



## **GPRS Huawei GGSN V900R007 C03 Functional Specification**

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# 1 Change History

Issue	Date	Author	Comments
1.0	10 Mar 2011	IBM	Fixpack Released

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## **2 Outstanding Issues**

<b>Number</b>	<b>Date</b>	<b>Description</b>	<b>Planned Resolution</b>
N/A			

## 3 Prerequisites

This section lists the Tech Pack modules that the current Tech Pack is dependent on, in alphabetical order.

- HUA GOMlet
- Neutral Core GOM
- Neutral GPRS/UMTS CN GOM
- Neutral GPRS BSS GOM
- Neutral GSM BSS/NSS GOM
- Neutral UMTS UTRAN GOM

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# 4 Network Model

This section describes the network objects (logical and physical) that are referenced in this technology pack module's data model.

## 4.1 APN

Access Point Names representing each external network interface to the GGSN. Information about which of these external networks an individual subscriber is allowed to access is stored as an APN list in their HLR profile.

Attribute Name	Description	Type	Related Object	Aggregat or
APN_Id	A unique identifier for the APN.	STRING		
APN_Name	A user friendly name preferably unique for the APN.	STRING		
GGSN_Id	A unique identifier for the GGSN.	STRING	GGSN	
Region_Id	Region associated with the APN.	STRING	Region	
Network_Id	Network associated with the APN.	STRING	Network	
APN_Type	Type of APN.	STRING		
APN_Version	Hardware/Software version of the APN.	STRING		
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).	STRING		

## 4.2 CG\_IP

Charging Gateway IP address

Attribute Name	Description	Type	Related Object	Aggregat or
CG_IP_Id	Primary identifier of the Charging Gateway IP address	STRING		

CG_IP_Name	Meaningful name of the CG IP	STRING		
Region_Id	Identifier of the region	STRING	Region	
Network_Id	Identifier of the Network	STRING	Network	
CG_Id	Identifier of the Charging Gateway	STRING		

## 4.3 GGSN\_Board

GGSN Board

Attribute Name	Description	Type	Related Object	Aggregat or
GGSN_Board_Id	Primary identifier of the GGSN Board	STRING		
GGSN_Board_Name	Meaningful name for the GGSN Board	STRING		
GGSN_Id	Identifier of the GGSN	STRING	GGSN	
Region_Id	Identifier of the GGSN region	STRING	Region	
Network_Id	Identifier of the Network	STRING	Network	

## 4.4 GGSN

The Gateway GPRS Serving Node provides the interconnection between the GPRS/UMTS network and external packet data networks, much as the GMSC interconnects a GSM voice service to the PSTN. Viewed externally, its primary function is that of a router.

Attribute Name	Description	Type	Related Object	Aggregat or
GGSN_Id	A unique identifier for the GGSN.	STRING		
GGSN_Name	A user friendly name preferably unique for the GGSN.	STRING		
Region_Id	Region associated with the GGSN.	STRING	Region	
DHCP_Id	A unique identifier for the DHCP.	STRING	DHCP	
Radius_Id	A unique identifier for the Radius.	STRING	Radius	

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DNS_Id	A unique identifier for the DNS.	STRING	DNS	
Network_Id	Network associated with the GGSN.	STRING	Network	
GGSN_IP_Address	IP address of the GGSN.	STRING		
GGSN_Version	Hardware/Software version of the GGSN.	STRING		
Max_Subscriber	Maximum number of subscribers supported by the GGSN.	INTEGER		
Max_PDP	Maximum number of PDP sessions supported by the GGSN.	INTEGER		
Max_PDP_per_Subscriber	Maximum number of PDP sessions supported per subscriber by the GGSN.	INTEGER		
Max_Traffic_Rate	Maximum supported traffic rate of the GGSN.	FLOAT		
PDP_Session_Timeout	Timeout period for PDP sessions.	STRING		
PDP_Idle_Timeout	Idle timeout period for PDP sessions.	STRING		
Technology	Technology of the network/element (e.g. GPRS, UMTS).	STRING		

## 4.5 GPRS\_Tunnel

The GPRS Tunnelling Protocol tunnels user data and signalling between GPRS Support Nodes in the GPRS backbone network. The GPRS Tunnelling Protocol encapsulates all PDP PDUs.

Attribute Name	Description	Type	Related Object	Aggregator
GTP_Id	A unique identifier for the GPRS Tunnel.	STRING		
GTP_Name	A user friendly name preferably unique for the GPRS Tunnel.	STRING		
GGSN_Id	A unique identifier for the GGSN.	STRING	GGSN	
Region_Id	Region associated with the GPRS Tunnel.	STRING	Region	
SGSN_Id	A unique identifier for the SGSN.	STRING	SGSN	
Network_Id	Network associated with the GPRS Tunnel.	STRING	Network	
GTP_Version	Hardware/Software version of the GPRS Tunnel.	STRING		

GTP_PDP_Capacity	Number of PDP sessions supported by the GPRS Tunnel.	INTEGE R		
GTP_Role	GPRS Tunnel usage.	STRING		
GTP_Status	Status of the GPRS Tunnel.	STRING		
Technology	Technology of the network/element (e.g. GPRS, UMTS).	STRING		

## 4.6 HPLMN

Home PLMN

Attribute Name	Description	Type	Related Object	Aggregat or
HPLMN_Id	Primary identifier of the Home PLMN	STRING		
HPLMN_Name	Meaningful name of the HPLMN	STRING		
Region_Id	Region associated with the HPLMN.	STRING	Region	
Network_Id	Network associated with the HPLMN	STRING	Network	
HPLMN_Info	Description/free information about the HPLMN	STRING		
HPLMN_Type	Type of the HLMN (e.g. Partner)	STRING		

## 4.7 IMSI

International Mobile Station Identifier

Attribute Name	Description	Type	Related Object	Aggregat or
IMSI_Id	Primary identifier of the International Mobile Station Identifier	STRING		
IMSI_Name	Meaningful name of the International Mobile Station Identifier	STRING		
Network_Id	Network associated with the IMSI	STRING	Network	

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IMSI_Info	Optional free information and description for the IMSI	STRING		
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## 4.8 Network

Network information.

Attribute Name	Description	Type	Related Object	Aggregat or
Network_Id	A unique identifier for the Network.	STRING		
Network_Name	A user friendly name preferably unique for the Network.	STRING		
Network_Type	Type of Network (e.g. GSM-900, GSM-1800 or GSM-1900).	STRING		
Default_Link_Speed	The default speed of SS7 Signalling Links in this network.	FLOAT		

## 4.9 PCRF

Policy Control and Charging Rule Function

Attribute Name	Description	Type	Related Object	Aggregat or
PCRF_ID	The primary identifier of the PCRF	STRING		
PCRF_Name	The meaningful name of the PCRF	STRING		
Region_Id	Identifier of the region	STRING	Region	
Network_Id	Identifier of the network	STRING	Network	
Technology	Technology of the SGSN	STRING		

## 4.10 Physical\_Port

Physical Port for GGSN

Attribute Name	Description	Type	Related Object	Aggregat or
Physical_Port_ID	The primary identifier of the Physical_Port	STRING		
Physical_Port_Name	The meaningful name of the	STRING		

	Physical_Port			
GGSN_Id	Identifier of the GGSN	STRING	GGSN	
Region_Id	Identifier of the GGSN region	STRING	Region	
Network_Id	Identifier of the Network	STRING	Network	

## 4.11 Processor

The Processor object represents a CPU inside another network element. Some elements have more than one Processor.

Attribute Name	Description	Type	Related Object	Aggregat or
Processor_Id	A unique identifier for the Processor.	STRING		
Processor_Name	A user friendly name preferably unique for the Processor.	STRING		
Region_Id	Region associated with the Processor.	STRING	Region	
Network_Id	Network associated with the Processor.	STRING	Network	
Processor_Type	Type of Processor.	STRING		
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).	STRING		
Node_Id	This is the identifier for the network element containing the Processor.	STRING		
Node_Name	A user friendly name preferably unique for the Node.	STRING		
Node_Type	The type of the network element containing the Processor.	STRING		
Processor_Version	Hardware/Software version of the Processor.	STRING		

## 4.12 Region

A user defined grouping of network elements.

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<b>Attribute Name</b>	<b>Description</b>	<b>Type</b>	<b>Related Object</b>	<b>Aggregat or</b>
Region_Id	Region associated with the network object.	STRING		
Region_Name	A user friendly name preferably unique for the Region.	STRING		
Network_Id	Network associated with the Region.	STRING	Network	

#### **4.13 SGSN\_IP**

IP address of the SGSN

This object is used for Data Availability tracking

<b>Attribute Name</b>	<b>Description</b>	<b>Type</b>	<b>Related Object</b>	<b>Aggregat or</b>
SGSN_IP_Id	Primary identifier of the SGSN IP address	STRING		
SGSN_IP_Name	Meaningful name of the SGSN IP	STRING		
SGSN_Id	Identifier of the SGSN	STRING	SGSN	
Region_Id	Identifier of the region	STRING	Region	
Network_Id	Identifier of the network	STRING	Network	
Technology	Technology of the SGSN	STRING		

# 5 Busy Hours

This section lists the busy hours that are defined in this technology pack, grouped by the network object to which they relate, as follows:

Each of the busy hours listed can be referenced within this document by way of a busy hour acronymn, which is included in the table below.

- [APN](#)
- [GGSN](#)
- [Processor](#)

## 5.1 APN Busy Hours

Busy Hour Name	Defining KPI	Acronym
Huawei_APN_PDP_Busy_Hour	APN.Huawei.APN_status.Average_active_PDP_context	huaactpbh

## 5.2 GGSN Busy Hours

Busy Hour Name	Defining KPI	Acronym
Huawei_GGSN_Traffic_Busy_Hour	GGSN.Huawei.Transport.Total_Gn_Gi_packets	hugbpbh
Huawei_GGSN_PDP_Busy_Hour	GGSN.Huawei.Basic_session.Avg_act_PDP_context	hugactpbh

## 5.3 Processor Busy Hours

Busy Hour Name	Defining KPI	Acronym

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Huawei_Processor_CPU_B usy_Hour	Processor.Huawei.System_resources.Peak_CPU_usage	hupcbh
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# 6 Performance Indicators

This section lists the performance indicators (both one-to-one counter mappings, and complex KPIs) that are defined in this technology pack module, grouped by the network object to which they relate, as follows:

- [APN](#)
- [CG\\_IP](#)
- [GGSN](#)
- [GGSN\\_Board](#)
- [GPRS\\_Tunnel](#)
- [HPLMN](#)
- [IMSI](#)
- [PCRF](#)
- [Physical\\_Port](#)
- [Processor](#)
- [SGSN\\_IP](#)

## 6.1 APN Performance Indicators

- [APN.Huawei.GPRS.APN\\_AAA](#)
- [APN.Huawei.GPRS.APN\\_session\\_by\\_traffic\\_class](#)
- [APN.Huawei.GPRS.APN\\_status](#)
- [APN.Huawei.GPRS.APN\\_Transport](#)
- [APN.Huawei.GPRS.GTPV0\\_APN\\_session](#)
- [APN.Huawei.GPRS.GTPV1\\_APN\\_session](#)
- [APN.Huawei.GPRS.Gx\\_interface\\_performance\\_APN](#)
- [APN.Huawei.GPRS.IMS\\_session](#)
- [APN.Huawei.GPRS.PCC\\_Session\\_APN](#)

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### 6.1.1 APN.Huawei.GPRS.APN\_AAA

APN AAA performance measurement

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
%_Accounting_request_success	hua_apn_aaa_tab.s5jx4mbjdob3guaus1wftf2vun	FLOAT	%	Successful rate of accounting request sent by GGSN	Average	huaactpbh, hugactpbh, hugbpbh, Maximum, Minimum, Sum
%_Authentication_request_success	hua_apn_aaa_tab.vvvuumralvb21t0ecyqveuny0x	FLOAT	%	Successful rate of access request sent by GGSN	Average	huaactpbh, hugactpbh, hugbpbh, Maximum, Minimum, Sum
Accounting_start_request	hua_apn_aaa_tab.rdfli6tltb b4lrgfwadfy352xy	INTEGER	#	Attempts of accounting start request sent from GGSN to AAA server	Sum	huaactpbh, hugactpbh, hugbpbh
Accounting_start_success	hua_apn_aaa_tab.thg3amx21hcvfs22dd5r4ckiyp	INTEGER	#	Successful times of accounting start request sent from GGSN to AAA server	Sum	huaactpbh, hugactpbh, hugbpbh
Accounting_stop_request	hua_apn_aaa_tab.ulwht5iyq3bracjfsflx0ev2y4	INTEGER	#	Attempts of accounting stopping request sent	Sum	huaactpbh, hugactpbh,

				from GGSN to AAA server		hugpbph
Accounting_stop_success	hua_apn_aaa_tab.wka6rfwov4bvme4vgrbcd4uqav	INTEGR	#	Successful times of accounting stopping request sent from GGSN to AAA server	Sum	huaactpbh, hugactpbh, hugpbph
Authentication_request_success	hua_apn_aaa_tab.t3kxksqkc4b21rqlggb4lt266a	INTEGR	#	Successful times of authentication request sent from GGSN to AAA server	Sum	huaactpbh, hugactpbh, hugpbph
Authentication_request	hua_apn_aaa_tab.stdctw2mx1bhfupdpaclape6j	INTEGR	#	Attempts of authentication request sent from GGSN to AAA server	Sum	huaactpbh, hugactpbh, hugpbph
Illegal_AAA_message_received	hua_apn_aaa_tab.r60b63i14mbobspvsf6lr00r6m	INTEGR	#	Times of receiving invalid packets by GGSN from AAA server	Sum	huaactpbh, hugactpbh, hugpbph
Realtime_accounting_request_success	hua_apn_aaa_tab.wjrcdk2cbocjasgp3wrhparlsd	INTEGR	#	Successful times of real-time accounting request sent from GGSN to AAA server	Sum	huaactpbh, hugactpbh, hugpbph
Realtime_accounting_request	hua_apn_aaa_tab.vivn20n4t5cnduonxi3or4aho	INTEGR	#	Attempts of real-time accounting request sent	Sum	huaactpbh, hugactpbh,

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				from GGSN to AAA server		hugpbph
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### 6.1.2 APN.Huawei.GPRS.APN\_session\_by\_traffic\_class

Active APN session dispatched by traffic class (low, medium and high)

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
Active_background_class_PDP_context	hua_m134221252_tab.tgg opqelfw2ahc3ij02incnmdw	INTEGER	#	Number of the APN-based PDP context, based on background traffic class	Average	huaactpbh, hugactpbh, hugpbph, Maximum, Minimum, Sum
Active_conversational_class_PDP_context	hua_m134221252_tab.tgg opq5lfw2ahc3ij02incnmdw	INTEGER	#	Number of the APN-based PDP context, based on conversational traffic class	Average	huaactpbh, hugactpbh, hugpbph, Maximum, Minimum, Sum
Active_interactive_class_PDP_context	hua_m134221252_tab.tgg opqclfw2ahc3ij02incnmdw	INTEGER	#	Number of the APN-based PDP context, based on interactive traffic class	Average	huaactpbh, hugactpbh, hugpbph, Maximum, Minimum, Sum
Active_PDP_context_with_high_priority	hua_m134221252_tab.tgg opq3lfw2ahc3ij02incnmdw	INTEGER	#	Number of the APN-based PDP context, based on user high priority	Average	huaactpbh, hugactpbh, hugpbph, Maximum

						m, Minimu m, Sum
Active_PDP_co ntext_with_low _priority	hua_m134221252_tab.tgg oppylfw2ahc3ij02incnmd w	INTEG ER	#	Number of the APN-based PDP context, based on user low priority	Average	huaactpb h, hugactpb h, hugbpbh, Maximu m, Minimu m, Sum
Active_PDP_co ntext_with_med ium_priority	hua_m134221252_tab.tgg opqlfw2ahc3ij02incnmd w	INTEG ER	#	Number of the APN-based PDP context, based on user medium priority	Average	huaactpb h, hugactpb h, hugbpbh, Maximu m, Minimu m, Sum
Active_streamin g_class_PDP_co ntext	hua_m134221252_tab.tgg opqalfw2ahc3ij02incnmd w	INTEG ER	#	Number of the APN-based PDP context, based on streaming traffic class	Average	huaactpb h, hugactpb h, hugbpbh, Maximu m, Minimu m, Sum

### 6.1.3 APN.Huawei.GPRS.APN\_status

APN status measurement

KPI Name	Expression	Data Type	Units	Description	Default Aggregat or	Other Aggrega tors

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Active_PDP_context	hua_apn_status_tab.rbm3pbqcp1brkbphatvl5eus66	INTEGR	#	Activated PDP contexts in GGSN by an APN	Average	huaactpbh, hugactpbh, hugbpbh, Maximum, Minimum, Sum
Average_active_PDP_context	hua_apn_status_tab.t4o1an12uvceglumouwwungye0t	INTEGR	#	Average number of PDP contexts activated by an APN in the GGSN	Average	huaactpbh, hugactpbh, hugbpbh, Maximum, Minimum, Sum
Average_IP_addresses_allocated_to_MS	hua_apn_status_tab.tggopnalfw2ahc3ij02incnmdw	FLOAT	#	Average number of local IP addresses allocated by the GGSN	Average	huaactpbh, hugactpbh, hugbpbh, Maximum, Minimum, Sum
Gn_Received_Packets	hua_apn_status_tab.tuckl4abeectwdg2yd2ufbpvun	INTEGR	#	Number of signaling messages sent from an APN and received by the GGSN Gn	Sum	huaactpbh, hugactpbh, hugbpbh
Gn_Sent_Packets	hua_apn_status_tab.xqi135tp6kb4br4ejwdu2r3xhb	INTEGR	#	Number of signaling messages sent from the GGSN Gn to an APN	Sum	huaactpbh, hugactpbh, hugbpbh
IP_addresses_alllocated_to_MS	hua_apn_status_tab.vwkoho5vwtct4rlpsbd5qlhxos	INTEGR	#	Number of IP addresses allocated by the GGSN to MS	Sum	huaactpbh, hugactpbh,

						hugpbph
Max_active_PDP_context	hua_apn_status_tab.tah4utmmbvbxrd6q4mqq1po0qb	INTEGR	#	The maximum activated PDP contexts in GGSN by an APN	Average	huaactpbh, hugactpbh, hugpbph, Maximum, Minimum, Sum
Maximum_IP_addresses_allocated_to_MS	hua_apn_status_tab.tggopnclfw2ahc3ij02incnmdw	INTEGR	#	Maximum number of local IP addresses allocated by the GGSN.	Average	huaactpbh, hugactpbh, hugpbph, Maximum, Minimum, Sum
Subscribers_with_PDP_context_act	hua_apn_status_tab.tggopn5lfw2ahc3ij02incnmdw	INTEGR	#	Number of subscribers with PDP context activation	Sum	huaactpbh, hugactpbh, hugpbph
Total_number_of_DHCP_address_release	hua_apn_status_tab.wrkxwfl1noco0sfhmrpl0devq5	INTEGR	#	Number of requests for IP address release that are sent to the DHCP SER	Sum	huaactpbh, hugactpbh, hugpbph
Total_number_of_DHCP_address_request	hua_apn_status_tab.ysbfmlobsnb5rix3yp5gpb1fo	INTEGR	#	Number of requests for IP address allocation that are sent to the DHCP SER	Sum	huaactpbh, hugactpbh, hugpbph
Total_number_of_successful_	hua_apn_status_tab.yhujxbm3evcslc1fdovjek1elm	INTEGR	#	Number of successful IP	Sum	huaactpbh,

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DHCP_address_request			address allocation by the DHCP SER		hugactpbh, hugbpbh
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#### 6.1.4 APN.Huawei.GPRS.APN\_Transport

