



gNB-Initiated Reset Procedure

- [Feature Summary and Revision History, on page 1](#)
- [Feature Description, on page 1](#)
- [How it Works, on page 2](#)

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

If a failure occurs at the NG-RAN node, it causes data loss in all or part of the transaction reference information. In order to recover from the failure, the gNB initiates a reset procedure towards AMF to release the resources. This procedure initializes or reinitializes the RAN, and provides an opportunity for new transactions.

The NG reset procedure resets all the UE sessions; during partial reset, you can reset particular UE sessions by using the `partOfNG-Interface` IE when sending NG Application Protocol (NGAP) ID for those sessions.

A sample partial reset IE:

```
IE Type: id-ResetType(88)
{'ResetType': {'choice-Extensions': None,
'nG-Interface': None,
'partOfNG-Interface': {0: {'UE-associatedLogicalNG-connectionItem': {'aMF-UE-NGAP-ID':
4194359,
'iE-Extensions': None,
'rAN-UE-NGAP-ID': 12346}}}}
```

How it Works

The gNB sends a Reset message to AMF when an event fails on the NG-RAN node. On receiving the message, the AMF releases all the allocated resources specified (implicitly and explicitly) in the Reset message. AMF allocates the resources related to UE associations on the NG node. The AMF also erases the NGAP ID assigned to the UE associations. After resetting the resources, the AMF sends a Reset Acknowledgment message to gNB indicating that the procedure is complete.

The following figure illustrates the reset procedure between gNB and AMF.

Figure 1: Reset Procedure Initiated from gNB to AMF

