UCC 5G AMF - Release Change Reference

Features and Changes Quick Reference

Features / Behavior Changes	Release Introduced / Modified	Default
Behavior Change—AMF Limitation for the MMIdle State with the Existing gNB Re-establishment, on page 4	2023.02.0	Not Applicable
Behavior Change—Enhancements to Subscriber Deregistration Callback URI, on page 5	2023.02.0	Enabled – Always-on
Behavior Change—Guardtimer Enhancement for n26 Idle Mode Handover, on page 6	2023.02.0	Enabled – Configuration required to disable
Feature—GPSI or MSISDN-based LI Monitoring on AMF, on page 2	2023.02.0	Disabled – Configuration required to enable
Feature—Multiple Service Pods on Multiple Nodes, on page 3	2023.02.0	Disabled – Configuration required to enable
Feature—Subscription Concealed Identifier Profile—5G AMF Supports the PSI Profile-A to Profile-B, on page 3	2023.02.0	Enabled – Always-on

Features

GPSI or MSISDN-based LI Monitoring on AMF

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	Disabled – Configuration required to enable
Related Documentation	*UCC 5G AMF Lawful Interception Configuration Guide*

Revision History

Table 2: Revision History

Revision Details	Release
GPSI or MSISDN-based LI monitoring updates	2023.02.0
Minor updates and corrections	2023.01.0
Added the new and revised lawful interception interface support-related information.	2022.04.0
First introduced.	2021.04.0

Feature Description

Currently, the AMF permits law enforcement agencies to intercept messages that are identified by the SUPI.

For more information, contact your Cisco representative.

Multiple Service Pods on Multiple Nodes

Feature Summary and Revision History

Summary Data

Table 3: Summary Data

Applicable Products or Functional Area	AMF
Applicable Platforms	SMI
Feature Default Setting	Disabled – Configuration required to enable
Related Documentation	*UCC 5G AMF Configuration and Administration Guide*

Revision History

Table 4: Revision History

Revision Details	Release
First introduced.	2023.02.0

Feature Description

This feature helps in bringing up service pods on two or more different nodes.

For more information, refer to the UCC 5G AMF Configuration and Administration Guide > Pods and Services Reference Chapter > Multiple Service Pods on Multiple Nodes Section.

Subscription Concealed Identifier Profile—5G AMF Supports the PSI Profile-A to Profile-B

Feature Summary and Revision History

Summary Data

Table 5: Summary Data

Applicable Product(s) or Functional Area	AMF
Applicable Platform(s)	SMI
Feature Default Setting	Enabled - Always-on
Related Documentation	*UCC 5G AMF Configuration and Administration Guide*

Revision History

Table 6: Revision History

Revision Details	Release
Content enhanced with 5G-AMF to support the PSI Profile-A/Profile-B feature.	2023.02.0
First introduced.	2021.04.0

Feature Description

A Subscription Concealed Identifier (SUCI) is a unique identifier designed to protect the privacy of the subscriber's identity. It's generated by the User Equipment (UE) using an Elliptic Curve Integrated Encryption Scheme (ECIES)-based protection scheme. The UE encrypts the Subscriber Permanent Identifier (SUPI) in a concealed method with the public key of the Home Network. It's securely provisioned to the Universal Subscriber Identity Module (USIM) during the registration process.

For more information, refer to the UCC 5G AMF Configuration and Administration Guide > Subscription Concealed Identifier Profile chapter.

Behavior Changes

AMF Limitation for the MMIdle State with the Existing gNB Re-establishment

Behavior Change Summary and Revision History

Summary Data

Table 7: Summary Data

Applicable Product(s) or Functional Area	AMF
Applicable Platform(s)	SMI
Feature Default Setting	Not Applicable
Related Changes in this Release	Not Applicable
Related Documentation	*UCC 5G Access and Mobility Management Function - Configuration and Administration Guide*

Revision History

Table 8: Revision History

Revision Details	Release
First introduced.	2023.02

Behavior Change

Previous Behavior: When the AMF received a new NG setup for an existing gNB, it didn't take any action regarding the UEs.

New Behavior: When the AMF receives a new NG Setup Request for an existing gNB, which was already set up but with a different SCTP connection ID, then the UEs associated with that gNB will be moved to the IDLE state.

Customer Impact: No impact.

Enhancements to Subscriber Deregistration Callback URI

Behavior Change Summary and Revision History

Summary Data

Table 9: Summary Data

Applicable Product(s) or Functional Area	AMF
Applicable Platform(s)	SMI
Feature Default Setting	Enabled – Always-on
Related Changes in this Release	Not Applicable
Related Documentation	*UCC 5G Access and Mobility Management Function - Configuration and Administration Guide*

Revision History

Table 10: Revision History

Revision Details	Release
First introduced.	2023.02

Behavior Change

Previous Behavior: Earlier, `deregCallbackUri` was sent in the UDM Registration Request `/namf-comm/v1/callbacks/dereg-notification/supi-xxxxxxxxxxxxx`.

New Behavior: Now, there's a change in the existing `deregCallbackUri` sent in the UDM Registration Request. The new format is `/namf-comm/v1/callbacks/dereg-notification/supi-xxxxxxxxxxxxx-xxxxxxx`.

Customer Impact: There's no impact, as the UDM automatically uses the new deregCallbackUri received from the AMF.

Guardtimer Enhancement for n26 Idle Mode Handover

Behavior Change Summary and Revision History

Summary Data

Table 11: Summary Data

Applicable Product(s) or Functional Area	AMF
Applicable Platform(s)	SMI
Feature Default Setting	Enabled – Configuration required to disable
Related Changes in this Release	Not Applicable
Related Documentation	*UCC 5G Access and Mobility Management Function - Configuration and Administration Guide*

Revision History

Table 12: Revision History

Revision Details	Release
First introduced.	2023.02

Behavior Change

Previous Behavior: The AMF was not clearing UEcontext after idle mode handover to MME, when deregistration notification was not received from UDM.

New Behavior: Added support for Guardtimer and subscriber cleanup post Guardtimer expiry for n26 and n14 idle mode handover interfaces. This support cleans up the subscriber, even if the udm dereg notification is not received. The following commands are now enhanced:

- **Sample AMF to MME Idle Mode Handoff Support - n26-interface Idle Mode Handover**:

```
amf-global call-control-policy policy_name timers context-transfer-guard n26-interface
  value guard_time_value
```

- **Sample Inter AMF Idle Mode Handoff Support - n14-interface Idle Mode Handover**:

```
amf-global call-control-policy policy_name timers context-transfer-guard n14-interface
  value guard_time_value
```

Customer Impact: Enhanced experience with context transfer Guardtimer feature.