APN Transport performance measurement

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
APN_Average_packet_throughput	hua_apn_transport_tab.u25nqngpnb55rqjfelxwppd4w	FLOAT	%	Average forwarding rate of both APN Gn and APN Gi interfaces in statistics period	Average	huaactpbh, hugactpbh, hugbpbh, Maximum, Minimum, Sum
APN_destination_address_in_valid_packets	hua_apn_transport_tab.r6gyd1nsldcdt4lr5utv5io6t	INT8	Packet s	Number of invalid destination address packets that are based on APN	Sum	huaactpbh, hugactpbh, hugbpbh
APN_DL_transport_success_ratio	hua_apn_transport_tab.sfeb esj6sicewut1sm6qbcuoqh	FLOAT	%	APN Gn Downlink packets/APN Gi Downlink packets *100%	Average	huaactpbh, hugactpbh, hugbpbh, Sum, Minimum, Maximum
APN_Downlink_in_MB	{APN_Gn_Downlink_in_MB} + {APN_Gi_Downlink_in_MB}	INT8	Bytes	Downlink forwarding bytes on APN Gn and Gi interface in statistics period	Sum	huaactpbh, hugactpbh, hugbpbh

APN_Gi_Downlink_in_KB	hua_apn_transport_tab.soxsgf5frccvydiol2xxjf5i0e	INT8	Bytes	Downlink forwarding bytes on APN Gi interface in statistics period	Sum	huaactpbh, hugactpbh, hugbpbh
APN_Gi_Downlink_in_MB	hua_apn_transport_tab.ycoskk6papbqlb5khmmq2o5ufu	INT8	Bytes	Downlink forwarding bytes on APN Gi interface in statistics period	Sum	huaactpbh, hugactpbh, hugbpbh
APN_Gi_Downlink_packets	hua_apn_transport_tab.uuni22dnb0cdrdrtvtst4px261	INTEGR	Packet s	Downlink forwarding packets on APN Gi interface in statistics period	Sum	huaactpbh, hugactpbh, hugbpbh
APN_Gi_Uplink_in_KB	hua_apn_transport_tab.wo3ruw4fjlb11rv1menhkr66sa	INT8	Bytes	Uplink forwarding bytes on APN Gi interface in statistics period	Sum	huaactpbh, hugactpbh, hugbpbh
APN_Gi_Uplink_in_MB	hua_apn_transport_tab.srnew6l44ec6vuvoo2x0f2tdtx	INT8	Bytes	Uplink forwarding bytes on APN Gi interface in statistics period	Sum	huaactpbh, hugactpbh, hugbpbh
APN_Gi_Uplink_packets	hua_apn_transport_tab.wvegrr4om0bjgd2n5uc1lpctgj	INTEGR	Packet s	Uplink forwarding packets on APN Gi interface in statistics period	Sum	huaactpbh, hugactpbh, hugbpbh
APN_Gn_Downlink_in_KB	hua_apn_transport_tab.tl2fovibi5b5dc4cfalvpxkjlk	INT8	Bytes	Downlink forwarding bytes on APN Gn interface in statistics period	Sum	huaactpbh, hugactpbh, hugbpbh

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APN_Gn_Downlink_in_MB	hua_apn_transport_tab.upw4v4pusmcosdyimmo15bt45j	INT8	Bytes	Downlink forwarding bytes on APN Gn interface in statistics period	Sum	huaactpbh, hugactpbh, hugbpbh
APN_Gn_Downlink_packets	hua_apn_transport_tab.xkltmf6vo2kbsetjlyn6cvuaj1f	INTEGR	Packet s	Downlink forwarding packets on APN Gn interface in statistics period	Sum	huaactpbh, hugactpbh, hugbpbh
APN_Gn_Uplink_in_KB	hua_apn_transport_tab.sbshy5killbihtb3txhtys3kqq	INT8	Bytes	Uplink forwarding bytes on APN Gn interface in statistics period	Sum	huaactpbh, hugactpbh, hugbpbh
APN_Gn_Uplink_in_MB	hua_apn_transport_tab.vcgfxlwjlycyerkpcletqyhvkd	INT8	Bytes	Uplink forwarding bytes on APN Gn interface in statistics period	Sum	huaactpbh, hugactpbh, hugbpbh
APN_Gn_Uplink_packets	hua_apn_transport_tab.vx22un54mpcmeccicq2uu2ckqym	INTEGR	Packet s	Uplink forwarding packets on APN Gn interface in statistics period	Sum	huaactpbh, hugactpbh, hugbpbh
APN_packets_exceed_1500_bytes	hua_apn_transport_tab.y2vlncrjojcdeeliskfo036x4fw	INTEGR	Packet s	Downlink forwarding packets exceed 1500 bytes on APN Gi interface in statistics period	Sum	huaactpbh, hugactpbh, hugbpbh
APN_Peak_packet_throughput	hua_apn_transport_tab.xmfj504dj2bojugnr4ksucwpoq	INTEGR	#	Maximum value of forwarding rate of both APN Gn and APN Gi interfaces in statistics period	Average	huaactpbh, hugactpbh, hugbpbh, Maximum, Minimum

						m, Sum
APN_redirect_packets	hua_apn_transport_tab.xtbf mtcdv1bt5re3k66m66tqbi	INT8	Packet s	Number of redirect packets that are based on APN	Sum	huaactpb h, hugactpb h, hugpbhb
APN_source_address_invalid_packets	hua_apn_transport_tab.w5r co3m5g5csluyov5tuw6kcl	INT8	Packet s	Number of invalid source address packets that are based on APN	Sum	huaactpb h, hugactpb h, hugpbhb
APN_UL_transport_success_ratio	hua_apn_transport_tab.vxfr ahmygscy6rh35js4divlrx	FLOAT	%	APN Gi Uplink packets/APN Gn Uplink packets *100%	Average	huaactpb h, hugactpb h, hugpbhb, Sum, Minimu m, Maximu m
APN_Uplink_Downlink_in_MB	{APN_Gn_Uplink_in_MB} + {APN_Gi_Uplink_in_MB} + {APN_Gn_Downlink_in_MB} + {APN_Gi_Downlink_in_MB}	INT8	Bytes	Uplink and downlink forwarding bytes on APN Gn and Gi interface in statistics period	Sum	huaactpb h, hugactpb h, hugpbhb
APN_Uplink_in_MB	{APN_Gn_Uplink_in_MB} + {APN_Gi_Uplink_in_MB}	INT8	Bytes	Uplink forwarding bytes on APN Gn and Gi interface in statistics period	Sum	huaactpb h, hugactpb h, hugpbhb
Gn_incoming_signalling_kbyt	hua_apn_transport_tab.tgg oppulfw2ahc3ij02incnmdw	INT8	Kb	Incoming signaling	Sum	huaactpb h,

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es				packets Kbytes received by the Gn interface based on the APN		hugactpb h, hugpbpb
Gn_outgoing_signalling_kbytes	hua_apn_transport_tab.tgg oppwlfw2ahc3ij02incnmdw	INT8	Kb	Outgoing signaling packets Kbytes sent by the Gn interface based on the APN	Sum	huaactpb h, hugactpb h, hugpbpb

### 6.1.5 APN.Huawei.GPRS.GTPV0\_APN\_session

GTPv0 APN session measurement

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
%_Dynamic_address_act_session_succeed	$100 * \{GTPv0_Dynamic_address\_activate\_session\_succeed\} / \{GTPv0_Dynamic_address\_activate\_session\_request\}$	FLOAT	%	Percentage of successful dynamic PDP context activation program initiated by MS	Average	huaactpb h, hugactpb h, hugpbpb
%_GGSN_deactivate_session_succeed	$100 * \{GTPv0_GGSN_deactivate\_session\_succeed\} / \{GTPv0_GGSN_deactivate\_session\_request\}$	FLOAT	%	Percentage of successful PDP context deactivation program initiated by GGSN	Average	huaactpb h, hugactpb h, hugpbpb
%_GGSN_modify_session_succeed	$100 * \{GTPv0_GGSN_modify\_session\_succeed\} / \{GTPv0_GGSN_modify\_session\_request\}$	FLOAT	%	Percentage of successful PDP context modification program initiated by GGSN	Average	huaactpb h, hugactpb h, hugpbpb
%_MS_deactiv	$100 * \{GTPv0_MS_deactivate\_s$	FLOAT	%	Percentage of successful PDP	Average	huaactpb h,

ate_session_succeed	ession_succeed}/ {GTPv0_MS_deactivate_session_request}			context deactivation program initiated by MS		hugactpbh, hugpbpbh
%_MS_modify_session_succeeded	100 * {GTPv0_MS_modify_session_succeed}/ {GTPv0_MS_modify_session_request}	FLOAT	%	Percentage of successful PDP context modification program initiated by MS	Average	huaactpbh, hugactpbh, hugpbpbh
GTPv0_Dynamic_address_activate_session_request	hua_gtpv0_apn_session_tab.w3nn5oe33jcome6saph1mebx3o	INTEGR	#	Attempts of dynamic PDP context activation program initiated by MS	Sum	huaactpbh, hugactpbh, hugpbpbh
GTPv0_Dynamic_address_activate_session_succeed	hua_gtpv0_apn_session_tab.w2oti3fjbjbtvcvxfaf6fc6yr6s	INTEGR	#	Successful times of dynamic PDP context activation program initiated by MS	Sum	huaactpbh, hugactpbh, hugpbpbh
GTPv0_GGSN_deactivate_session_request	hua_gtpv0_apn_session_tab.skxm2k4yoycmpr2wk41blcsnje	INTEGR	#	Attempts of PDP context deactivation program initiated by GGSN	Sum	huaactpbh, hugactpbh, hugpbpbh
GTPv0_GGSN_deactivate_session_succeed	hua_gtpv0_apn_session_tab.uubqo2ikv0beht0npkvtnphgjp	INTEGR	#	Successful times of PDP context deactivation program initiated by GGSN	Sum	huaactpbh, hugactpbh, hugpbpbh
GTPv0_GGSN	hua_gtpv0_apn_session_tab	INTEG	#	Attempts of	Sum	huaactpb

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_modify_session_request	b.rt52qumevecb2ssxtdgkkwxxtg	ER		PDP context modification program initiated by GGSN		h, hugactpb h, hugbpbh
GTPv0_GGSN_modify_session_succeed	hua_gtpv0_apn_session_tab.sh0cs32xx1cdirmoaxile16pjt	INTEGR	#	Successful times of PDP context modification program initiated by GGSN	Sum	huaactpb h, hugactpb h, hugbpbh
GTPv0_MS_activate_PDP_context_success_ratio	hua_gtpv0_apn_session_tab.s2fs5jhhjqbvtt6xinkj06ox3g	INTEGR	%	Successful rate of PDP context activation program initiated by 2G MS	Average	huaactpb h, hugactpb h, hugbpbh, Maximum, Minimum, Sum
GTPv0_MS_activate_PDP_context_satisfy_QoS	hua_gtpv0_apn_session_tab.xogeocvnp2bkoufm6suepcsw1s	INTEGR	#	Times of PDP context activation QOS promising initiated by MS	Sum	huaactpb h, hugactpb h, hugbpbh
GTPv0_MS_activate_session_request	hua_gtpv0_apn_session_tab.vhrrruao31bvldauexrqmojvtt	INTEGR	#	Attempts of PDP context activation program initiated by MS	Sum	huaactpb h, hugactpb h, hugbpbh
GTPv0_MS_activate_session_succeed	hua_gtpv0_apn_session_tab.rhr3bdswklbx5ru12un2uoytht	INTEGR	#	Successful times of PDP context activation program initiated by MS	Sum	huaactpb h, hugactpb h, hugbpbh
GTPv0_MS_deactivate_session_request	hua_gtpv0_apn_session_tab.xc2by1cn2icxue6xw0watrlaep	INTEGR	#	Attempts of PDP context deactivation program initiated by MS	Sum	huaactpb h, hugactpb h, hugbpbh

GTPv0_MS_deactivate_session_succeed	hua_gtpv0_apn_session_tab.rwlha26cxbodtmwjltiegf4lg	INTEGR	#	Successful times of PDP context deactivation program initiated by MS	Sum	huaactpbh, hugactpbh, hugbpbh
GTPv0_MS_modify_session_request	hua_gtpv0_apn_session_tab.wr5ie1604rbxtrseerhfarwcks	INTEGR	#	Attempts of PDP context modification program initiated by MS	Sum	huaactpbh, hugactpbh, hugbpbh
GTPv0_MS_modify_session_suceed	hua_gtpv0_apn_session_tab.v25onkd4tncaxtfuulclhxah0h	INTEGR	#	Successful times of PDP context modification program initiated by MS	Sum	huaactpbh, hugactpbh, hugbpbh
GTPv0_MS_PDP_context_actiive_failed_by_AAA_Server_No_IP	hua_gtpv0_apn_session_tab.uqgxp6mqqa2aidm2002uay2nvm	INTEGR	#	GTPv0 MS-init. PDP context act. failed - AAA Server No IP	Sum	huaactpbh, hugactpbh, hugbpbh
GTPv0_MS_PDP_context_actiive_failed_by_APN_access_dened_no_subscription	hua_gtpv0_apn_session_tab.uqgxp6uqqa2aidm2002uay2nvm	INTEGR	#	GTPv0 MS-init. PDP context act. failed - APN access denied - no subscription	Sum	huaactpbh, hugactpbh, hugbpbh
GTPv0_MS_PDP_context_actiive_failed_by_APN_Lock	hua_gtpv0_apn_session_tab.uqgxp6kqqa2aidm2002uay2nvm	INTEGR	#	GTPv0 MS-init. PDP context act. failed - APN Lock	Sum	huaactpbh, hugactpbh, hugbpbh
GTPv0_MS_PDP_context_actiive_failed_by_auth_failed	hua_gtpv0_apn_session_tab.sblsubxf2cqesplmlbndp6gt6	INTEGR	#	MS PDP context activation failed times	Sum	huaactpbh, hugactpbh,

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				caused by the authentication failure		hugpbph
GTPv0_MS_P DP_context_act ive_failed_by_ DHCP_Server_ No_Response	hua_gtpv0_apn_session_ta b.uqgxp6cqqa2aidm2002ua y2nvm	INTEG ER	#	GTPv0 MS-init. PDP context act. failed - DHCP Server No Response	Sum	huaactpb h, hugactpb h, hugpbph
GTPv0_MS_P DP_context_act ive_failed_by_ LNS_Forbidden _Static_IP	hua_gtpv0_apn_session_ta b.uqgxp6oqqa2aidm2002u ay2nvm	INTEG ER	#	GTPv0 MS-init. PDP context act. failed - LNS Forbidden Static IP	Sum	huaactpb h, hugactpb h, hugpbph
GTPv0_MS_P DP_context_act ive_failed_by_ LNS_No_Resp onse	hua_gtpv0_apn_session_ta b.uqgxp6eqqa2aidm2002ua y2nvm	INTEG ER	#	GTPv0 MS-init. PDP context act. failed - LNS No Response	Sum	huaactpb h, hugactpb h, hugpbph
GTPv0_MS_P DP_context_act ive_failed_by_n o_resource	hua_gtpv0_apn_session_ta b.wfdqbjudqicx1tuuoelfq2 2xwt	INTEG ER	#	MS PDP context activation failed times caused by no available resources	Sum	huaactpb h, hugactpb h, hugpbph
GTPv0_MS_P DP_context_act ive_failed_by_ OCS_Server_N o_Response	hua_gtpv0_apn_session_ta b.uqgxp6gqqa2aidm2002u ay2nvm	INTEG ER	#	GTPv0 MS-init. PDP context act. failed - OCS Server No Response	Sum	huaactpb h, hugactpb h, hugpbph
GTPv0_MS_P DP_context_act ive_failed_by_o ther_reason	hua_gtpv0_apn_session_ta b.uymfvge2kc1wrupkuq1 efoukt	INTEG ER	#	MS PDP context activation failed times caused by other reasons	Sum	huaactpb h, hugactpb h, hugpbph
GTPv0_MS_P DP_context_act	hua_gtpv0_apn_session_ta b.uqgxp6iqqa2aidm2002ua	INTEG ER	#	GTPv0 MS-init. PDP	Sum	huaactpb h,

ive_failed_by_P CRF_No_Response	y2nvm			context act. failed - PCRF No Response		hugactpb h, hugpbph
GTPv0_MS_P DP_context_act ive_failed_by_Radius_Account_Server_No_Response	hua_gtpv0_apn_session_tb.uqgxp6aqqa2aidm2002uay2nvm	INTEGR	#	GTPv0 MS-init. PDP context act. failed - Radius Account Server No Response	Sum	huaactpb h, hugactpb h, hugpbph
GTPv0_MS_P DP_context_act ive_failed_by_Radius_Authentication_Server_No_Response	hua_gtpv0_apn_session_tb.uqgxp65qqa2aidm2002uay2nvm	INTEGR	#	GTPv0 MS-init. PDP context act. failed - Radius Authentication Server No Response	Sum	huaactpb h, hugactpb h, hugpbph
GTPv0_MS_P DP_context_act ive_failed_by_roaming_restriction	hua_gtpv0_apn_session_tb.uqgxp6qqqa2aidm2002uay2nvm	INTEGR	#	GTPv0 MS-init. PDP context act. failed -roaming restriction	Sum	huaactpb h, hugactpb h, hugpbph
GTPv0_MS_P DP_context_act ive_failed_by_service_not_support	hua_gtpv0_apn_session_tb.uqgxp6sqqa2aidm2002uay2nvm	INTEGR	#	GTPv0 MS-init. PDP context act. failed - service not support	Sum	huaactpb h, hugactpb h, hugpbph
GTPv0_MS_P DP_context_act ive_failed_by_system_fault	hua_gtpv0_apn_session_tb.r3tm3qrihgbjybut3k16nlsean	INTEGR	#	MS PDP context activation failed times caused by the system faults	Sum	huaactpb h, hugactpb h, hugpbph

### 6.1.6 APN.Huawei.GPRS.GTPV1\_APN\_session

GTPv1 APN session measurement

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KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
$\bar{\%}_{\text{Dynamic\_address\_act\_session\_succeed}}$	$100 * \{\text{GTPv1\_Dynamic\_address\_activate\_session\_succeed}\} / \{\text{GTPv1\_Dynamic\_address\_activate\_session\_request}\}$	FLOAT	%	Percentage of successful dynamic PDP context activating program initiated by MS	Average	huaactpbh, hugactpbh, hugbpbh
$\bar{\%}_{\text{GGSN\_deactivate\_session\_succeed}}$	$100 * \{\text{GTPv1\_GGSN\_deactivate\_session\_succeed}\} / \{\text{GTPv1\_GGSN\_deactivate\_session\_request}\}$	FLOAT	%	Percentage of successful PDP context deactivation program initiated by GGSN	Average	huaactpbh, hugactpbh, hugbpbh
$\bar{\%}_{\text{GGSN\_modify\_session\_succeed}}$	$100 * \{\text{GTPv1\_GGSN\_modify\_session\_succeed}\} / \{\text{GTPv1\_GGSN\_modify\_session\_request}\}$	FLOAT	%	Percentage of successful PDP context modification program initiated by GGSN	Average	huaactpbh, hugactpbh, hugbpbh
$\bar{\%}_{\text{MS\_deactivate\_session\_succeed}}$	$100 * \{\text{GTPv1\_MS\_deactivate\_session\_succeed}\} / \{\text{GTPv1\_MS\_deactivate\_session\_request}\}$	FLOAT	%	Percentage of successful PDP context deactivating program initiated by MS	Average	huaactpbh, hugactpbh, hugbpbh
$\bar{\%}_{\text{MS\_launch\_second\_active\_succeed}}$	$100 * \{\text{GTPv1\_MS\_launch\_second\_active\_succeed}\} / \{\text{GTPv1\_MS\_launch\_second\_active\_request}\}$	FLOAT	%	Percentage of successful PDP context secondary activating	Average	huaactpbh, hugactpbh, hugbpbh
$\bar{\%}_{\text{MS\_modify\_session\_succeed}}$	$100 * \{\text{GTPv1\_MS\_modify\_session\_succeed}\} / \{\text{GTPv1\_MS\_modify\_session\_request}\}$	FLOAT	%	Percentage of successful PDP context modification program initiated by MS	Average	huaactpbh, hugactpbh, hugbpbh

