



# Triggering lu Release Command Procedure

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## Feature Summary and Revision History

### Summary Data

Applicable Product(s) or Functional Area	SGSN
Applicable Platform(s)	<ul style="list-style-type: none"><li>• ASR 5500</li><li>• VPC-DI</li><li>• VPC-SI</li></ul>
Feature Default	Disabled - Configuration Required
Related Changes in This Release	Not Applicable
Related Documentation	<ul style="list-style-type: none"><li>• <i>Command Line Interface Reference</i></li><li>• <i>SGSN Administration Guide</i></li><li>• <i>Statistics and Counters Reference</i></li></ul>

### Revision History



#### Important

Revision history details are not provided for features introduced before releases 21.2 and N5.1.

Revision Details	Release
SGSN triggers the Iu Release procedure when it receives: <ul style="list-style-type: none"> <li>• RAB Release Request with cause 46 "Radio Connection With UE Lost".</li> <li>• RAB Assignment Response with cause 46 "Radio Connection With UE Lost".</li> </ul> This feature is available in 21.8.4 and 21.9 releases.	21.8
First introduced.	Pre 21.2

## Feature Description

SGSN triggers the Iu Release Command procedure to RNC when it receives the RAB Release Request with cause 46 "Radio Connection With UE Lost" and the RAB Assignment Response with cause 46 "Radio Connection With UE Lost".

### Support for RAB Release Request with cause 46

In releases prior to 21.8: When SGSN receives the RAB Release Request with cause "Radio Connection With UE Lost" from RNC, it responds with the same cause code in RAB Assignment Request (cause RAB Release). RNC then sends the RAB Assignment Response with cause RAB Release followed by Iu Release Command with cause "No Remaining RAB" to SGSN.

In 21.8 and later releases: When SGSN receives the RAB Release Request with cause "Radio Connection With UE Lost" from RNC, it triggers the Iu Release Command with cause "Normal Release". RNC then sends the Iu Release Complete message to SGSN.

The Iu release procedure is handled through the **ranap rabrel-with-radiolost** CLI command configured in the RNC Configuration mode.

SGSN proceeds with the following steps when it receives the RAB Release Request with cause "Radio Connection With UE Lost":

- SGSN verifies if the **ranap rabrel-with-radiolost** CLI command is enabled.
- If the **ranap rabrel-with-radiolost** CLI command is enabled, then SGSN triggers the Iu Release command towards the RNC to release the Iu connection for that specific UE.

### Support for RAB Assignment Response with cause 46

In releases prior to 21.8: When RNC sends the RAB Assignment Response with cause "Radio Connection With UE Lost", SGSN sends the RAB Assignment Request with the cause "Radio Connection With UE Lost". Multiple retries are done before RNC sends the Iu Release Request message.

In 21.8 and later releases: When RNC sends the RAB Assignment Response with cause "Radio Connection With UE Lost", SGSN sends the Iu Release Command immediately and there are no RAB Assignment Request retries.

The Iu release procedure is handled through the **ranap rab-arsp-ue-radio-lost** CLI command configured in the RNC Configuration mode.

SGSN proceeds with the following steps when it receives the RAB Assignment Response with cause "Radio Connection With UE Lost":

- SGSN verifies if the **ranap rab-arsp-ue-radio-lost** CLI command is enabled.
- If the **ranap rab-arsp-ue-radio-lost** CLI command is enabled, then SGSN triggers the Iu Release Command towards the RNC to release the Iu connection for that specific UE.

## Configuring RAB Messages with Cause 46

This section describes how to trigger the Iu Release Command procedure with cause 46 "Radio Connection With UE Lost".

### Configuring RAB Assignment Response

Use the following configuration to enable or disable handling of the RAB Assignment Response with cause 46 (Radio Connection With UE Lost). SGSN sends the Iu Release Command with normal cause to RNC when it receives the RAB Assignment Response with cause 46.

```
configure
context context_name
  iups-service service_name
    rnc id rnc_id
      [ no ] ranap rab-arsp-ue-radio-lost
    end
```

#### NOTES:

- **iups-service service\_name**: Creates an IuPS service instance and enters the IuPS Service Configuration mode. This mode defines the configuration and usage of IuPS interfaces between the SGSN and the RNCs in the UMTS radio access network (UTRAN).  
*service\_name* specifies the IuPS service name as a unique alphanumeric string of 1 through 63 characters.
- **rnc id rnc\_id**: Sets the identification number of the RNC configuration instance. *rnc\_id* must be an integer from 0 to 65535.
- When **no ranap rab-arsp-ue-radio-lost** is configured, SGSN will send the RAB Assignment Request with RAB Release to RNC.
- This command applies to Gn-SGSN only.
- This command is disabled by default.

### Configuring RAB Release Request

Use the following configuration to enable or disable handling of the RAB Release Request with cause 46 (Radio Connection With UE Lost). SGSN sends the Iu Release Command to RNC when it receives the RAB Release Request with cause 46.

```
configure
context context_name
```

```

iups-service service_name
  rnc id rnc_id
    [ no ] ranap rab-release-with-radiolost
  end

```

**NOTES:**

- **iups-service** *service\_name*: Creates an IuPS service instance and enters the IuPS Service Configuration mode. This mode defines the configuration and usage of IuPS interfaces between the SGSN and the RNCs in the UMTS radio access network (UTRAN).  
*service\_name* specifies the IuPS service name as a unique alphanumeric string of 1 through 63 characters.
- **rnc id** *rnc\_id*: Sets the identification number of the RNC configuration instance. *rnc\_id* must be an integer from 0 to 65535.
- When **no ranap rab-release-with-radiolost** is configured, SGSN will send the RAB Assignment Request with RAB Release to RNC.
- This command applies to Gn-SGSN only.
- This command is disabled by default.

## Monitoring and Troubleshooting

This section provides information regarding show commands and bulk statistics available to monitor and troubleshoot this feature.

### Show Commands and Outputs

#### show iups-service all

The output of this command includes the following fields:

- **Rab release with Radio lost** — Indicates whether RAB Release Request with cause 46 "Radio Connection With UE Lost" is enabled or disabled.
- **Rab assignment response with UE Radio lost** — Indicates whether RAB Assignment Response with cause 46 "Radio Connection With UE Lost" is enabled or disabled.

### Bulk Statistics

The following bulk statistics are available in the SGSN schema.

- **Iu-release-command-with-radio-lost-ue** — Total number of Iu interface release commands due to RAB Release Request with radio lost received.
- **Iu-release-command-rab-ass-rsp-with-radio-lost-ue** — Total number of Iu interface release commands due to RAB Assignment Response with radio lost received.