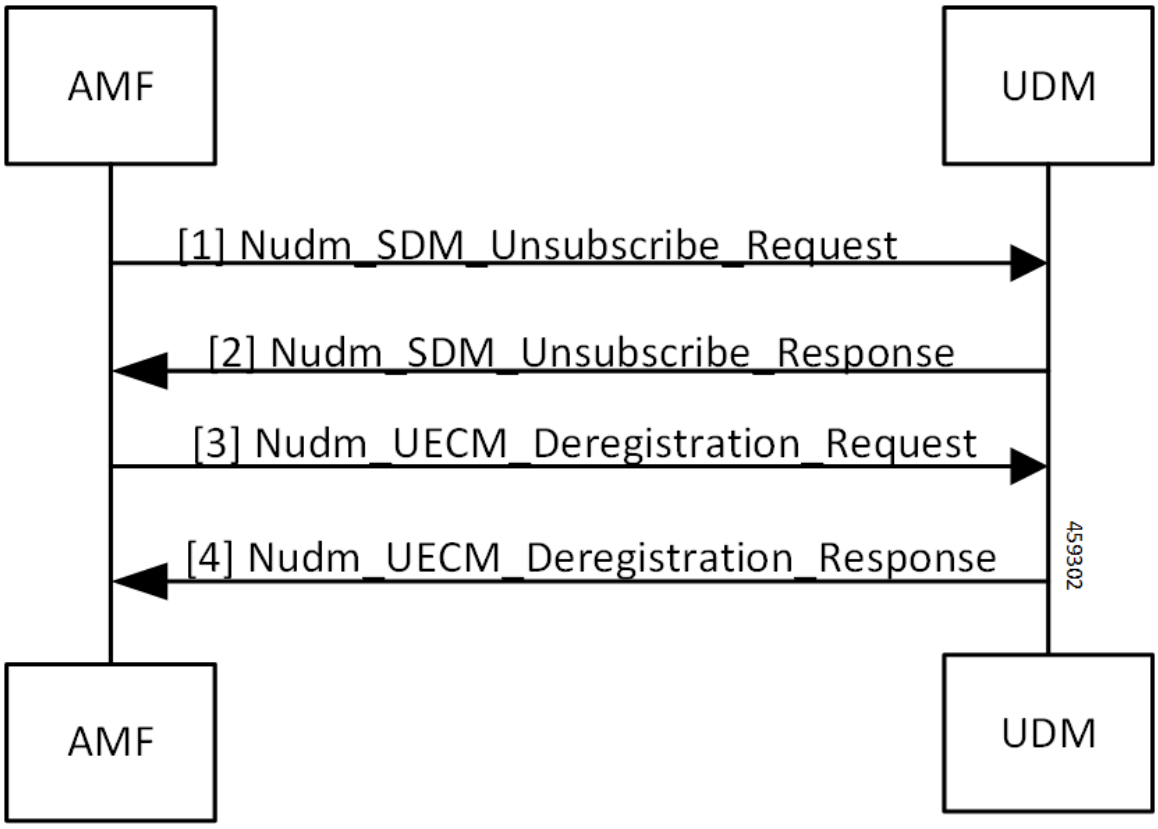

Table 3: Purge of Subscriber Data in AMF Call Flow Description

Step	Description
1, 2	When AMF receives the Deregistration Request from the UE, it sends SDM Unsubscribe and UE CM Deregistration triggers on purge timer expiry. AMF receives the response from the UDM.
3, 4	AMF sends the UE CM Deregistration Request to the UDM and receives response from it.

Feature Configuration

To configure this feature, use the following configuration:

```
config
   amf-global
      call-control-policy call_control_policy_name
         timers tpurge value purge_value
         end
```

NOTES:

- **call-control-policy** *call_control_policy_name*—Specify the call control policy name.

- **timers tpurge value** *purge_value*—Specify the purge timer value in seconds.

  Default purge timer value is 86400 seconds.

  To disable the purge timer value, provide its value as zero.

Configuration Example

The following is an example configuration.

```
config
   amf-global
      call-control-policy local
         timers tpurge value 100
         end
```