GTPv1_Dynamic_address_activate_session_request	hua_gtpv1_apn_session_tabc.wdre4s30ibciwt2cng1hlldvrq	INTEGR	#	Attempts of dynamic PDP context activating program initiated by MS	Sum	huaactpbh, hugactpbh, hugbpbh
GTPv1_Dynamic_address_activate_session_succeed	hua_gtpv1_apn_session_tabc.sqtauff5cfbf1bq1sfyjq6grar	INTEGR	#	Successful times of dynamic PDP context activating program initiated by MS	Sum	huaactpbh, hugactpbh, hugbpbh
GTPv1_GGSN_deactivate_session_request	hua_gtpv1_apn_session_tabc.v4jo3tis6hchaetxog4yworyrv	INTEGR	#	Attempts of PDP context deactivation program initiated by GGSN	Sum	huaactpbh, hugactpbh, hugbpbh
GTPv1_GGSN_deactivate_session_succeed	hua_gtpv1_apn_session_tabc.rfqwfe42lhbtblt31t5djb0yw	INTEGR	#	Successful times of PDP context deactivation program initiated by GGSN	Sum	huaactpbh, hugactpbh, hugbpbh
GTPv1_GGSN_modify_session_request	hua_gtpv1_apn_session_tabc.wrodeybj4bu0do4sl0typdh3s	INTEGR	#	Attempts of PDP context modification program initiated by GGSN	Sum	huaactpbh, hugactpbh, hugbpbh
GTPv1_GGSN_modify_session_succeed	hua_gtpv1_apn_session_tabc.wl1kax6nmpcgic4dposmi35pyd	INTEGR	#	Successful times of PDP context modification program initiated by	Sum	huaactpbh, hugactpbh, hugbpbh

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				GGSN		
GTPv1_MS_activate_PDP_context_success_ratio	hua_gtpv1_apn_session_tab.w6bjw3km2qbtervvl3r6yt3ece	INTEGRER	%	Successful rate of PDP context activation program initiated by 3G MS	Average	huaactpbh, hugactpbh, hugbpbh, Maximum, Minimum, Sum
GTPv1_MS_activate_PDP_context_satisfy_QoS	hua_gtpv1_apn_session_tab.ru1repms5qbgaeyeb0m2ly4fp4	INTEGRER	#	Times of PDP context activation QOS promising initiated by MS	Sum	huaactpbh, hugactpbh, hugbpbh
GTPv1_MS_activate_session_request	hua_gtpv1_apn_session_tab.yifstalm0hobudtdkokqxg5xgbu	INTEGRER	#	Attempts of PDP context activation program initiated by MS	Sum	huaactpbh, hugactpbh, hugbpbh
GTPv1_MS_activate_session_succeed	hua_gtpv1_apn_session_tab.xls3ljq1isc33rdswgjrn2f3yw	INTEGRER	#	Successful times of PDP context activating program initiated by MS	Sum	huaactpbh, hugactpbh, hugbpbh
GTPv1_MS_deactivate_session_request	hua_gtpv1_apn_session_tab.yd0qxdd1jibaqdn2y6olsrf1kl	INTEGRER	#	Attempts of PDP context deactivating program initiated by MS	Sum	huaactpbh, hugactpbh, hugbpbh
GTPv1_MS_deactivate_session_succeed	hua_gtpv1_apn_session_tab.u0vgqm50l5bpjdue3cv6qj3r32	INTEGRER	#	Successful times of PDP context deactivating program initiated by MS	Sum	huaactpbh, hugactpbh, hugbpbh
GTPv1_MS_launch_second_active_request	hua_gtpv1_apn_session_tab.s3c5fdk5ybcdwcbc3lcphwvjmp	INTEGRER	#	Times that PDP context secondary activation	Sum	huaactpbh, hugactpbh,

				request		hugpbph
GTPv1_MS_lau nch_second_act ive_succeed	hua_gtpv1_apn_session_ta b.tlubraucvkbp2rssyl6eww n1ma	INTEG ER	#	Successful times of PDP context secondary activating	Sum	huaactpb h, hugactpb h, hugpbph
GTPv1_MS_m odify_session_r equest	hua_gtpv1_apn_session_ta b.vbkwawy4xhckrt2f5imsy bdcnj	INTEG ER	#	Attempts of PDP context modification program initiated by MS	Sum	huaactpb h, hugactpb h, hugpbph
GTPv1_MS_m odify_session_s ucceed	hua_gtpv1_apn_session_ta b.urfvjshshrb2tcpty3pnwpj yrd	INTEG ER	#	Successful times of PDP context modification program initiated by MS	Sum	huaactpb h, hugactpb h, hugpbph
GTPv1_MS_P DP_act_fail_by _no_dynamic_P DP_addresses	hua_gtpv1_apn_session_ta b.vshpanbjuqcqmhstqblvxw dmh60	INTEG ER	#	Times of failed PDP context activation caused by no dynamic PDP addresses of GTPv1	Sum	huaactpb h, hugactpb h, hugpbph
GTPv1_MS_P DP_act_fail_by _no_memory	hua_gtpv1_apn_session_ta b.yjx46qeviqc02ukt1wf4ay 1mp0	INTEG ER	#	Times of failed PDP context activation caused by no free memory of GTPv1	Sum	huaactpb h, hugactpb h, hugpbph
GTPv1_MS_P DP_act_fail_by _PDP_without_ TFT_already_a ct	hua_gtpv1_apn_session_ta b.x3j6eimijcr1sd1gekq04ti is	INTEG ER	#	Times of failed PDP context activation caused by no activated GTPv1 TFT context	Sum	huaactpb h, hugactpb h, hugpbph

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GTPv1_MS_P DP_act_fail_by_semantic_err_in_packet_filter	hua_gtpv1_apn_session_tab.wfxafb2yrbc1vd0045qhe4t0o1	INTEGR	#	Times of failed PDP context activation caused by semantic error during GTPv1 packet filtering	Sum	huaactpb h, hugactpb h, hugpbpb
GTPv1_MS_P DP_act_fail_by_semantic_err_in_TFT_operation	hua_gtpv1_apn_session_tab.sjusvj1jpxbctatj6deayyduc	INTEGR	#	Times of failed PDP context activation caused by semantic error of GTPv1 TFT operations	Sum	huaactpb h, hugactpb h, hugpbpb
GTPv1_MS_P DP_act_fail_by_syntactic_err_in_packet_filter	hua_gtpv1_apn_session_tab.ttgg1evnkxb5acovuaxuuldn26	INTEGR	#	Times of failed PDP context activation caused by syntax error during GTPv1 packet filtering	Sum	huaactpb h, hugactpb h, hugpbpb
GTPv1_MS_P DP_act_fail_by_syntactic_err_in_TFT_operation	hua_gtpv1_apn_session_tab.vlvmv1crnmcu4ccpy04i1fctx0	INTEGR	#	Times of failed PDP context activation caused by syntax error of GTPv1 TFT operations	Sum	huaactpb h, hugactpb h, hugpbpb
GTPv1_MS_P DP_act_fail_by_unknown_PDP_addr_or_type	hua_gtpv1_apn_session_tab.vtd4ory4gxbcdt0idgb4114vwm	INTEGR	#	Times of failed PDP context activation caused by unknown PDP addresses or types of GTPv1	Sum	huaactpb h, hugactpb h, hugpbpb
GTPv1_MS_P DP_context_act_ive_failed_by_AAA_Server_No_IP	hua_gtpv1_apn_session_tab.uqgxp5sqqa2aidm2002uay2nvm	INTEGR	#	GTPv1 MS-init. PDP context act. failed - AAA Server No IP	Sum	huaactpb h, hugactpb h, hugpbpb
GTPv1_MS_P DP_context_act	hua_gtpv1_apn_session_tab.uqgxp63qqa2aidm2002u	INTEGR	#	GTPv1 MS-init. PDP	Sum	huaactpb h,

ive_failed_by_APN_access_denied_no_subscription	ay2nvm			context act. failed - APN access denied - no subscription		hugactpbh, hugbpbh
GTPv1_MS_PDP_context_act ive_failed_by_APN_Lock	hua_gtpv1_apn_session_ta b.uqgxp5qqqa2aidm2002u ay2nvm	INTEGR	#	GTPv1 MS-init. PDP context act. failed - APN Lock	Sum	huaactpbh, hugactpbh, hugbpbh
GTPv1_MS_PDP_context_act ive_failed_by_APN_Restriction_type_incompatibility	hua_gtpv1_apn_session_ta b.uqgxp61qqa2aidm2002u ay2nvm	INTEGR	#	GTPv1 MS-init. PDP context act. failed - APN Restriction type incompatibility	Sum	huaactpbh, hugactpbh, hugbpbh
GTPv1_MS_PDP_context_act ive_failed_by_auth_failed	hua_gtpv1_apn_session_ta b.ws3bb1yp5vbnxb3rvfvx 3hlw2	INTEGR	#	MS PDP context activation failed times caused by the authentication failure	Sum	huaactpbh, hugactpbh, hugbpbh
GTPv1_MS_PDP_context_act ive_failed_by_DHCP_Server_No_Response	hua_gtpv1_apn_session_ta b.uqgxp5iqqa2aidm2002ua y2nvm	INTEGR	#	GTPv1 MS-init. PDP context act. failed - DHCP Server No Response	Sum	huaactpbh, hugactpbh, hugbpbh
GTPv1_MS_PDP_context_act ive_failed_by_LNS_Forbidden_Static_IP	hua_gtpv1_apn_session_ta b.uqgxp5uqqa2aidm2002u ay2nvm	INTEGR	#	GTPv1 MS-init. PDP context act. failed - LNS Forbidden Static IP	Sum	huaactpbh, hugactpbh, hugbpbh
GTPv1_MS_PDP_context_act ive_failed_by_	hua_gtpv1_apn_session_ta b.uqgxp5kqqqa2aidm2002u ay2nvm	INTEGR	#	GTPv1 MS-init. PDP context act.	Sum	huaactpbh, hugactpb

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LNS_No_Response				failed - LNS No Response		h, hugpbh
GTPv1_MS_PDP_context_activate_failed_by_no_resource	hua_gtpv1_apn_session_tab.tc2ryoircjgsnpa0dt1015an	INTEGRER	#	MS PDP context activation failed times caused by no available resources	Sum	huaactpb h, hugactpb h, hugpbh
GTPv1_MS_PDP_context_activate_failed_by_OCS_Server_No_Response	hua_gtpv1_apn_session_tab.uqgxp5mqqa2aidm2002uay2nvm	INTEGRER	#	GTPv1 MS-init. PDP context act. failed - OCS Server No Response	Sum	huaactpb h, hugactpb h, hugpbh
GTPv1_MS_PDP_context_activate_failed_by_other_reason	hua_gtpv1_apn_session_tab.rg2h2ul0ugb3ecph4lfkijfb1s	INTEGRER	#	MS PDP context activation failed times caused by other reasons	Sum	huaactpb h, hugactpb h, hugpbh
GTPv1_MS_PDP_context_activate_failed_by_PCRF_No_Response	hua_gtpv1_apn_session_tab.uqgxp5oqqa2aidm2002uay2nvm	INTEGRER	#	GTPv1 MS-init. PDP context act. failed - PCRF No Response	Sum	huaactpb h, hugactpb h, hugpbh
GTPv1_MS_PDP_context_activate_failed_by_Radius_Account_Server_No_Response	hua_gtpv1_apn_session_tab.uqgxp5gqqa2aidm2002uay2nvm	INTEGRER	#	GTPv1 MS-init. PDP context act. failed - Radius Account Server No Response	Sum	huaactpb h, hugactpb h, hugpbh
GTPv1_MS_PDP_context_activate_failed_by_Radius_Authentication_Server_No_Response	hua_gtpv1_apn_session_tab.uqgxp5eqqa2aidm2002uay2nvm	INTEGRER	#	GTPv1 MS-init. PDP context act. failed - Radius Authentication Server No Response	Sum	huaactpb h, hugactpb h, hugpbh
GTPv1_MS_PDP_context_act	hua_gtpv1_apn_session_tab.uqgxp5wqqa2aidm2002uay2nvm	INTEGRER	#	GTPv1 MS-init. PDP	Sum	huaactpb h,

ive_failed_by_roaming_restriction	ay2nvm			context act. failed - roaming restriction		hugactpbh, hugpbhh
GTPv1_MS_PDP_context_act ive_failed_by_service_not_support	hua_gtpv1_apn_session_tb.uqgxp5yqqa2aidm2002uay2nvm	INTEGR	#	GTPv1 MS-init. PDP context act. failed - service not support	Sum	huaactpbh, hugactpbh, hugpbhh
GTPv1_MS_PDP_context_act ive_failed_by_system_fault	hua_gtpv1_apn_session_tb.vfw1tv0yv0cxrudenr31bkjxrs	INTEGR	#	MS PDP context activation failed times caused by the system faults	Sum	huaactpbh, hugactpbh, hugpbhh

### 6.1.7 APN.Huawei.GPRS.Gx\_interface\_performance\_APN

Gx interface performance on APN

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
PCC_Received_ASR_Messages	hua_apn_gx_tab.txigoyqo152aidm0r02uay2nvm	INTEGR	#	PCC Received ASR Messages (PCRF)	Sum	huaactpbh
PCC_Received_CCAI_Messages	hua_apn_gx_tab.txigoyco152aidm0r02uay2nvm	INTEGR	#	PCC Received CCA-I Messages (PCRF)	Sum	huaactpbh
PCC_Received_CCAT_Message	hua_apn_gx_tab.txigoyko152aidm0r02uay2nvm	INTEGR	#	PCC Received CCA-T Message (PCRF)	Sum	huaactpbh
PCC_Received_CCAU_Messages	hua_apn_gx_tab.txigoygo152aidm0r02uay2nvm	INTEGR	#	PCC Received CCA-U Messages	Sum	huaactpbh

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				(PCRF)		
PCC_Received_Messages	hua_apn_gx_tab.txigoy5o1 52aidm0r02uay2nvm	INTEGRER	#	PCC Received Messages (PCRF)	Sum	huaactpbh
PCC_Received_RAR_Messages	hua_apn_gx_tab.txigoymo152aidm0r02uay2nvm	INTEGRER	#	PCC Received RAR Messages (PCRF)	Sum	huaactpbh
PCC_Sent_AS_A_Messages	hua_apn_gx_tab.txigoys01 52aidm0r02uay2nvm	INTEGRER	#	PCC Sent ASA Messages (PCRF)	Sum	huaactpbh
PCC_Sent_CCRRI_Messages	hua_apn_gx_tab.txigoya01 52aidm0r02uay2nvm	INTEGRER	#	PCC Sent CCR-I Messages (PCRF)	Sum	huaactpbh
PCC_Sent_CCRT_Messages	hua_apn_gx_tab.txigoyio1 52aidm0r02uay2nvm	INTEGRER	#	PCC Sent CCR-T Messages (PCRF)	Sum	huaactpbh
PCC_Sent_CCRU_Messages	hua_apn_gx_tab.txigoyeo1 52aidm0r02uay2nvm	INTEGRER	#	PCC Sent CCR-U Messages (PCRF)	Sum	huaactpbh
PCC_Sent_Messages	hua_apn_gx_tab.txigoy3o1 52aidm0r02uay2nvm	INTEGRER	#	PCC Sent Messages (PCRF)	Sum	huaactpbh
PCC_Sent_RA_A_Messages	hua_apn_gx_tab.txigoyoo1 52aidm0r02uay2nvm	INTEGRER	#	PCC Sent RAA Messages (PCRF)	Sum	huaactpbh

### 6.1.8 APN.Huawei.GPRS.IMS\_session

\*\*Obsolete in GGSN/V800R006 C02. IMS Data PDP context session

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
%_APN_IMS_DATA_PDP_context_active_failed_times	100 * {APN_IMS_DATA_PDP_context_active_failed_time}/{APN_IMS_DATA_PDP_context_active_request_time}	FLOAT	%	Obsolete from GGSN/V800R006 C01B010: Percentage of APN IMS_DATA PDP context	Average	huaactpbh, hugactpbh, hugbpbh

				active failed times		
$\bar{\%}_{\text{PDF\_start\_APN\_IMS\_DATA\_PDP\_context\_update\_failed\_times}}$	$100 * \{\text{PDF\_start\_APN\_IMS\_DATA\_PDP\_context\_update\_failed\_times}\} / \{\text{PDF\_start\_APN\_IMS\_DATA\_PDP\_context\_update\_request\_times}\}$	FLOAT	%	Obsolete from GGSN/V800R0 06 C01B010:Percentage of PDF start APN IMS_DATA PDP context active failed times	Average	huaactpbh, hugactpbh, hugbpbh
$\bar{\%}_{\text{SGSN\_start\_APN\_IMS\_DATA\_PDP\_context\_delete\_failed\_times}}$	$100 * \{\text{SGSN\_start\_APN\_IMS\_DATA\_PDP\_context\_delete\_failed\_times}\} / \{\text{SGSN\_start\_APN\_IMS\_DATA\_PDP\_context\_delete\_request\_times}\}$	FLOAT	%	Obsolete from GGSN/V800R0 06 C01B010:Percentage of SGSN start APN IMS_DATA PDP context delete success times	Average	huaactpbh, hugactpbh, hugbpbh
$\bar{\%}_{\text{SGSN\_start\_APN\_IMS\_DATA\_PDP\_context\_update\_failed\_times}}$	$100 * \{\text{SGSN\_start\_APN\_IMS\_DATA\_PDP\_context\_update\_failed\_times}\} / \{\text{SGSN\_start\_APN\_IMS\_DATA\_PDP\_context\_update\_request\_times}\}$	FLOAT	%	Obsolete from GGSN/V800R0 06 C01B010:Percentage of SGSN start APN IMS_DATA PDP context active failed times	Average	huaactpbh, hugactpbh, hugbpbh
$\text{APN\_IMS\_DATA\_PDP\_context\_active\_failed\_times}$	hua_m134221259_tab.tgg opqklfw2ahc3ij02incnmdw	INTEGER	#	Obsolete from GGSN/V800R0 06 C01B010:APN IMS_DATA PDP context	Sum	huaactpbh, hugactpbh, hugbpbh

