

## **NB-IoT** and Low Power Session Counters

This chapter describes the following topics:

- Feature Summary and Revision History, on page 1
- Feature Description, on page 2
- Monitoring and Troubleshooting, on page 2

# **Feature Summary and Revision History**

#### **Summary Data**

Applicable Product(s) or Functional Area	C-SGN, MME
Applicable Platform(s)	• ASR 5500
	• VPC-DI
	• VPC-SI
Feature Default	Enabled - Always-on
Related Changes in This Release	Not applicable
Related Documentation	MME Administration Guide
	Statistics and Counters Reference
	• Ultra IoT C-SGN Administration Guide

#### **Revision History**

Revision Details	Release
First introduced.	21.6

## **Feature Description**

On MME and C-SGN, new counters are added to count the number of low power subscribers when RAT type is E-UTRAN or NB-IoT. The counters will increment by 1 for each subscriber if eDRX or PSM or both are received in Attach or TAU Request.

The **show mme-service statistics** command and MME schema are enhanced to support the new counters and and new bulk statistics respectively.

## **Monitoring and Troubleshooting**

This section provides information on the bulk statistics and show commands available to support NB-IoT and Low Power Session RAT type.

### **Show Commands and/or Outputs**

This section provides information regarding show commands and/or their outputs.

#### show mme-service statistics

The following new fields are added to the output of this command to display the number of low power subscribers attached when RAT type is NBIOT and E-UTRAN.

- Low power Subscribers:
  - NB-IoT Attached Calls The current total number of attached low power subscribers which are operating in NB-IoT.
  - EUTRAN Attached Calls The current total number of attached low power subscribers which are operating in E-UTRAN.

### **Bulk Statistics**

The following bulk statistics are added in the MME schema to display the number of low power subscribers attached when RAT type is NB-IOT and E-UTRAN.

Bulk Statistics	Description
attached-lp-nbiot-subscriber	The current total number of attached low power subscribers which are operating in NB-IoT.
attached-lp-eutran-subscriber	The current total number of attached low power subscribers which are operating in E-UTRAN.