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				active failed times		
APN_IMS_DA TA_PDP_context_active_request_times	hua_m134221259_tab.tgg opqglfw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:APN IMS_DATA PDP context active request times	Sum	huaactpb h, hugactpb h, hugbpbh
APN_IMS_DA TA_PDP_context_active_successes_times	hua_m134221259_tab.tgg opqilfw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:APN IMS_DATA PDP context active success times	Sum	huaactpb h, hugactpb h, hugbpbh
PDF_start_APN_IMS_DATA_PDP_context_update_failed_times	hua_m134221259_tab.tgg oprllfw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:PDF start APN IMS_DATA PDP context active failed times	Sum	huaactpb h, hugactpb h, hugbpbh
PDF_start_APN_IMS_DATA_PDP_context_update_request_times	hua_m134221259_tab.tgg opqwlfw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:PDF start APN IMS_DATA PDP context active request times	Sum	huaactpb h, hugactpb h, hugbpbh
PDF_start_APN_IMS_DATA_PDP_context_update_successes_times	hua_m134221259_tab.tgg opqylfw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:PDF start APN IMS_DATA PDP context	Sum	huaactpb h, hugactpb h, hugbpbh

				active success times		
PDF_start_revoke_authorization_APN_IMS_DATA_PDP_context	hua_m134221259_tab.tgg oprelfw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:Times of revoke authorization APN IMS_DATA PDP context started by PDF	Sum	huaactpb h, hugactpb h, hugbpbh
SGSN_start_APN_IMS_DATA_PDP_context_delete_failed_times	hua_m134221259_tab.tgg opralfw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:SGSN start APN IMS_DATA PDP context delete success times	Sum	huaactpb h, hugactpb h, hugbpbh
SGSN_start_APN_IMS_DATA_PDP_context_delete_request_times	hua_m134221259_tab.tgg opr5lfw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:SGSN start APN IMS_DATA PDP context delete request times	Sum	huaactpb h, hugactpb h, hugbpbh
SGSN_start_APN_IMS_DATA_PDP_context_update_failed_times	hua_m134221259_tab.tgg opqslfw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:SGSN start APN IMS_DATA PDP context active failed	Sum	huaactpb h, hugactpb h, hugbpbh

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				times		
SGSN_start_AP_N_IMS_DATA_PDP_context_update_request_times	hua_m134221259_tab.tgg opqqlfw2ahc3ij02incnmd w	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:SGS N start APN IMS_DATA PDP context active request times	Sum	huaactpb h, hugactpb h, hugbpbh
SGSN_start_AP_N_IMS_DATA_PDP_context_update_success_times	hua_m134221259_tab.tgg opqqlfw2ahc3ij02incnmd w	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:SGS N start APN IMS_DATA PDP context active success times	Sum	huaactpb h, hugactpb h, hugbpbh

### 6.1.9 APN.Huawei.GPRS.PCC\_Session\_APN

Policy and Charging Control (PCC) session on APN

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
Activated_PDP_Contexts_With_PCC_Enabled	hua_apn_pcc_tab.txigp0ao 152aidm0r02uay2nvm	INTEGR	#	Activated PDP Contexts With PCC Enabled (PCRF)	Sum	huaactpb h
Activated_PDP_Sessions_With_PCC_Enabled	hua_apn_pcc_tab.txigp03o 152aidm0r02uay2nvm	INTEGR	#	Activated PDP Sessions With PCC Enabled (PCRF)	Sum	huaactpb h
Deactivated_PDP_Contexts_With_PCC_Enabled	hua_apn_pcc_tab.txigp0co 152aidm0r02uay2nvm	INTEGR	#	Deactivated PDP Contexts With PCC Enabled (PCRF)	Sum	huaactpb h
Deactivated_PDP_Sessions_with	hua_apn_pcc_tab.txigp05o 152aidm0r02uay2nvm	INTEGR	#	Deactivated PDP Sessions	Sum	huaactpb h

h_PCC_Enabled			with PCC Enabled (PCRF)	
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## 6.2 CG\_IP Performance Indicators

- [CG\\_IP.Huawei.GPRS.GTPP](#)

### 6.2.1 CG\_IP.Huawei.GPRS.GTPP

GTPP performance measurement (discriminate CG IP)

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
Bytes_of_CDRs_sent_to(CG)	hua_gtpp_cgip_tab.xphlajj6machje5rcvgidx4uoj	INTEGER	#	Perform the statistics about the total bill bytes sent to CG	Sum	
CDR_information_transfers_attempted	hua_gtpp_cgip_tab.r02eo0kny6cwau13hsnqyfhegy	INTEGER	#	Number of CDR messages that are sent successfully	Sum	
CDR_information_transfers_failed	hua_gtpp_cgip_tab.xjmk2ccnwbbnbbphiwwrolognr	INTEGER	#	Number of CDR messages that get improper responses	Sum	
CDR_sent_to_the_cg_got_a_response	hua_gtpp_cgip_tab.vm2sn3sq5gctybgadsjvrxgvcs	INTEGER	#	Number of CDR messages that get proper responses	Sum	
CG_communication_fault	hua_gtpp_cgip_tab.txfb3axb2vbvwdfyxphfw2pck3	INTEGER	#	Perform the broken times when CG	Sum	

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				communication is broken		
CG_redirection_ fault	hua_gtpp_cgip_tab.sbt5oh mtovcjlrqvwgymurj3ug	INTEG ER	#	Perform CG redirection failed times	Sum	
CG_sent_redire ction_message_t o_GGSN	hua_gtpp_cgip_tab.x65ctp 1h1lch3ddtkn513rnk1k	INTEG ER	#	Perform the times for CG sending redirection message to GGSN	Sum	
Currently_pendi ng_G_CDR_out put_messages	hua_gtpp_cgip_tab.vjvwb hwuwcjtak3bcw2lyghq	INTEG ER	#	Total users bills that are pending currently	Average	Maximu m, Minimu m, Sum
Downlink_data_ packets_discard ed_for_service_ APN	hua_gtpp_cgip_tab.txigos oo152aidm0r02uay2nvm	INTEG ER	#	Downlink data packets discarded for service (APN)	Sum	
G_CDR_transm ission_failure_b y_no_resource_ available	hua_gtpp_cgip_tab.tggop mwlfw2ahc3ij02incnmdw	INTEG ER	#	Number of CDR messages that get improper responses by no resource available	Sum	
G_CDR_transm ission_failure_b y_other_reasons	hua_gtpp_cgip_tab.tggopn 3lfw2ahc3ij02incnmdw	INTEG ER	#	Number of CDR messages that get improper responses by other reasons	Sum	
G_CDR_transm ission_failure_f or_service_not_ supporting	hua_gtpp_cgip_tab.tggop mylfw2ahc3ij02incnmdw	INTEG ER	#	Number of CDR messages that get improper responses for service not supporting	Sum	
G_CDR_transm ission_failure_f	hua_gtpp_cgip_tab.tggopn 1lfw2ahc3ij02incnmdw	INTEG ER	#	Number of CDR messages	Sum	

or_system_failure				that get improper responses for system failure		
GCDR_transmission_type_1_success_messages_CG	hua_gtpp_cgip_tab.txigosgo152aidm0r02uay2nvm	INTEGR	#	G-CDR transmission type 1 success messages (CG)	Sum	
GCDR_transmission_type_2_success_messages_CG	hua_gtpp_cgip_tab.txigoso152aidm0r02uay2nvm	INTEGR	#	G-CDR transmission type 2 success messages (CG)	Sum	
GGSN_traffic_in_packets_APN	hua_gtpp_cgip_tab.txigosko152aidm0r02uay2nvm	INTEGR	#	GGSN traffic in packets (APN)	Sum	
Illegal_GTPP_received_from_CG	hua_gtpp_cgip_tab.v2kqf6326gcvnrrxyoavasuxu1	INTEGR	#	Perform the statistics about the illegal GTP signaling packets received by GGSN	Sum	
Num_of_CDRs_sent_to(CG	hua_gtpp_cgip_tab.udk36pc4necl3rcnc1hxuhf4xa	INTEGR	#	Perform the statistics about the total bills sending to CG	Sum	
Uplink_data_packets_discarded_for_service_APN	hua_gtpp_cgip_tab.txigosmo152aidm0r02uay2nvm	INTEGR	#	Uplink data packets discarded for service (APN)	Sum	

### 6.3 GGSN Performance Indicators

- [GGSN.Huawei.GPRS.AAA](#)
- [GGSN.Huawei.GPRS.Basic\\_session\\_by\\_traffic\\_class](#)
- [GGSN.Huawei.GPRS.Basic\\_session\\_IPV6](#)
- [GGSN.Huawei.GPRS.Basic\\_session](#)
- [GGSN.Huawei.GPRS.CLT](#)

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- [GGSN.Huawei.GPRS.DHCP](#)
- [GGSN.Huawei.GPRS.Different\\_service\\_PDP\\_context](#)
- [GGSN.Huawei.GPRS.G\\_CDR](#)
- [GGSN.Huawei.GPRS.GTP\\_data\\_by\\_traffic\\_class](#)
- [GGSN.Huawei.GPRS.GTP\\_signal\\_by\\_traffic\\_class](#)
- [GGSN.Huawei.GPRS.GTPP](#)
- [GGSN.Huawei.GPRS.Gx\\_interface\\_performance\\_GGSN](#)
- [GGSN.Huawei.GPRS.Gy\\_interface](#)
- [GGSN.Huawei.GPRS.IMS\\_basic\\_session](#)
- [GGSN.Huawei.GPRS.Intelligent\\_service](#)
- [GGSN.Huawei.GPRS.IP\\_data\\_by\\_traffic\\_class](#)
- [GGSN.Huawei.GPRS.IPV6\\_transport](#)
- [GGSN.Huawei.GPRS.L2TP](#)
- [GGSN.Huawei.GPRS.Layer7\\_parser](#)
- [GGSN.Huawei.GPRS.MBMS](#)
- [GGSN.Huawei.GPRS.MIP\\_FA](#)
- [GGSN.Huawei.GPRS.PCC\\_Session\\_GGSN](#)
- [GGSN.Huawei.GPRS.PPPC](#)
- [GGSN.Huawei.GPRS.Prepay](#)
- [GGSN.Huawei.GPRS.SBR\\_traffic](#)
- [GGSN.Huawei.GPRS.Signal\\_message\\_error\\_cause](#)
- [GGSN.Huawei.GPRS.Transport](#)
- [GGSN.Huawei.GPRS.Tunnels](#)
- [GGSN.Huawei.GPRS.Users\\_number](#)

### 6.3.1 GGSN.Huawei.GPRS.AAA

AAA performance measurement

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
$\%_{\text{Accounting\_start\_success}}$	$100 * \{\text{Accounting\_start\_success}\} / \{\text{Accounting\_start\_request}\}$	FLOAT	%	Percentage of successful accounting start request sent from GGSN to AAA server	Average	hugactpbh, hugbpbh
$\%_{\text{Accounting\_stop\_success}}$	$100 * \{\text{Accounting\_stop\_success}\} / \{\text{Accounting\_stop\_request}\}$	FLOAT	%	Percentage of successful accounting stopping request sent	Average	hugactpbh, hugbpbh

				from GGSN to AAA server		
%_Authentication_request_success	100 * {Authentication_request_success}/ {Authentication_request}	FLOAT	%	Percentage of successful authentication request sent from GGSN to AAA server	Average	hugactpbh, hugbpbh
%_Realtime_accounting_request_success	100 * {Realtime_accounting_request_success}/ {Realtime_accounting_request}	FLOAT	%	Percentage of successful real-time accounting request sent from GGSN to AAA server	Average	hugactpbh, hugbpbh
Accounting_start_request	hua_aaa_tab.uktjusj5q4bjcsntcu6m1hl4j4	INTEGR	#	Attempts of accounting start request sent from GGSN to AAA server	Sum	hugactpbh, hugbpbh
Accounting_start_success	hua_aaa_tab.wvof5ecqfsb32dpqanoiuajxe	INTEGR	#	Successful times of accounting start request sent from GGSN to AAA server	Sum	hugactpbh, hugbpbh
Accounting_stop_request	hua_aaa_tab.w3hn2s3xygbpnd4np5hoyddcfe	INTEGR	#	Attempts of accounting stopping request sent from GGSN to AAA server	Sum	hugactpbh, hugbpbh
Accounting_stop_success	hua_aaa_tab.run2wgwh3ucvdtsqqmao5hbwea	INTEGR	#	Successful times of accounting	Sum	hugactpbh, hugbpbh

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				stopping request sent from GGSN to AAA server		
Authentication_r equest_success	hua_aaa_tab.sjnppu23ecy 6eaujkt5y2r5hn	INTEG ER	#	Successful times of authentication request sent from GGSN to AAA server	Sum	hugactpb h, hugbpbh
Authentication_r equest	hua_aaa_tab.ueshkttn6aub4 2b14oewyfr5vld	INTEG ER	#	Attempts of authentication request sent from GGSN to AAA server	Sum	hugactpb h, hugbpbh
GGSN_receive_ disconnect_req_n um	hua_aaa_tab.tggopaglfw2a hc3ij02incnmdw	INTEG ER	#	Times of receiving "DISCONNEC T REQ" messages by GGSN from AAA server	Sum	hugactpb h, hugbpbh
GGSN_send_dis connect_ack_nu m	hua_aaa_tab.tggopailfw2a hc3ij02incnmdw	INTEG ER	#	Times of sending "DISCONNEC T ACK" messages by GGSN to AAA server	Sum	hugactpb h, hugbpbh
GGSN_send_dis connect_nak_nu m	hua_aaa_tab.tggopaklfw2a hc3ij02incnmdw	INTEG ER	#	Times of sending "DISCONNEC T NAK" messages by GGSN to AAA server	Sum	hugactpb h, hugbpbh
Illegal_AAA_me ssage_received	hua_aaa_tab.wvqx2r1ohfbr 6b0eek5wcmi5wn	INTEG ER	#	Times of receiving invalid packets by GGSN from AAA server	Sum	hugactpb h, hugbpbh

Realtime_accounting_request_success	hua_aaa_tab.sxkb5adrmxcixer4eo4ev6h6kx	INTEGR	#	Successful times of real-time accounting request sent from GGSN to AAA server	Sum	hugactpbh, hugbpbh
Realtime_accounting_request	hua_aaa_tab.ythtv4kv0gb25tpovv4ytoipfc	INTEGR	#	Attempts of real-time accounting request sent from GGSN to AAA server	Sum	hugactpbh, hugbpbh

### 6.3.2 GGSN.Huawei.GPRS.Basic\_session\_by\_traffic\_class

PDP context per traffic class (conversational, streaming, interactive and background) and priority (low, medium and high)

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
%_Background_class_PDP_context_act_succ_with_high_priority	100 * {Background_class_PDP_context_act_succ_with_high_priority}/ {Background_class_PDP_context_act_with_high_priority}	FLOAT	%	Percentage of PDP context creation successful, based on traffic class and user priority. Traffic class is background and the user priority is high	Average	hugactpbh, hugbpbh
%_Background_class_PDP_context_act_succ_with_low_priority	100 * {Background_class_PDP_context_act_succ_with_low_priority}/ {Background_class_PDP_	FLOAT	%	Percentage of PDP context creation successful, based on	Average	hugactpbh, hugbpbh

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	context_act_with_low_priority}			traffic class and user priority. Traffic class is background and the use priority is low		
%_Background_class_PDP_context_act_succ_with_mid_priority	100 * {Background_class_PDP_context_act_succ_with_mid_priority}/ {Background_class_PDP_context_act_with_mid_priority}	FLOAT	%	Percentage of PDP context creation successful, based on traffic class and user priority. Traffic class is background and the use priority is medium	Average	hugactpbh, hugbpbh
%_Conversationalclass_PDP_context_act_succ_with_high_priority	100 * {Conversational_class_PDP_context_act_succ_with_high_priority}/ {Conversational_class_PDP_context_act_with_high_priority}	FLOAT	%	Percentage of PDP context creation successful, based on traffic class and user priority. Traffic class is conversational and the use priority is high	Average	hugactpbh, hugbpbh
%_Conversationalclass_PDP_context_act_succ_with_low_priority	100 * {Conversational_class_PDP_context_act_succ_with_low_priority}/ {Conversational_class_PDP_context_act_with_low_priority}	FLOAT	%	Percentage of PDP context creation successful, based on traffic class and user priority. Traffic class is conversational and the use priority is low	Average	hugactpbh, hugbpbh

$\%_{\text{Conversational\_class\_PDP\_context\_act\_succ\_with\_mid\_priority}}$	$100 * \{\text{Conversational\_class\_PDP\_context\_act\_succ\_with\_mid\_priority}\} / \{\text{Conversational\_class\_PDP\_context\_act\_with\_medium\_priority}\}$	FLOAT	%	Percentage of PDP context creation successful, based on traffic class and user priority. Traffic class is conversational and the use priority is medium	Average	hugactpbh, hugbpbh
$\%_{\text{Interactive\_class\_PDP\_context\_act\_succ\_with\_high\_priority}}$	$100 * \{\text{Interactive\_class\_PDP\_context\_act\_succ\_with\_high\_priority}\} / \{\text{Interactive\_class\_PDP\_context\_act\_with\_high\_priority}\}$	FLOAT	%	Percentage of PDP context creation successful, based on traffic class and user priority. Traffic class is interactive and the use priority is high	Average	hugactpbh, hugbpbh
$\%_{\text{Interactive\_class\_PDP\_context\_act\_succ\_with\_low\_priority}}$	$100 * \{\text{Interactive\_class\_PDP\_context\_act\_succ\_with\_low\_priority}\} / \{\text{Interactive\_class\_PDP\_context\_act\_with\_low\_priority}\}$	FLOAT	%	Percentage of PDP context creation successful, based on traffic class and user priority. Traffic class is interactive and the use priority is low	Average	hugactpbh, hugbpbh
$\%_{\text{Interactive\_class}}$	$100 * \{\text{Interactive\_class\_PDP\_context\_act\_succ\_with\_high\_priority}\} / \{\text{Interactive\_class\_PDP\_context\_act\_with\_high\_priority}\}$	FLOAT	%	Percentage of PDP context	Average	hugactpbh,

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ss_PDP_context_act_succ_with_medium_priority	ontext_act_succ_with_medium_priority}/ {Interactive_class_PDP_context_act_with_mid_priority}			creation successful, based on traffic class and user priority. Traffic class is interactive and the use priority is medium	hugpbph
%_Streaming_class_PDP_context_act_succ_with_high_priority	100 * {Streaming_class_PDP_context_act_succ_with_high_priority}/ {Streaming_class_PDP_context_act_with_high_priority}	FLOAT	%	Percentage of PDP context creation successful, based on traffic class and user priority. Traffic class is streaming and the use priority is high	Average hugactpbh, hugpbph
%_Streaming_class_PDP_context_act_succ_with_low_priority	100 * {Streaming_class_PDP_context_act_succ_with_low_priority}/ {Streaming_class_PDP_context_act_with_low_priority}	FLOAT	%	Percentage of PDP context creation successful, based on traffic class and user priority. Traffic class is streaming and the use priority is low	Average hugactpbh, hugpbph
%_Streaming_class_PDP_context_act_succ_with_medium_priority	100 * {Streaming_class_PDP_context_act_succ_with_medium_priority}/ {Streaming_class_PDP_context_act_with_mid_priority}	FLOAT	%	Percentage of PDP context creation successful, based on traffic class and user priority. Traffic class is streaming and	hugactpbh, hugpbph

				the use priority is medium		
Background_classes_PDP_context_act_succ_with_high_priority	hua_m134221249_tab.tgg opc1lfw2ahc3ij02incnmd w	INTEGR	#	PDP context creation successful, based on traffic class and user priority. Traffic class is background and the use priority is high	Sum	hugactpb h, hugbpbh
Background_classes_PDP_context_act_succ_with_low_priority	hua_m134221249_tab.tgg opbslfw2ahc3ij02incnmd w	INTEGR	#	PDP context creation successful, based on traffic class and user priority. Traffic class is background and the use priority is low	Sum	hugactpb h, hugbpbh
Background_classes_PDP_context_act_succ_with_medium_priority	hua_m134221249_tab.tgg opcclfw2ahc3ij02incnmd w	INTEGR	#	PDP context creation successful, based on traffic class and user priority. Traffic class is background and the use priority is medium	Sum	hugactpb h, hugbpbh
Background_classes_PDP_context_act_succ_with_low	{Background_class_PDP_context_act_succ_with_low}	INTEGR	#	PDP context creation	Sum	hugactpb h,

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ct_succ	w_priority}+ {Background_class_PDP_context_act_succ_with_high_priority}+ {Background_class_PDP_context_act_succ_with_mid_priority}			successful, based on traffic class. Traffic class is background		hugpbph
Background_classes_PDP_context_act_with_high_priority	hua_m134221249_tab.tgg opbclfw2ahc3ij02incnmdw	INTEGR	#	PDP context creation attempts, based on traffic class and user priority. Traffic class is background and the user priority is high	Sum	hugactpbh, hugpbph
Background_classes_PDP_context_act_with_low_priority	hua_m134221249_tab.tgg opb1lfw2ahc3ij02incnmdw	INTEGR	#	PDP context creation attempts, based on traffic class and user priority. Traffic class is background and the user priority is low	Sum	hugactpbh, hugpbph
Background_classes_PDP_context_act_with_mid_priority	hua_m134221249_tab.tgg opbklfw2ahc3ij02incnmdw	INTEGR	#	PDP context creation attempts, based on traffic class and user priority. Traffic class is background and the user priority is medium	Sum	hugactpbh, hugpbph
Background_classes_PDP_context_act	{Background_class_PDP_context_act_with_low_priority}+ {Background_class_PDP_context_act_with_high_pr	INTEGR	#	PDP context creation attempts, based on traffic class. Traffic class is	Sum	hugactpbh, hugpbph

	iority}+ {Background_class_PDP_ context_act_with_mid_pri ority}			background		
Conversational_cl ass_PDP_context _act_succ_with_h igh_priority	hua_m134221249_tab.tgg opbulfw2ahc3ij02incnmd w	INTEG ER	#	PDP context creation successful, based on traffic class and user priority. Traffic class is conversational and the use priority is high	Sum	hugactpb h, hugbpbh
Conversational_cl ass_PDP_context _act_succ_with_l ow_priority	hua_m134221249_tab.tgg opbmlfw2ahc3ij02incnmd w	INTEG ER	#	PDP context creation successful, based on traffic class and user priority. Traffic class is conversational and the use priority is low	Sum	hugactpb h, hugbpbh
Conversational_cl ass_PDP_context _act_succ_with_ mid_priority	hua_m134221249_tab.tgg opc3lfw2ahc3ij02incnmd w	INTEG ER	#	PDP context creation successful, based on traffic class and user priority. Traffic class is conversational and the use priority is medium	Sum	hugactpb h, hugbpbh

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Conversational_class_PDP_context_act_succ	{Conversational_class_P DP_context_act_succ_with_low_priority}+ {Conversational_class_P DP_context_act_succ_with_high_priority}+ {Conversational_class_P DP_context_act_succ_with_mid_priority}	INTEGR	#	PDP context creation successful, based on traffic class. Traffic class is conversational	Sum	hugactpbh, hugbpbh
Conversational_class_PDP_context_act_with_high_priority	hua_m134221249_tab.tgg opb3lfw2ahc3ij02incnmdw	INTEGR	#	PDP context creation attempts, based on traffic class and user priority. Traffic class is conversational and the use priority is high	Sum	hugactpbh, hugbpbh
Conversational_class_PDP_context_act_with_low_priority	hua_m134221249_tab.tgg opaulfw2ahc3ij02incnmdw	INTEGR	#	PDP context creation attempts, based on traffic class and user priority. Traffic class is conversational and the use priority is low	Sum	hugactpbh, hugbpbh
Conversational_class_PDP_context_act_with_mid_priority	hua_m134221249_tab.tgg opbelfw2ahc3ij02incnmdw	INTEGR	#	PDP context creation attempts, based on traffic class and user priority. Traffic class is conversational and the use priority is medium	Sum	hugactpbh, hugbpbh
Conversational_class_PDP_context_act	{Conversational_class_P DP_context_act_with_low_priority}+	INTEGR	#	PDP context creation attempts, based	Sum	hugactpbh, hugbpbh

	{Conversational_class_P DP_context_act_with_hi gh_priority}+ {Conversational_class_P DP_context_act_with_mi d_priority}			on traffic class. Traffic class is conversational		
Interactive_class_ PDP_context_act_ _succ_with_high_ _priority	hua_m134221249_tab.tgg opbylfw2ahc3ij02incnmd w	INTEG ER	#	PDP context creation successful, based on traffic class and user priority. Traffic class is interactive and the use priority is high	Sum	hugactpb h, hugbpbh
Interactive_class_ PDP_context_act_ _succ_with_low_ _priority	hua_m134221249_tab.tgg opbqlfw2ahc3ij02incnmd w	INTEG ER	#	PDP context creation successful, based on traffic class and user priority. Traffic class is interactive and the use priority is low	Sum	hugactpb h, hugbpbh
Interactive_class_ PDP_context_act_ _succ_with_mid_ _priority	hua_m134221249_tab.tgg opcalfw2ahc3ij02incnmd w	INTEG ER	#	PDP context creation successful, based on traffic class and user priority. Traffic class is interactive and the use priority is medium	Sum	hugactpb h, hugbpbh

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Interactive_class_PDP_context_act_succ	{Interactive_class_PDP_context_act_succ_with_low_priority}+{Interactive_class_PDP_context_act_succ_with_high_priority}+{Interactive_class_PDP_context_act_succ_with_medium_priority}	INTEGRER	#	PDP context creation successful, based on traffic class. Traffic class is interactive	Sum	hugactpbh, hugbpbh
Interactive_class_PDP_context_act_with_high_priority	hua_m134221249_tab.tgg opbalfw2ahc3ij02incnmdw	INTEGRER	#	PDP context creation attempts, based on traffic class and user priority. Traffic class is interactive and the use priority is high	Sum	hugactpbh, hugbpbh
Interactive_class_PDP_context_act_with_low_priority	hua_m134221249_tab.tgg opaylfw2ahc3ij02incnmdw	INTEGRER	#	PDP context creation attempts, based on traffic class and user priority. Traffic class is interactive and the use priority is low	Sum	hugactpbh, hugbpbh
Interactive_class_PDP_context_act_with_mid_priority	hua_m134221249_tab.tgg opbilfw2ahc3ij02incnmdw	INTEGRER	#	PDP context creation attempts, based on traffic class and user priority. Traffic class is interactive and the use priority is medium	Sum	hugactpbh, hugbpbh
Interactive_class_PDP_context_act	{Interactive_class_PDP_context_act_with_low_priority}+{Interactive_class_PDP_context_act_with_high_priority}+{Interactive_class_PDP_context_act_with_medium_priority}	INTEGRER	#	PDP context creation attempts, based on traffic class.	Sum	hugactpbh, hugbpbh

	ontext_act_with_high_priority}+ {Interactive_class_PDP_context_act_with_mid_priority}			Traffic class is interactive		
Streaming_class_PDP_context_act_succ_with_high_priority	hua_m134221249_tab.tgg opbwlfw2ahc3ij02incnmd w	INTEGR	#	PDP context creation successful, based on traffic class and user priority. Traffic class is streaming and the use priority is high	Sum	hugactpb h, hugpbph
Streaming_class_PDP_context_act_succ_with_low_priority	hua_m134221249_tab.tgg opbolfw2ahc3ij02incnmd w	INTEGR	#	PDP context creation successful, based on traffic class and user priority. Traffic class is streaming and the use priority is low	Sum	hugactpb h, hugpbph
Streaming_class_PDP_context_act_succ_with_mid_priority	hua_m134221249_tab.tgg opc5lfw2ahc3ij02incnmd w	INTEGR	#	PDP context creation successful, based on traffic class and user priority. Traffic class is streaming and the use priority is medium	Sum	hugactpb h, hugpbph

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Streaming_class_PDP_context_act_succ	{Streaming_class_PDP_context_act_succ_with_low_priority}+{Streaming_class_PDP_context_act_succ_with_high_priority}+{Streaming_class_PDP_context_act_succ_with_medium_priority}	INTEGR	#	PDP context creation successful, based on traffic class. Traffic class is streaming	Sum	hugactpbh, hugbpbh
Streaming_class_PDP_context_act_with_high_priority	hua_m134221249_tab.tgg opb5lfw2ahc3ij02incnmdw	INTEGR	#	PDP context creation attempts, based on traffic class and user priority. Traffic class is streaming and the use priority is high	Sum	hugactpbh, hugbpbh
Streaming_class_PDP_context_act_with_low_priority	hua_m134221249_tab.tgg opawlfw2ahc3ij02incnmdw	INTEGR	#	PDP context creation attempts, based on traffic class and user priority. Traffic class is streaming and the use priority is low	Sum	hugactpbh, hugbpbh
Streaming_class_PDP_context_act_with_mid_priority	hua_m134221249_tab.tgg opbglfw2ahc3ij02incnmdw	INTEGR	#	PDP context creation attempts, based on traffic class and user priority. Traffic class is streaming and the use priority is medium	Sum	hugactpbh, hugbpbh
Streaming_class_PDP_context_act	{Streaming_class_PDP_context_act_with_low_priority}+{Streaming_class_PDP_context_act_with_high_priority}+{Streaming_class_PDP_context_act_with_medium_priority}	INTEGR	#	PDP context creation attempts, based on traffic class.	Sum	hugactpbh, hugbpbh

	ontext_act_with_high_priority}+ {Streaming_class_PDP_context_act_with_mid_priority}		Traffic class is streaming	
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### 6.3.3 GGSN.Huawei.GPRS.Basic\_session\_IPV6

Basic session for IPV6 measurement

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
%_IPv6_PDP_context_Succ_activate	100 * {IPv6_PDP_context_succ_activate}/ {IPv6_PDP_context_reqs_activate}	FLOAT	%	Percentage of successful times of IPV6 PDP context activation by the GGSN.	Average	hugactpbh, hugbpbh
IPV6_PDP_average_context_activated	hua_basic_session_ipv6_tاب.uqgxpbsqqa2aidm2002uay2nvm	INTEGR	#	Average IPV6 PDP contexts activated by GGSN	Average	hugactpbh, hugbpbh, Sum, Minimum, Maximum
IPV6_PDP_context_act_fail_by_auth_failed	hua_basic_session_ipv6_tاب.uqgxpbaqqa2aidm2002uay2nvm	INTEGR	#	Times of failed IPV6 PDP context activation caused by failed authentication.	Sum	hugactpbh, hugbpbh
IPV6_PDP_context_act_fail_by_invalid_message_format	hua_basic_session_ipv6_tاب.uqgxpawqqa2aidm2002uay2nvm	INTEGR	#	Times of failed IPV6 PDP context activation	Sum	hugactpbh, hugbpbh

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				caused by invalid message format		
IPV6_PDP_context_act_fail_by_mandatory_IE_incorrect	hua_basic_session_ipv6_tabb.uqgxpqqaa2aidm2002uay2nvm	INTEGR	#	Times of failed IPV6 PDP context activation caused by error of mandatory IEs.	Sum	hugactpbh, hugbpbh
IPV6_PDP_context_act_fail_by_mandatory_IE_missing	hua_basic_session_ipv6_tabb.uqgxpqqaa2aidm2002uay2nvm	INTEGR	#	Times of failed IPV6 PDP context activation caused by loss of mandatory IEs.	Sum	hugactpbh, hugbpbh
IPV6_PDP_context_act_fail_by_no_dynamic_PDP_addresses	hua_basic_session_ipv6_tabb.uqgxpbb1qqa2aidm2002uay2nvm	INTEGR	#	Times of failed IPV6 PDP context activation caused by no dynamic PDP addresses.	Sum	hugactpbh, hugbpbh
IPV6_PDP_context_act_fail_by_no_memory	hua_basic_session_ipv6_tabb.uqgxpbb3qqa2aidm2002uay2nvm	INTEGR	#	Times of failed IPV6 PDP context activation caused by no free memory.	Sum	hugactpbh, hugbpbh
IPv6_PDP_context_act_fail_by_no_resource	hua_basic_session_ipv6_tabb.uqgxpboqqaa2aidm2002uay2nvm	INTEGR	#	Times of failed IPV6 PDP context activation caused by no resource.	Sum	hugactpbh, hugbpbh
IPV6_PDP_context_act_fail_by_optional_IE_incorrect	hua_basic_session_ipv6_tabb.uqgxpauqqaa2aidm2002uay2nvm	INTEGR	#	Times of failed IPV6 PDP context activation caused by error of optional IEs.	Sum	hugactpbh, hugbpbh

IPV6_PDP_context_act_fail_by_PDP_without_TFT_already_act	hua_basic_session_ipv6_tabb.uqgxpbmqq2aidm2002uay2nvm	INTEGR	#	Times of failed IPV6 PDP context activation caused by no activated TFT context.	Sum	hugactpbh, hugbpbh
IPV6_PDP_context_act_fail_by_semantic_err_in_packet_filters	hua_basic_session_ipv6_tabb.uqgxpbiqqa2aidm2002uay2nvm	INTEGR	#	Times of failed IPV6 PDP context activation caused by semantic error during packet filtering.	Sum	hugactpbh, hugbpbh
IPV6_PDP_context_act_fail_by_semantic_err_in_TFT_operation	hua_basic_session_ipv6_tabb.uqgxpbeqqa2aidm2002uay2nvm	INTEGR	#	Times of failed IPV6 PDP context activation caused by semantic error of TFT operations.	Sum	hugactpbh, hugbpbh
IPV6_PDP_context_act_fail_by_syntax_err_in_packet_filters	hua_basic_session_ipv6_tabb.uqgxpbkqqa2aidm2002uay2nvm	INTEGR	#	Times of failed IPV6 PDP context activation caused by syntax error during packet filtering.	Sum	hugactpbh, hugbpbh
IPV6_PDP_context_act_fail_by_syntax_err_in_TFT_operation	hua_basic_session_ipv6_tabb.uqgxpbgqqa2aidm2002uay2nvm	INTEGR	#	Times of failed IPV6 PDP context activation caused by syntax error of TFT	Sum	hugactpbh, hugbpbh

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				operations.		
IPV6_PDP_context_act_fail_by_system_fault	hua_basic_session_ipv6_tabb.uqgxpbcqqaa2aidm2002uay2nvm	INTEGR	#	Times of failed IPV6 PDP context activation caused by system failure.	Sum	hugactpbh, hugbpbh
IPV6_PDP_context_act_fail_by_unknown_APN	hua_basic_session_ipv6_tabb.uqgxpayqqa2aidm2002uay2nvm	INTEGR	#	Times of failed IPV6 PDP context activation caused by unknown APNs.	Sum	hugactpbh, hugbpbh
IPV6_PDP_context_act_fail_by_unknown_PDP_address_or_PD_P_type	hua_basic_session_ipv6_tabb.uqgxpby5qqa2aidm2002uay2nvm	INTEGR	#	Times of failed IPV6 PDP context activation caused by unknown PDP addresses or types.	Sum	hugactpbh, hugbpbh
IPV6_PDP_context_reqs_activate	hua_basic_session_ipv6_tabb.uqgxpakqqa2aidm2002uay2nvm	INTEGR	#	Attempts of IPV6 PDP context activation request received by the GGSN.	Sum	hugactpbh, hugbpbh
IPv6_PDP_context_succ_activate	hua_basic_session_ipv6_tabb.uqgxpamqqa2aidm2002uay2nvm	INTEGR	#	Successful times of IPV6 PDP context activation by the GGSN.	Sum	hugactpbh, hugbpbh
IPv6_PDP_current_activated_context	hua_basic_session_ipv6_tabb.uqgxpbyqqqa2aidm2002uay2nvm	INTEGR	#	IPV6 PDP contexts which are in activated status in GGSN system	Average	hugactpbh, hugbpbh, Sum, Minimum, Maximum

IPV6_PDP_maximum_simultaneously_ACTIVATED_context	hua_basic_session_ipv6.tab.uqgxpbuqqa2aidm2002uay2nvm	INTEGR	#	The maximum number of IPV6 PDP contexts activated by GGSN.	Average	hugactpbh, hugbpbh, Sum, Minimum, Maximum
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### 6.3.4 GGSN.Huawei.GPRS.Basic\_session

Basic session measurement

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
%_Succ_PDP_context_1Tunnel_chg_to_2Tunnel	100 * {Succ_PDP_context_1Tunnel_chg_to_PDP_context_2Tunnel}/ {PDP_context_1Tunnel_req_chg_PDP_context_2Tunnel}	FLOAT	%	Percentage of successful PDP context of One Tunnel change to PDP context of Two Tunnel	Average	hugactpbh, hugbpbh
%_Succ_PDP_context_2Tunnel_chg_to_1Tunnel	100 * {Succ_PDP_context_2Tunnel_chg_to_PDP_context_1Tunnel}/ {PDP_context_2Tunnel_req_chg_PDP_context_1Tunnel}	FLOAT	%	Percentage of successful PDP context of Two Tunnel change to PDP context of One Tunnel	Average	hugactpbh, hugbpbh
%_Successful_PDP_deactivation	100 * {Huawei.Basic_session.PD_Context_Deact_Success}/ {Huawei.Basic_session.PD_Context_Deact}	FLOAT	%	percentage of Successful times of PDP context deactivation by the GGSN	Average	hugactpbh, hugbpbh
Active_PDP_context_failed_r	hua_basic_session_tab.tpoj614ceuc5cbwwcxrofparye	INTEGR	#	PPP regenerative	Sum	hugactpbh,

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each_max_for_PPP_regen				user activation failure caused by maximum users		hugpbph
Active_PDP_context_failed_unavailable_resource_for_PPP_regen	hua_basic_session_tab.w4sv3pd6hec1nevt3e55trkljtj	INTEGRER	#	PPP regenerative user activation failure caused by limited resource	Sum	hugactpbh, hugpbph
Avg_act_PDP_context	hua_basic_session_tab.wdesois3nxc2xciak4aae6tldn	INTEGRER	#	Average PDP contexts activated by GGSN	Average	hugactpbh, hugpbph, Maximum, Minimum, Sum
Background_class_PDP_context	hua_basic_session_tab.rxeuihct1qctsswode04tabppy	INTEGRER	#	Number of Background class PDP contexts	Sum	hugactpbh, hugpbph
Congestion_duration	hua_basic_session_tab.w0kr uvmkejcqlu6agix4bkugoy	INTEGRER	Second	Total duration of GGSN users congestion	Sum	hugactpbh, hugpbph
Conversational_class_PDP_context	hua_basic_session_tab.w3dn1x6rujbxbsemribgjkhqj0y	INTEGRER	#	Number of Conversational class PDP contexts	Sum	hugactpbh, hugpbph
Current_act_1Tunnel_PDP_context	hua_basic_session_tab.txigo oyo152aidm0r02uay2nvm	INTEGRER	#	Current activated One Tunnel PDP contexts	Average	hugactpbh, hugpbph, Sum, Minimum, Maximum
Current_number_active_GTPV0_PDP_context	hua_basic_session_tab.uv6p4oelgwc5od4geyf060odfw	INTEGRER	#	Number of users whose activated PDP context is of	Average	hugactpbh, hugpbph, Maximum

				V0 type		m, Minimu m, Sum
Current_number_active_GTPV1_PDP_context	hua_basic_session_tab.wg4oy5jhx5bqxub2q4445h1mcj	INTEGR	#	Number of users whose activated PDP context is of V1 type	Average	hugactpbh, hugbpbh, Maximu m, Minimu m, Sum
Current_PDP_contexts_with_GGSN_assigned_QoS	hua_basic_session_tab.w4n4pq3tlebacujmrtyeacqlxo	INTEGR	#	PDP contexts apply the QOS that is assigned by the GGSN.	Average	hugactpbh, hugbpbh, Maximu m, Minimu m, Sum
Failed_to_respond_to_an_GTP_Echo_Request_messages	hua_basic_session_tab.ripg1mde6mc3he2kdglgiu1i3m	INTEGR	#	Failed times of the GGSN to send a GTP Echo Request message to the opposite equipment	Sum	hugactpbh, hugbpbh
GGSN_Received_error_packets	hua_basic_session_tab.wg2k0audcgbrpregt60x62r1oh	INTEGR	Packet s	Error packets received by GGSN	Sum	hugactpbh, hugbpbh
GGSN_Received_Packets	hua_basic_session_tab.s11abqlxq0cjbrxd6c36rgpxia	INTEGR	Packet s	Packets received by GGSN	Sum	hugactpbh, hugbpbh
GGSN_received_Path_Manager_Packets	hua_basic_session_tab.un5qe5ljkrbm3tx4jb6tibekkx	INTEGR	Packet s	Path management packets received by GGSN	Sum	hugactpbh, hugbpbh
GGSN_Receiv	hua_basic_session_tab.v1di	INTEG	Packet	Session	Sum	hugactpb

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ed_SM_Packets	gl1hixb6jsa4b3jwjdjfsa	ER	s	management packets received by GGSN		h, hugpbph
GGSN_Sent_Packets	hua_basic_session_tab.xbhqkwu3kmcoyewwsu1do6owm4	INTEG ER	Packet s	Packets sent by GGSN	Sum	hugactpb h, hugpbph
GGSN_Sent_Path_Manager_Packets	hua_basic_session_tab.xtvywafodqbm5escnu0ybuhuh2d	INTEG ER	Packet s	Path management packets sent by GGSN	Sum	hugactpb h, hugpbph
GGSN_Sent_Session_M_Packets	hua_basic_session_tab.wa2cvhqjoybrndwhe4rnodfu14	INTEG ER	Packet s	Session management packets sent by GGSN	Sum	hugactpb h, hugpbph
Gn_GTP_tunnels_created_num	hua_basic_session_tab.tggiop5wlfw2ahc3ij02incnmdw	INTEG ER	#	The number of the GTP tunnels created on the Gn interface	Sum	hugactpb h, hugpbph
Gn_GTP_tunnels_num	hua_basic_session_tab.tggiop5ulfw2ahc3ij02incnmdw	INTEG ER	#	The number of the GTP tunnels on the Gn interface, including signaling tunnels and data tunnels	Sum	hugactpb h, hugpbph
GTP_C_path_down_times	hua_basic_session_tab.r0p2d3urlpbabta54cr230vnlk	INTEG ER	Times	Statistics of GGSN GTP signaling path broken times	Sum	hugactpb h, hugpbph
GTP_C_peer_restart_times	hua_basic_session_tab.w0i0cfairgbc6cow2s4vjahu4u	INTEG ER	Times	Statistics of the peer restarting times	Sum	hugactpb h, hugpbph
Incoming_GTP_signalling_kbytes	hua_basic_session_tab.u30q5nkkvocu5r44h1y5w0nchn	INT8	Kbyte s	Incoming GTP signaling packets in KB	Sum	hugactpb h, hugpbph
Interactive_clas	hua_basic_session_tab.x6vy	INTEG	#	Number of	Sum	hugactpb

s_PDP_context	byotw1bqtuacy3nwgx3dut	ER		Interactive class PDP contexts		h, hugpbph
Max_users_with_act_PDP_context	hua_basic_session_tab.xio6gydm4qbhuts5acjgaqskse	INTEGR	#	Maximum number of PDP contexts activated by GGSN	Average	hugactpbh, hugpbph, Maximum, Minimum, Sum
Maximum_requests_of_PDP_context_activation	hua_basic_session_tab.xrk2aey0pmbcntvilu3ha3djgd	INTEGR	#	The maximum requests of PDP context activation received by the GGSN per second.	Average	hugactpbh, hugpbph, Maximum, Minimum, Sum
Outgoing_GTP_signalling_kbytes	hua_basic_session_tab.rktrknv55ocort5g6cb26roxpv	INT8	Kbytes	Outgoing GTP signaling packets in KB	Sum	hugactpbh, hugpbph
PDP_context_1_Tunnel_req_change_PDP_context_2Tunnel	hua_basic_session_tab.txigop1o152aidm0r02uay2nvm	INTEGR	#	PDP context of One Tunnel requests change to PDP context of Two Tunnel	Sum	hugactpbh, hugpbph
PDP_context_2_Tunnel_req_change_PDP_context_1Tunnel	hua_basic_session_tab.txigopao152aidm0r02uay2nvm	INTEGR	#	PDP context of Two Tunnel requests change to PDP context of One Tunnel	Sum	hugactpbh, hugpbph
PDP_context_act_duration	hua_basic_session_tab.yj1mktdcnkbujr5v0naynp612p	INTEGR	Second	PDP context activation time initiated by MS	Sum	hugactpbh, hugpbph

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PDP_context_act_fail_AAA_Server_No_IP	hua_basic_session_tab.uqgx p4iqqa2aidm2002uay2nvm	INTEGRITY	#	PDP context act. failed - AAA Server No IP	Sum	hugactpb h, hugpbph
PDP_context_act_fail_APN_access_denied_no_subscription	hua_basic_session_tab.uqgx p4kqqa2aidm2002uay2nvm	INTEGRITY	#	PDP context act. failed - APN access denied_no subscription	Sum	hugactpb h, hugpbph
PDP_context_act_fail_APN_Lock	hua_basic_session_tab.uqgx p51qqa2aidm2002uay2nvm	INTEGRITY	#	PDP context act. failed - APN Lock	Sum	hugactpb h, hugpbph
PDP_context_act_fail_APN_Restrict_incomp	hua_basic_session_tab.txigo pg0152aidm0r02uay2nvm	INTEGRITY	#	PDP context act. failed - APN Restriction type incompatibility	Sum	hugactpb h, hugpbph
PDP_context_act_fail_by_auth_failed	hua_basic_session_tab.uygc mko3dfcbddhihvi2g4qp4f	INTEGRITY	#	Times of failed PDP context activation caused by failed authentication	Sum	hugactpb h, hugpbph
PDP_context_act_fail_by_invalid_message_format	hua_basic_session_tab.yrvmv2pscacaprdefrh43qfe0t	INTEGRITY	#	Times of failed PDP context activation caused by invalid message format	Sum	hugactpb h, hugpbph
PDP_context_act_fail_by_mandatory_IE_incorrect	hua_basic_session_tab.tuxpf 1rxknxcbxupy0brxwboiw5	INTEGRITY	#	Times of failed PDP context activation caused by error of mandatory IEs	Sum	hugactpb h, hugpbph

PDP_context_act_fail_by_mandatory_IE_missing	hua_basic_session_tab.tsyw5bqo0qb1bcen0g22b6146q	INTEGR	#	Times of failed PDP context activation caused by loss of mandatory IEs	Sum	hugactpbh, hugbpbh
PDP_context_act_fail_by_missing_or_unknown_APN	hua_basic_session_tab.ssxg36n32xcdou6uvknq203gp4	INTEGR	#	Times of failed PDP context activation caused by unknown APNs	Sum	hugactpbh, hugbpbh
PDP_context_act_fail_by_no_dynamic_PDP_addresses	hua_basic_session_tab.xcm55kh5h5c3srf6nlmraflo6b	INTEGR	#	Times of failed PDP context activation caused by no dynamic PDP addresses	Sum	hugactpbh, hugbpbh
PDP_context_act_fail_by_no_memory	hua_basic_session_tab.wj00cvkthbf5disr2wthr3t4s	INTEGR	#	Times of failed PDP context activation caused by no free memory	Sum	hugactpbh, hugbpbh
PDP_context_act_fail_by_optional_IE_incorrect	hua_basic_session_tab.wdj3g3ul0kct4erfrs44m0wubr	INTEGR	#	Times of failed PDP context activation caused by error of optional IEs	Sum	hugactpbh, hugbpbh
PDP_context_act_fail_by_PDP_without_TFT_already_act	hua_basic_session_tab.yvm b4g2ro0bvccrrilsncogcl2	INTEGR	#	Times of failed PDP context activation	Sum	hugactpbh, hugbpbh

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				caused by no activated TFT context		
PDP_context_act_fail_by_semantic_err_in_packet_filters	hua_basic_session_tab.wtj1ykqpxwbdeuwvtvg65kya6es	INTEGR	#	Times of failed PDP context activation caused by semantic error during packet filtering	Sum	hugactpbh, hugbpbh
PDP_context_act_fail_by_semantic_err_in_TFT_operation	hua_basic_session_tab.w0o4o5foocb3nd6lp3j3gwrg2w	INTEGR	#	Times of failed PDP context activation caused by semantic error of TFT operations	Sum	hugactpbh, hugbpbh
PDP_context_act_fail_by_syntax_error_in_packet_filters	hua_basic_session_tab.wxp xqknvukbihrxhai6kfi1e2g	INTEGR	#	Times of failed PDP context activation caused by syntax error during packet filtering	Sum	hugactpbh, hugbpbh
PDP_context_act_fail_by_syntax_error_in_TFT_operation	hua_basic_session_tab.ulbw v313ukcrosrvsqlwq1sgd	INTEGR	#	Times of failed PDP context activation caused by syntax error of TFT operations	Sum	hugactpbh, hugbpbh
PDP_context_act_fail_by_system_fault	hua_basic_session_tab.sn3surf3xucw4b3xnubrvpsoup	INTEGR	#	Times of failed PDP context activation caused by system failure	Sum	hugactpbh, hugbpbh
PDP_context_a	hua_basic_session_tab.sf31	INTEGR	#	Times of	Sum	hugactpb

ct_fail_by_unkn_PDP_address_or_PDP_type	p2mpc6byrsmww5tmntju4x	ER		failed PDP context activation caused by unknown PDP addresses or types		h, hugpbph
PDP_context_act_fail_CPU_Overload	hua_basic_session_tab.uqgx p53qqa2aidm2002uay2nvm	INTEG ER	#	PDP context act. failed - CPU Overload	Sum	hugactpb h, hugpbph
PDP_context_act_fail_DHCP_Server_No_Response	hua_basic_session_tab.uqgx p4qqqa2aidm2002uay2nvm	INTEG ER	#	PDP context act. failed - DHCP Server No Response	Sum	hugactpb h, hugpbph
PDP_context_act_fail_LNS_Forbidden_Static_IP	hua_basic_session_tab.uqgx p55qqa2aidm2002uay2nvm	INTEG ER	#	PDP context act. failed - LNS Forbidden Static IP	Sum	hugactpb h, hugpbph
PDP_context_act_fail_LNS_No_Response	hua_basic_session_tab.uqgx p4sqqa2aidm2002uay2nvm	INTEG ER	#	PDP context act. failed - LNS No Response	Sum	hugactpb h, hugpbph
PDP_context_act_fail_OCS_Server_No_Response	hua_basic_session_tab.uqgx p4uqqa2aidm2002uay2nvm	INTEG ER	#	PDP context act. failed - OCS Server No Response	Sum	hugactpb h, hugpbph
PDP_context_act_fail_PCRF_No_Response	hua_basic_session_tab.uqgx p4wqqa2aidm2002uay2nvm	INTEG ER	#	PDP context act. failed - PCRF No Response	Sum	hugactpb h, hugpbph
PDP_context_act_fail_Radius_Account_Server_No_Response	hua_basic_session_tab.uqgx p4oqqa2aidm2002uay2nvm	INTEG ER	#	PDP context act. failed - Radius Account Server No	Sum	hugactpb h, hugpbph

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				Response		
PDP_context_act_fail_Radius_Authentication_Server_No_Response	hua_basic_session_tab.uqgx p4mqqa2aidm2002uay2nvm	INTEGR	#	PDP context act. failed - Radius Authentication Server No Response	Sum	hugactpb h, hugbpbh
PDP_context_act_fail_roaming_restriction	hua_basic_session_tab.uqgx p5aqqa2aidm2002uay2nvm	INTEGR	#	PDP context act. failed - roaming restriction	Sum	hugactpb h, hugbpbh
PDP_context_act_fail_service_not_support	hua_basic_session_tab.uqgx p5cqqa2aidm2002uay2nvm	INTEGR	#	PDP context act. failed - service not support	Sum	hugactpb h, hugbpbh
PDP_context_act_fail_Slot_Lock	hua_basic_session_tab.uqgx p4yqqa2aidm2002uay2nvm	INTEGR	#	PDP context act. failed - Slot Lock	Sum	hugactpb h, hugbpbh
PDP_context_act_fail	hua_basic_session_tab.tbcit ujcedbrdrfmeug4mnyp5j	INTEGR	Times	Failed times of PDP context activation	Sum	hugactpb h, hugbpbh
PDP_context_act_success_ratio	hua_basic_session_tab.y1lw a230svbbkutesnlwxarry	FLOAT	%	Successful rate of PDP context activation program	Average	hugactpb h, hugbpbh, Maximum, Minimum, Sum
PDP_context_act_success	hua_basic_session_tab.rnvt0 d35n2cicrvbkosemxjhjd	INTEGR	Times	Successful times of PDP context activation by the GGSN	Sum	hugactpb h, hugbpbh
PDP_context_act	hua_basic_session_tab.yjsp 5pe003ca6bnubb6hfck04t	INTEGR	Times	Attempts of PDP context activation request received by the GGSN	Sum	hugactpb h, hugbpbh
PDP_context_d	hua_basic_session_tab.s11c	INTEGR	#	Times of	Sum	hugactpb

eact_fail_by_in valid_message _format	nblwwycojsbo2qvp3mm5l5	ER		failed PDP context deactivation caused by invalid message format		h, hugpbph
PDP_context_d eact_fail_by_m andatory_IE_in correct	hua_basic_session_tab.ub3c orbeonbpeckx5arwobrhtml	INTEG ER	#	Times of failed PDP context deactivation caused by error of mandatory IEs	Sum	hugactpb h, hugpbph
PDP_context_d eact_fail_by_m andatory_IE_m issing	hua_basic_session_tab.u2qu 5scmqkbsub3gy0j4nj6qe4	INTEG ER	#	Times of failed PDP context deactivation caused by loss of mandatory IEs	Sum	hugactpb h, hugpbph
PDP_context_d eact_fail_by_n on_existent	hua_basic_session_tab.vm3 wljo6okc5ybybhpur0amcfg	INTEG ER	#	Times of failed PDP context deactivation caused by non- existence of PDP	Sum	hugactpb h, hugpbph
PDP_context_d eact_fail_by_o ptional_IE_In correct	hua_basic_session_tab.yr0s ptf1uoecdxcsg2sf3ucgxla	INTEG ER	#	Times of failed PDP context deactivation caused by error of optional IEs	Sum	hugactpb h, hugpbph
PDP_context_d eact_success	hua_basic_session_tab.tfvch 10fdqbrldvq4r6662pyi2	INTEG ER	Times	Successful times of PDP context	Sum	hugactpb h, hugpbph

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				deactivation by the GGSN		
PDP_context_deact	hua_basic_session_tab.uhci bpa3gebjd31pvrw3iujhl	INTEGRER	Times	Attempts of PDP context deactivation request received by the GGSN	Sum	hugactpb h, hugpbhh
PDP_Context_num	hua_basic_session_tab.ve50 cdwvfjbxqewlwmfo6eqa1h	INTEGRER	#	PDP contexts which are in activated status in GGSN system	Sum	hugactpb h, hugpbhh
PDP_contexts_request_fail_for_limited_resource	hua_basic_session_tab.rcdjx 120j1cmxrfgr5465mep0t	INTEGRER	#	GGSN receives the users activation request and the GGSN resource reaches the upper limit.	Sum	hugactpb h, hugpbhh
PDP_usage_ratio	hua_basic_session_tab.ra16 niv33kcbqbt15x0ms5i00b	INTEGRER	#	The current PDP contexts in GGSN system/PDP contexts which the License permit	Average	hugactpb h, hugpbhh, Maximum, Minimum, Sum
PPP_PDP_contexts_currently_active	hua_basic_session_tab.w0fambskopblyuduajwjwq6kpyr4	INTEGRER	#	PPP PDP contexts that are currently activated	Average	hugactpb h, hugpbhh, Maximum, Minimum, Sum
PPP_Regen_PDP_contexts_currently_active	hua_basic_session_tab.t1bp gxr514b54ucy1x4giah6hr	INTEGRER	#	PPP-Regenerative PDP contexts that are currently activated	Average	hugactpb h, hugpbhh, Maximum, Minimum

						m, Sum
Received_GTP_packets_dropped	hua_basic_session_tab.v5githt15xc5ys5ov6ut5f54dr	INTEG ER	#	Received GTP packets dropped	Sum	hugactpb h, hugbpbh
Streaming_classes_context	hua_basic_session_tab.wi0ctkj4ekc4pcfcep5rd60qj	INTEG ER	#	Number of Streaming class PDP contexts	Sum	hugactpb h, hugbpbh
Succ_PDP_context_1Tunnel_chg_to_PDP_context_2Tunnel	hua_basic_session_tab.txigop3o152aidm0r02uay2nvm	INTEG ER	#	Successful PDP context of One Tunnel change to PDP context of Two Tunnel	Sum	hugactpb h, hugbpbh
Succ_PDP_context_2Tunnel_chg_to_PDP_context_1Tunnel	hua_basic_session_tab.txigopco152aidm0r02uay2nvm	INTEG ER	#	Successful PDP context of Two Tunnel change to PDP context of One Tunnel	Sum	hugactpb h, hugbpbh
Total_number_of_PPP_PDP_contexts_created	hua_basic_session_tab.sk0rnc4pxbbq4tntqpyknhewcr	INTEG ER	#	PPP PDP contexts that are created successfully	Sum	hugactpb h, hugbpbh
Total_PPP_PD_P_contexts_deleted	hua_basic_session_tab.yxngueust0cqqlsi6tmw3wt5qko	INTEG ER	#	PPP PDP contexts that are deleted successfully	Sum	hugactpb h, hugbpbh
Unexpected_GTP_messages_received	hua_basic_session_tab.w1rgykbbqsbff2uuxl5wu4lyhx	INTEG ER	#	GGSN receives unexpected GTP messages.	Sum	hugactpb h, hugbpbh

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### 6.3.5 GGSN.Huawei.GPRS.CLIT

\*\*Obsolete in GGSN/V800R006 C02. X1 and X2 interfaces connections

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
Receiving_creating_Tunnel_response_success_times	hua_m134221260_tab.tgg opoqlfw2ahc3ij02incnmdw	INTEGER	#	Obsolete from GGSN/V800R006 C01B010:Receiving creating Tunnel response success times	Sum	hugactpbh, hugbpbh
Receiving_creating_Tunnel_response_times	hua_m134221260_tab.tgg opoqlfw2ahc3ij02incnmdw	INTEGER	#	Obsolete from GGSN/V800R006 C01B010:Receiving creating Tunnel response times	Sum	hugactpbh, hugbpbh
Receiving_flow_by_Tunnel	hua_m134221260_tab.tgg opoqlfw2ahc3ij02incnmdw	INTEGER	bytes	Obsolete from GGSN/V800R006 C01B010:Receiving flow by Tunnel	Sum	hugactpbh, hugbpbh
Receiving_release_Tunnel_request_success_times	hua_m134221260_tab.tgg oppalfw2ahc3ij02incnmdw	INTEGER	#	Obsolete from GGSN/V800R006 C01B010:Receiving release Tunnel request success times	Sum	hugactpbh, hugbpbh
Receiving_release_Tunnel_request_times	hua_m134221260_tab.tgg opp5lfw2ahc3ij02incnmdw	INTEGER	#	Obsolete from GGSN/V800R006 C01B010:Receiving release Tunnel request times	Sum	hugactpbh, hugbpbh
Sending_creatin	hua_m134221260_tab.tgg	INTEGER	#	Obsolete from	Sum	hugactpb

g_Tunnel_request_success_time_s	opoulfw2ahc3ij02incnmdw	ER		GGSN/V800R0 06 C01B010:Sending creating Tunnel request success times		h, hugpbph
Sending_creating_Tunnel_request_times	hua_m134221260_tab.tgg oposlfw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:Sending creating Tunnel request times	Sum	hugactpb h, hugpbph
Sending_flow_by_Tunnel	hua_m134221260_tab.tgg opoolfw2ahc3ij02incnmdw	INTEGR	bytes	Obsolete from GGSN/V800R0 06 C01B010:Sending flow by Tunnel	Sum	hugactpb h, hugpbph
Sending_IDP_success_times_by_Tunnel	hua_m134221260_tab.tgg oppelfw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:Sending IDP success times by Tunnel	Sum	hugactpb h, hugpbph
Sending_IDP_times_by_Tunnel	hua_m134221260_tab.tgg oppclf2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:Sending IDP times by Tunnel	Sum	hugactpb h, hugpbph
Sending_release_Tunnel_request_success_times	hua_m134221260_tab.tgg opp3lfw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:Sending release Tunnel request	Sum	hugactpb h, hugpbph

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				success times		
Sending_release_Tunnel_request_times	hua_m134221260_tab.tgg opp1lfw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010: Sending release Tunnel request times	Sum	hugactpbh, hugbpbh
X1_interface_Receiving_connection_release_request_times	hua_m134221260_tab.tgg opnslfw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010: X1 interface Receiving connection release request times	Sum	hugactpbh, hugbpbh
X1_interface_Receiving_connection_response_times	hua_m134221260_tab.tgg opnelfw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010: X1 interface Receiving connection response times	Sum	hugactpbh, hugbpbh
X1_interface_Receiving_connection_response	hua_m134221260_tab.tgg opnlfw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010: X1 interface Receiving connection response	Sum	hugactpbh, hugbpbh
X1_interface_Receiving_message_counter	hua_m134221260_tab.tgg opnk1fw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010: X1 interface Receiving message counter	Sum	hugactpbh, hugbpbh
X1_interface_R	hua_m134221260_tab.tgg	INTEG	bytes	Obsolete from	Sum	hugactpb

eceiving_message_flow	opnulfw2ahc3ij02incnmdw	ER		GGSN/V800R0 06 C01B010:X1 interface Receiving message flow		h, hugpbph
X1_interface_sending_connection_release_request_success_times	hua_m134221260_tab.tgg opnqlfw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:X1 interface sending connection release request success times	Sum	hugactpb h, hugpbph
X1_interface_sending_connection_release_request_times	hua_m134221260_tab.tgg opnulfw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:X1 interface sending connection release request times	Sum	hugactpb h, hugpbph
X1_interface_sending_connection_request_times	hua_m134221260_tab.tgg opnglfw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:X1 interface sending connection request times	Sum	hugactpb h, hugpbph
X1_interface_sending_message_counter	hua_m134221260_tab.tgg opnmlfw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:X1 interface sending	Sum	hugactpb h, hugpbph

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				message counter		
X1_interface_sending_message_flow	hua_m134221260_tab.tgg opnwlfw2ahc3ij02incnmdw	INTEGR	bytes	Obsolete from GGSN/V800R0 06 C01B010:X1 interface sending message flow	Sum	hugactpbh, hugbpbh
X2_interface_Receiving_connection_release_request_times	hua_m134221260_tab.tgg opoglfw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:X2 interface Receiving connection release request times	Sum	hugactpbh, hugbpbh
X2_interface_Receiving_connection_response_success_times	hua_m134221260_tab.tgg opoalfw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:X2 interface Receiving connection response success times	Sum	hugactpbh, hugbpbh
X2_interface_Receiving_connection_response_times	hua_m134221260_tab.tgg opo5lfw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/R002:X2 interface Receiving connection response times	Sum	hugactpbh, hugbpbh
X2_interface_Receiving_flow	hua_m134221260_tab.tgg opo1lfw2ahc3ij02incnmdw	INTEGR	bytes	Obsolete from GGSN/V800R0 06 C01B010:X2 interface Receiving flow	Sum	hugactpbh, hugbpbh
X2_interface_sending_alarm_times	hua_m134221260_tab.tgg opoilfw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R0 06	Sum	hugactpbh, hugbpbh

				C01B010:X2 interface sending alarm times		
X2_interface_se nding_connecti on_release_requ est_success_tim es	hua_m134221260_tab.tgg opoelfw2ahc3ij02incnmd w	INTEG ER	#	Obsolete from GGSN/V800R0 06 C01B010:X2 interface sending connection release request success times	Sum	hugactpb h, hugbpbh
X2_interface_se nding_connecti on_release_requ est_times	hua_m134221260_tab.tgg opoelfw2ahc3ij02incnmd w	INTEG ER	#	Obsolete from GGSN/V800R0 06 C01B010:X2 interface sending connection release request times	Sum	hugactpb h, hugbpbh
X2_interface_se nding_connect ion_request_tim es	hua_m134221260_tab.tgg opo3lfw2ahc3ij02incnmd w	INTEG ER	#	Obsolete from GGSN/V800R0 06 C01B010:X2 interface sending connection request times	Sum	hugactpb h, hugbpbh
X2_interface_se nding_flow	hua_m134221260_tab.tgg opnylfw2ahc3ij02incnmd w	INTEG ER	bytes	Obsolete from GGSN/V800R0 06 C01B010:X2 interface sending flow	Sum	hugactpb h, hugbpbh
X2_interface_se nding_IRI_succ	hua_m134221260_tab.tgg opomlfw2ahc3ij02incnmd w	INTEG ER	#	Obsolete from GGSN/V800R0	Sum	hugactpb h,

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ess_times	w			06 C01B010:X2 interface sending IRI success times		hugpbph
X2_interface_se nding_IRI_time s	hua_m134221260_tab.tgg opokfw2ahc3ij02incnmd w	INTEG ER	#	Obsolete from GGSN/V800R0 06 C01B010:X2 interface sending IRI times	Sum	hugactpb h, hugpbph

### 6.3.6 GGSN.Huawei.GPRS.DHCP

DHCP performance measurement

KPI Name	Expression	Data Type	Units	Description	Default Aggregat or	Other Aggrega tors
%_DHCP_addr ess_allocation_f ailures	100 * {DHCP_address_allocatio n_failures}/ ({DHCP_address_allocati on_successes} + {DHCP_address_allocatio n_failures})	FLOAT	%	Percentage failures to obtain the IP addresses from the DHCP server although the request for DHCP address allocation is received	Average	hugactpb h, hugpbph
DHCP_address _allocation_fail ures	hua_dhcp_tab.uvdsk4jh11 b2gb6jhcjjmjuar	INTEG ER	#	Failed times to obtain the IP addresses from the DHCP server although the request for DHCP address allocation is received	Sum	hugactpb h, hugpbph
DHCP_address _allocation_suc cesses	hua_dhcp_tab.tx4xqiuqv1 bbkt13jwwan4ecjq	INTEG ER	#	Successful times that the user obtains the IP addresses	Sum	hugactpb h, hugpbph

				from the DHCP server		
Received_DHC P_add_alloc_re quests	hua_dhcp_tab.tgavsnuhjy bkdc2644yl3xctip	INTEG ER	#	Requests of received DHCP address allocation from the user	Sum	hugactpb h, hugpbph

### 6.3.7 GGSN.Huawei.GPRS.Different\_service\_PDP\_context

User with ARP high/medium/low level and traffic class (conversational, streaming, background, interactive)

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
High_level_background_PDP_contexts	hua_m134221258_tab.tggopllyfw2ahc3ij02incnmdw	INTE GER	#	Number of the user whose ARP is high level and traffic class is background, real-time value	Sum	hugactpb h, hugpbph
High_level_conversation_PDP_contexts	hua_m134221258_tab.tggoplmlfw2ahc3ij02incnmdw	INTE GER	#	Number of the user whose ARP is high level and traffic class is conversational, real-time value	Sum	hugactpb h, hugpbph
High_level_interactiveTrafficPri1_PDP_contexts	hua_m134221258_tab.tggoplslfw2ahc3ij02incnmdw	INTE GER	#	Number of the user whose ARP is high level and traffic class is InteractiveTrafficPri1, real-time value	Sum	hugactpb h, hugpbph
High_level_interactiveTrafficPri2_PDP_contexts	hua_m134221258_tab.tggoplulfw2ahc3ij02incnmdw	INTE GER	#	Number of the user whose ARP is high level and traffic	Sum	hugactpb h, hugpbph

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				class is InteractiveTrafficPr i2, real-time value		
High_level_interacti veTrafficPri3_PDP_ contexts	hua_m134221258_tab.t ggoplwlfw2ahc3ij02inc nmdw	INTE GER	#	Number of the user whose ARP is high level and traffic class is InteractiveTrafficPr i3, real-time value	Sum	hugactpb h, hugbpbh
High_level_streami ngGBRLess25Kbps _PDP_contexts	hua_m134221258_tab.t ggoplqlfw2ahc3ij02incn mdw	INTE GER	#	Number of the user whose ARP is high level and traffic class is streamingGBRLess 25Kbps, real-time value	Sum	hugactpb h, hugbpbh
High_level_streami ngGBRMore25Kbp s_PDP_contexts	hua_m134221258_tab.t ggoplqlfw2ahc3ij02incn mdw	INTE GER	#	Number of the user whose ARP is high level and traffic class is streamingGBRMor e25Kbps, real-time value	Sum	hugactpb h, hugbpbh
Low_level_backgro und_PDP_contexts	hua_m134221258_tab.t ggopmulfw2ahc3ij02inc nmdw	INTE GER	#	Number of the user whose ARP is low level and traffic class is background, real- time value	Sum	hugactpb h, hugbpbh
Low_level_convers ation_PDP_contexts	hua_m134221258_tab.t ggopmilfw2ahc3ij02inc nmdw	INTE GER	#	Number of the user whose ARP is high level and traffic class is conversational, real-time value	Sum	hugactpb h, hugbpbh
Low_level_interacti veTrafficPri1_PDP_ contexts	hua_m134221258_tab.t ggopmolfw2ahc3ij02inc nmdw	INTE GER	#	Number of the user whose ARP is low level and traffic class is InteractiveTrafficPr i1, real-time value	Sum	hugactpb h, hugbpbh

Low_level_interactiveTrafficPri2_PDP_contexts	hua_m134221258_tab.t ggopmqlfw2ahc3ij02inc nmdw	INTEGRER	#	Number of the user whose ARP is low level and traffic class is InteractiveTrafficPri2, real-time value	Sum	hugactpbh, hugbpbh
Low_level_interactiveTrafficPri3_PDP_contexts	hua_m134221258_tab.t ggopmslfw2ahc3ij02inc nmdw	INTEGRER	#	Number of the user whose ARP is low level and traffic class is InteractiveTrafficPri3, real-time value	Sum	hugactpbh, hugbpbh
Low_level_streamingGBRLess25Kbps_PDP_contexts	hua_m134221258_tab.t ggopmmlfw2ahc3ij02inc nmdw	INTEGRER	#	Number of the user whose ARP is low level and traffic class is streamingGBRLess 25Kbps, real-time value	Sum	hugactpbh, hugbpbh
Low_level_streamingGBRMore25Kbps_PDP_contexts	hua_m134221258_tab.t ggopmklfw2ahc3ij02inc nmdw	INTEGRER	#	Number of the user whose ARP is low level and traffic class is streamingGBRMor e25Kbps, real-time value	Sum	hugactpbh, hugbpbh
Normal_level_background_PDP_contexts	hua_m134221258_tab.t ggopmqlfw2ahc3ij02inc nmdw	INTEGRER	#	Number of the user whose ARP is normal level and traffic class is background, real-time value	Sum	hugactpbh, hugbpbh
Normal_level_conversation_PDP_contexts	hua_m134221258_tab.t ggopm1lfw2ahc3ij02inc nmdw	INTEGRER	#	Number of the user whose ARP is high level and traffic class is conversational, real-time value	Sum	hugactpbh, hugbpbh

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Normal_level_interactiveTrafficPri1_PDP_contexts	hua_m134221258_tab.t ggopmalfw2ahc3ij02inc nmdw	INTEGRER	#	Number of the user whose ARP is normal level and traffic class is InteractiveTrafficPri1, real-time value	Sum	hugactpbh, hugbpbh
Normal_level_interactiveTrafficPri2_PDP_contexts	hua_m134221258_tab.t ggopmclfw2ahc3ij02inc nmdw	INTEGRER	#	Number of the user whose ARP is normal level and traffic class is InteractiveTrafficPri2, real-time value	Sum	hugactpbh, hugbpbh
Normal_level_interactiveTrafficPri3_PDP_contexts	hua_m134221258_tab.t ggopmelfw2ahc3ij02inc nmdw	INTEGRER	#	Number of the user whose ARP is normal level and traffic class is InteractiveTrafficPri3, real-time value	Sum	hugactpbh, hugbpbh
Normal_level_streamingGBRLess25Kbps_PDP_contexts	hua_m134221258_tab.t ggopm5lfw2ahc3ij02inc nmdw	INTEGRER	#	Number of the user whose ARP is normal level and traffic class is streamingGBRLess 25Kbps, real-time value	Sum	hugactpbh, hugbpbh
Normal_level_streamingGBRMore25Kbps_PDP_contexts	hua_m134221258_tab.t ggopm3lfw2ahc3ij02inc nmdw	INTEGRER	#	Number of the user whose ARP is normal level and traffic class is streamingGBRMor e25Kbps, real-time value	Sum	hugactpbh, hugbpbh

### 6.3.8 GGSN.Huawei.GPRS.G\_CDR

G-CDR measurement

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
%_CDRs_creat	100 * {CDRs_create_fault}/	FLOAT	%	Percentage of specific users	Average	hugactpbh,

e_fault	({CDRs_create_fault} + {CDRs_create_success})			bills which are created unsuccessfully		hugpbph
Access_points_CDRs_being_collected	hua_g_cdr_tab.w5qowyyq25bnwb2jnextgbcab1	INTEGRER	#	Number of access points for which charging data is being collected	Sum	hugactpbh, hugpbph
CDRs_create_fault	hua_g_cdr_tab.sxtcoxnd3cbb5eik6oca3alajl	INTEGRER	#	Perform the statistics about the specific users bills which are created unsuccessfully	Sum	hugactpbh, hugpbph
CDRs_create_success	hua_g_cdr_tab.yavdb5eledbljbsn6cwgh34kcp	INTEGRER	#	Perform the statistics about the specific users bills which are created successfully	Sum	hugactpbh, hugpbph
Create_user_eG_CDR_faith	hua_g_cdr_tab.tggopaelfw2ahc3ij02incnmdw	INTEGRER	#	Obsolete from GGSN/V800R006 C01B010:Total number of eG-CDRs that are created unsuccessfully	Sum	hugactpbh, hugpbph
Create_user_eG_CDR_success	hua_g_cdr_tab.tggopaclfw2ahc3ij02incnmdw	INTEGRER	#	Obsolete from GGSN/V800R006 C01B010:Total number of eG-CDRs that are created successfully	Sum	hugactpbh, hugpbph

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Currently_operated_charging_containers	hua_g_cdr_tab.vqtvuwbs buxsn5srr1mfqtwy	INTEGRER	#	Number of charging containers that are opened successfully	Average	hugactpbh, hugbpbh, Maximum, Minimum, Sum
Total_number_of_CDRs_opened	hua_g_cdr_tab.smf2xgph5 abvjcqu56xee2hqac	INTEGRER	#	Total number of users bills that are created successfully	Sum	hugactpbh, hugbpbh
Total_number_of_containers_created	hua_g_cdr_tab.xve56fxyr bo3sk5rdtfwivrws	INTEGRER	#	Total number of containers that are created successfully	Sum	hugactpbh, hugbpbh

### 6.3.9 GGSN.Huawei.GPRS.GTP\_data\_by\_traffic\_class

GTP data per traffic class (conversational, streaming, interactive and background) on the Gn interface

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
Background_classes_incoming_GTP_data_kbytes	hua_m134221250_data_tb .tggoeslfw2ahc3ij02inc nmdw	INT8	Kb	Number of GTP data kbytes received by the Gn interface, based on background traffic class	Sum	hugactpbh, hugbpbh
Background_classes_incoming_GTP_data_packets	hua_m134221250_data_tb .tggopeclfw2ahc3ij02inc nmdw	INT8	Packets	Number of GTP data packets received by the Gn interface, based on background traffic class	Sum	hugactpbh, hugbpbh
Background_classes_outgoing_GTP_data_kbytes	hua_m134221250_data_tb .tggopf11fw2ahc3ij02inc nmdw	INT8	Kb	Number of GTP data kbytes sent by the Gn interface, based on background	Sum	hugactpbh, hugbpbh

				traffic class		
Background_class_outgoing_GTP_data_packets	hua_m134221250_data_tاب.tggopeklfw2ahc3ij02incnmdw	INT8	Packet s	Number of GTP data packets sent by the Gn interface, based on background traffic class	Sum	hugactpbh, hugbpbh
Conversational_class_incoming_GTP_data_kbytes	hua_m134221250_data_tاب.tggopemlfw2ahc3ij02incnmdw	INT8	Kb	Number of GTP data kbytes received by the Gn interface, based on conversational traffic class	Sum	hugactpbh, hugbpbh
Conversational_class_incoming_GTP_data_packets	hua_m134221250_data_tاب.tggope3lfw2ahc3ij02incnmdw	INT8	Packet s	Number of GTP data packets received by the Gn interface, based on conversational traffic class	Sum	hugactpbh, hugbpbh
Conversational_class_outgoing_GTP_data_kbytes	hua_m134221250_data_tاب.tggopeulfw2ahc3ij02incnmdw	INT8	Kb	Number of GTP data kbytes sent by the Gn interface, based on conversational traffic class	Sum	hugactpbh, hugbpbh
Conversational_class_outgoing_GTP_data_packets	hua_m134221250_data_tاب.tggopeelfw2ahc3ij02incnmdw	INT8	Packet s	Number of GTP data packets sent by the Gn interface, based on conversational traffic class	Sum	hugactpbh, hugbpbh
Interactive_class_incoming_GTP	hua_m134221250_data_tاب.tggopeqlfw2ahc3ij02inc	INT8	Kb	Number of GTP data kbytes	Sum	hugactpbh,

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_data_kbytes	nmdw			received by the Gn interface, based on interactive traffic class		hugpbph
Interactive_class_incoming_GTP_data_packets	hua_m134221250_data_tabc.tggopealfw2ahc3ij02incnmdw	INT8	Packet s	Number of GTP data packets received by the Gn interface, based on interactive traffic class	Sum	hugactpbh, hugpbph
Interactive_class_outgoing_GTP_data_kbytes	hua_m134221250_data_tabc.tggopeylfw2ahc3ij02incnmdw	INT8	Kb	Number of GTP data kbytes sent by the Gn interface, based on interactive traffic class	Sum	hugactpbh, hugpbph
Interactive_class_outgoing_GTP_data_packets	hua_m134221250_data_tabc.tggopeilfw2ahc3ij02incnmdw	INT8	Packet s	Number of GTP data packets sent by the Gn interface, based on interactive traffic class	Sum	hugactpbh, hugpbph
Streaming_class_incoming_GTP_data_kbytes	hua_m134221250_data_tabc.tggopeolfw2ahc3ij02incnmdw	INT8	Kb	Number of GTP data kbytes received by the Gn interface, based on streaming traffic class	Sum	hugactpbh, hugpbph
Streaming_class_incoming_GTP_data_packets	hua_m134221250_data_tabc.tggope5lfw2ahc3ij02incnmdw	INT8	Packet s	Number of GTP data packets received by the Gn interface, based on streaming traffic class	Sum	hugactpbh, hugpbph
Streaming_class_outgoing_GTP_data_kbytes	hua_m134221250_data_tabc.tgopewlfw2ahc3ij02incnmdw	INT8	Kb	Number of GTP data kbytes sent by the Gn interface, based	Sum	hugactpbh, hugpbph

				on streaming traffic class		
Streaming_class_outgoing_GTP_data_packets	hua_m134221250_data_tab.tggopeglfw2ahc3ij02incnmdw	INT8	Packet s	Number of GTP data packets sent by the Gn interface, based on streaming traffic class	Sum	hugactpb h, hugbpbh

### 6.3.10 GGSN.Huawei.GPRS.GTP\_signal\_by\_traffic\_class

GTP signaling per traffic class (conversational, streaming, interactive and background) on the Gn interface

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
Background_class_incoming_GTP_signalling_kbytes	hua_m134221250_signal_tab.tggopdlsfw2ahc3ij02incnmdw	INT8	Kb	Number of GTP signaling kbytes received by the Gn interface, based on background traffic class	Sum	hugactpb h, hugbpbh
Background_class_incoming_GTP_signalling_packets	hua_m134221250_signal_tab.tggopdclf2ahc3ij02incnmdw	INT8	Packet s	Number of GTP signaling packets received by the Gn interface, based on background traffic class	Sum	hugactpb h, hugbpbh
Background_class_outgoing_GTP_signalling_kbytes	hua_m134221250_signal_tab.tggope1lfw2ahc3ij02incnmdw	INT8	Kb	Number of GTP signaling kbytes sent by the Gn interface, based on background traffic class	Sum	hugactpb h, hugbpbh

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Background_class_outgoing_GTP_signalling_packets	hua_m134221250_signal_tab.tggopdklfw2ahc3ij02incnmdw	INT8	Packet s	Number of GTP signaling packets sent by the Gn interface, based on background traffic class	Sum	hugactpb h, hugbpbh
Conversational_class_incoming_GTP_signalling_kbytes	hua_m134221250_signal_tab.tggopdmlfw2ahc3ij02incnmdw	INT8	Kb	Number of GTP signaling kbytes received by the Gn interface, based on conversational traffic class	Sum	hugactpb h, hugbpbh
Conversational_class_incoming_GTP_signalling_packets	hua_m134221250_signal_tab.tggopd3lfw2ahc3ij02incnmdw	INT8	Packet s	Number of GTP signaling packets received by the Gn interface, based on conversational traffic class	Sum	hugactpb h, hugbpbh
Conversational_class_outgoing_GTP_signalling_kbytes	hua_m134221250_signal_tab.tggopdulfw2ahc3ij02incnmdw	INT8	Kb	Number of GTP signaling kbytes sent by the Gn interface, based on conversational traffic class	Sum	hugactpb h, hugbpbh
Conversational_class_outgoing_GTP_signalling_packets	hua_m134221250_signal_tab.tggopdelfw2ahc3ij02incnmdw	INT8	Packet s	Number of GTP signaling packets sent by the Gn interface, based on conversational traffic class	Sum	hugactpb h, hugbpbh
Interactive_class_incoming_GTP_signalling_kbytes	hua_m134221250_signal_tab.tggopdqlfw2ahc3ij02incnmdw	INT8	Kb	Number of GTP signaling kbytes received by the Gn interface, based on interactive	Sum	hugactpb h, hugbpbh

				traffic class		
Interactive_class_incoming_GTP_signalling_packets	hua_m134221250_signal_tab.tggopdalfw2ahc3ij02incnmdw	INT8	Packet s	Number of GTP signaling packets received by the Gn interface, based on interactive traffic class	Sum	hugactpbh, hugbpbh
Interactive_class_outgoing_GTP_signalling_kbytes	hua_m134221250_signal_tab.tggopdylfw2ahc3ij02incnmdw	INT8	Kb	Number of GTP signaling kbytes sent by the Gn interface, based on interactive traffic class	Sum	hugactpbh, hugbpbh
Interactive_class_outgoing_GTP_signalling_packets	hua_m134221250_signal_tab.tggopdilfw2ahc3ij02incnmdw	INT8	Packet s	Number of GTP signaling packets sent by the Gn interface, based on interactive traffic class	Sum	hugactpbh, hugbpbh
Streaming_class_incoming_GTP_signalling_kbytes	hua_m134221250_signal_tab.tggopdolfw2ahc3ij02incnmdw	INT8	Kb	Number of GTP signaling kbytes received by the Gn interface, based on streaming traffic class	Sum	hugactpbh, hugbpbh
Streaming_class_incoming_GTP_signalling_packets	hua_m134221250_signal_tab.tggopd5lfw2ahc3ij02incnmdw	INT8	Packet s	Number of GTP signaling packets received by the Gn interface, based on streaming traffic class	Sum	hugactpbh, hugbpbh

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Streaming_class_outgoing_GTP_signalling_kbytes	hua_m134221250_signal_tab.tggopdwlfw2ahc3ij02incnmdw	INT8	Kb	Number of GTP signaling kbytes sent by the Gn interface, based on streaming traffic class	Sum	hugactpb h, hugbpbh
Streaming_class_outgoing_GTP_signalling_packets	hua_m134221250_signal_tab.tggopdglfw2ahc3ij02incnmdw	INT8	Packet s	Number of GTP signaling packets sent by the Gn interface, based on streaming traffic class	Sum	hugactpb h, hugbpbh

### 6.3.11 GGSN.Huawei.GPRS.GTPP

GTPP performance measurement

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
Bytes_of_CDRs_sent_to(CG)	hua_gtpp_tab.v0vmfengxqc3jb6s6wvi5rggyg	INT8	Bytes	Perform the statistics about the total bytes of the bills for sending to CG	Sum	hugactpb h, hugbpbh
CG_communication_fault	hua_gtpp_tab.yumfxpgrnbkrbyqiroxkgci21	INTEGR	#	Perform the statistics about broken times when CG communication is broken	Sum	hugactpb h, hugbpbh
CG_redirection_fault	hua_gtpp_tab.sn0jtbtx03bjes6mjbqwvxvgqs1	INTEGR	#	Perform the statistics about the failed times of CG redirection	Sum	hugactpb h, hugbpbh
CG_sent_redirection_message_to_GGSN	hua_gtpp_tab.ubpgxnsbscb2sbudvx4atxn11	INTEGR	#	Perform the statistics about times for sending redirection	Sum	hugactpb h, hugbpbh

				message from CG to GGSN		
Illegal_GTPP_received_from_CG	hua_gtpp_tab.vrfkiavkxrc1edbf4j3e2yafmr	INTEGR	#	Perform the statistics about illegal GTP signaling packets received by GGSN	Sum	hugactpbh, hugbpbh
Num_of_CDRs_sent_to(CG)	hua_gtpp_tab.v4010dr4qs crwulleypku3vfav	INTEGR	#	Perform the statistics about the total numbers of bills for sending to CG	Sum	hugactpbh, hugbpbh

### 6.3.12 GGSN.Huawei.GPRS.Gx\_interface\_performance\_GGSN

Gx interface performance on GGSN

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
PCC_Received_ASR_Messages	hua_ggsn_gx_tab.txigoxyo152aidm0r02uay2nvm	INTEGR	#	PCC Received ASR Messages (APN)	Sum	hugactpbh, hugbpbh
PCC_Received_CCAI_Messages	hua_ggsn_gx_tab.txigoxko152aidm0r02uay2nvm	INTEGR	#	PCC Received CCA-I Messages (APN)	Sum	hugactpbh, hugbpbh
PCC_Received_CCAT_Message	hua_ggsn_gx_tab.txigoxso152aidm0r02uay2nvm	INTEGR	#	PCC Received CCA-T Message (APN)	Sum	hugactpbh, hugbpbh
PCC_Received_CCAU_Messages	hua_ggsn_gx_tab.txigoxoo152aidm0r02uay2nvm	INTEGR	#	PCC Received CCA-U Messages (APN)	Sum	hugactpbh, hugbpbh

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PCC_Received_Messages	hua_ggsn_gx_tab.txigoxgo 152aidm0r02uay2nvm	INTEGRER	#	PCC Received Messages (APN)	Sum	hugactpbh, hugbpbh
PCC_Received_RAR_Messages	hua_ggsn_gx_tab.txigoxuo 152aidm0r02uay2nvm	INTEGRER	#	PCC Received RAR Messages (APN)	Sum	hugactpbh, hugbpbh
PCC_Sent_AS_A_Messages	hua_ggsn_gx_tab.txigoy1o 152aidm0r02uay2nvm	INTEGRER	#	PCC Sent ASA Messages (APN)	Sum	hugactpbh, hugbpbh
PCC_Sent_CCRI_RI_Messages	hua_ggsn_gx_tab.txigoxio 152aidm0r02uay2nvm	INTEGRER	#	PCC Sent CCR-I Messages (APN)	Sum	hugactpbh, hugbpbh
PCC_Sent_CCRT_Messages	hua_ggsn_gx_tab.txigoxqo 152aidm0r02uay2nvm	INTEGRER	#	PCC Sent CCR-T Messages (APN)	Sum	hugactpbh, hugbpbh
PCC_Sent_CCRU_Messages	hua_ggsn_gx_tab.txigoxmo 152aidm0r02uay2nvm	INTEGRER	#	PCC Sent CCR-U Messages (APN)	Sum	hugactpbh, hugbpbh
PCC_Sent_Messages	hua_ggsn_gx_tab.txigoxeo 152aidm0r02uay2nvm	INTEGRER	#	PCC Sent Messages (APN)	Sum	hugactpbh, hugbpbh
PCC_Sent_RAAMessages	hua_ggsn_gx_tab.txigoxwo 152aidm0r02uay2nvm	INTEGRER	#	PCC Sent RAA Messages (APN)	Sum	hugactpbh, hugbpbh

### 6.3.13 GGSN.Huawei.GPRS.Gy\_interface

Gy interface traffic

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
Gy_average_packets_throughput	hua_m134221255_tab.tgg opjclfw2ahc3ij02incnmdw	FLOAT	Packet/s/s	Gy average packets throughput	Average	hugactpbh, hugbpbh, Maximum, Minimum, Sum
Gy_downlink_	hua_m134221255_tab.tgg	INT8	Kb	Obsolete from	Sum	hugactpb

Kbytes	opjilfw2ahc3ij02incnmdw			GGSN/V800R 006 C01B010:Gy downlink Mbytes		h, hugbpbh
Gy_downlink_packets	hua_m134221255_tab.tgg opjklfw2ahc3ij02incnmdw	INT8	Packet s	Gy downlink packets	Sum	hugactpb h, hugbpbh
Gy_peak_packets_throughput	hua_m134221255_tab.tgg opjalfw2ahc3ij02incnmdw	FLOAT	Packet s/s	Gy peak packets throughput	Average	hugactpb h, hugbpbh, Maximum, Minimum, Sum
Gy_peak_throughput	hua_m134221255_tab.tgg opj5lfw2ahc3ij02incnmdw	FLOAT	Kb/s	Obsolete from GGSN/V800R 006 C01B010:Gy peak throughput	Average	hugactpb h, hugbpbh, Maximum, Minimum, Sum
Gy_total_packets	hua_m134221255_tab.txig ouwo152aidm0r02uay2nv m	INTEGR	#	Gy total packets	Sum	hugactpb h, hugbpbh
Gy_uplink_Kbytes	hua_m134221255_tab.tgg opjelfw2ahc3ij02incnmdw	INT8	Kb	Obsolete from GGSN/V800R 006 C01B010:Gy uplink Mbytes	Sum	hugactpb h, hugbpbh
Gy_uplink_packets	hua_m134221255_tab.tgg opjglfw2ahc3ij02incnmdw	INT8	Packet s	Gy uplink packets	Sum	hugactpb h, hugbpbh

### 6.3.14 GGSN.Huawei.GPRS.IMS\_basic\_session

IMS basis session

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KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
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GGSN_receive_authorization_decision	hua_m134221253_tab.tgg opgqlfw2ahc3ij02incnmdw	INTEGRER	#	Obsolete from GGSN/V800R0 06 C01B010:Times of GGSN receive authorization decision	Sum	hugactpb h, hugbpbh
GGSN_receive_gate_decision	hua_m134221253_tab.tgg opgslfw2ahc3ij02incnmdw	INTEGRER	#	Obsolete from GGSN/V800R0 06 C01B010:Times of GGSN receive gate decision	Sum	hugactpb h, hugbpbh
GGSN_receive_global_PDP_SS_Q	hua_m134221253_tab.tgg oph1lfw2ahc3ij02incnmdw	INTEGRER	#	Obsolete from GGSN/V800R0 06 C01B010:Times of GGSN receive global PDP SSQ	Sum	hugactpb h, hugbpbh
GGSN_receive_remove_decision	hua_m134221253_tab.tgg opgulfw2ahc3ij02incnmdw	INTEGRER	#	Obsolete from GGSN/V800R0 06 C01B010:Times of GGSN receive remove decision	Sum	hugactpb h, hugbpbh
GGSN_receive_single_PDP_SS_Q	hua_m134221253_tab.tgg opgylfw2ahc3ij02incnmdw	INTEGRER	#	Obsolete from GGSN/V800R0 06 C01B010:Times of GGSN receive single PDP SSQ	Sum	hugactpb h, hugbpbh
GGSN_receive	hua_m134221253_tab.tgg opgwlfw2ahc3ij02incnmd	INTEGRER	#	Obsolete from GGSN/V800R0	Sum	hugactpb h,

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	w			06 C01B010:Time s of GGSN receive initialize capability decision		hugpbph
GGSN_start_au thorization_RE Q	hua_m134221253_tab.tgg opgelfw2ahc3ij02incnmd w	INTEG ER	#	Obsolete from GGSN/V800R0 06 C01B010:Num ber of GGSN start authorization REQ	Sum	hugactpb h, hugpbph
GGSN_start_DR Q	hua_m134221253_tab.tgg opgmlfw2ahc3ij02incnmd w	INTEG ER	#	Obsolete from GGSN/V800R0 06 C01B010:Num ber of GGSN start DRQs	Sum	hugactpb h, hugpbph
GGSN_start_fai led_report	hua_m134221253_tab.tgg opgilfw2ahc3ij02incnmdw	INTEG ER	#	Obsolete from GGSN/V800R0 06 C01B010:Num ber of GGSN start failed reports	Sum	hugactpb h, hugpbph
GGSN_start_ini tialize_capabilit y_REQ	hua_m134221253_tab.tgg opgclfw2ahc3ij02incnmd w	INTEG ER	#	Obsolete from GGSN/V800R0 06 C01B010:Num ber of GGSN start initialize capability REQ	Sum	hugactpb h, hugpbph
GGSN_start_SS C	hua_m134221253_tab.tgg opgolfw2ahc3ij02incnmd w	INTEG ER	#	Obsolete from GGSN/V800R0 06 C01B010:Num ber of GGSN start SSCs	Sum	hugactpb h, hugpbph
GGSN_start_su	hua_m134221253_tab.tgg	INTEG	#	Obsolete from	Sum	hugactpb

ccess_report	opggfw2ahc3ij02incmdw	ER		GGSN/V800R006 C01B010:Number of GGSN start success report		h, hugpbph
GGSN_start_usage_report	hua_m134221253_tab.tgg opgkfw2ahc3ij02incmdw	INTEGR	#	Obsolete from GGSN/V800R006 C01B010:Number of GGSN start usage reports	Sum	hugactpb h, hugpbph

### 6.3.15 GGSN.Huawei.GPRS.Intelligent\_service

\*\*Obsolete in GGSN/V800R006 C02. Intelligent service performance measurement

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
%_Intelligent_PDP_act_successes	100 * {Intelligent_PDP_act_successes}/ {Intelligent_PDP_act_requests}	FLOAT	%	Obsolete from GGSN/V800R006 C01B010:Percentage of successful Continue messages sent to the GTPC by the SSF	Average	hugactpb h, hugpbph
%_PDP_deact_Successes_initiated_GGSN	100 * {PDP_deact_successes_initiated_GGSN}/ {PDP_deact_requests_initiated_GGSN}	FLOAT	%	Obsolete from GGSN/V800R006 C01B010:Percentage of successful GGSN-initiated	Average	hugactpb h, hugpbph

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				intelligent user PDP deactivation		
%_PDP_deact_sucesses_initiated_SC	100 * {PDP_deact_sucesses_initiated_SC}/{PDP_deact_requests_initiated_SC}	FLOAT	%	Obsolete from GGSN/V800R 006 C01B010:Percentage of successful SCP-initiated intelligent user PDP deactivation	Average	hugactpbh, hugbpbh
Avg_act_IN_PDP_contexts	hua_intelligent_service_tabc.thwxui13ywcamtcvxq3sobiare	FLOAT	#	Obsolete from GGSN/V800R 006 C01B010:Average intelligent PDP contexts activated by GGSN	Average	hugactpbh, hugbpbh, Maximum, Minimum, Sum
IN_service_failures_arised_gprsSSF	hua_intelligent_service_tabc.waadevtnpbb64rt5wohxcm3aik	INTEGR	#	Obsolete from GGSN/V800R 006 C01B010:Failed times of intelligent service caused by gprsSSF	Sum	hugactpbh, hugbpbh
IN_service_failures_arised_SC	hua_intelligent_service_tabc.xh6eqbw6pcghu4ps0c0mk0jmn	INTEGR	#	Obsolete from GGSN/V800R 006 C01B010:Failed times of intelligent service caused by SCP	Sum	hugactpbh, hugbpbh
Intelligent_PDP_act_requests	hua_intelligent_service_tabc.xvmfk4fme2c1cu2jal4bfdl1fd	INTEGR	#	Obsolete from GGSN/V800R 006 C01B010:The number of Invoke_SSF	Sum	hugactpbh, hugbpbh

				messages sent to the SSF by the GTPC		
Intelligent_PDP_act_successes	hua_intelligent_service_tab.y4tjusuujvcj1swb0xk44c1eby	INTEGR	#	Obsolete from GGSN/V800R 006 C01B010:The number of Continue messages sent to the GTPC by the SSF	Sum	hugactpbh, hugbpbh
PDP_deact_requests_initiated_GSN	hua_intelligent_service_tab.ybrsunkicbbwxuvii4o6bycawa	INTEGR	#	Obsolete from GGSN/V800R 006 C01B010:Requests of GGSN-initiated intelligent user PDP deactivation	Sum	hugactpbh, hugbpbh
PDP_deact_requests_initiatedSCP	hua_intelligent_service_tab.wmppikcbb4cfrb35ys45e5urj6	INTEGR	#	Obsolete from GGSN/V800R 006 C01B010:Requests of SCP-initiated intelligent user PDP deactivation	Sum	hugactpbh, hugbpbh
PDP_deact_successes_initiated_GGSN	hua_intelligent_service_tab.xxfwwjqgsubumtluwcmkgtjqxu	INTEGR	#	Obsolete from GGSN/V800R 006 C01B010:Successful times of GGSN-initiated	Sum	hugactpbh, hugbpbh

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				intelligent user PDP deactivation		
PDP_deact_succesess_initiated_SC	hua_intelligent_service_tabc.urondf5y0jbe3e3yucmo16wjni	INTEGR	#	Obsolete from GGSN/V800R 006 C01B010:Succ esful times of SCP-initiated intelligent user PDP deactivation	Sum	hugactpb h, hugpbph

### 6.3.16 GGSN.Huawei.GPRS.IP\_data\_by\_traffic\_class

IP data per traffic class (conversational, streaming, interactive and background) on the Gi interface

KPI Name	Expression	Data Type	Units	Description	Default Aggregat or	Other Aggrega tors
Background_cla ss_incoming_IP _data_Kbytes	hua_m134221250_ip_tab.tggopfslfw2ahc3ij02incnm dw	INT8	Kb	Number of IP data kbytes received by the Gi interface, based on background traffic class	Sum	hugactpb h, hugpbph
Background_cla ss_incoming_IP _data_Packets	hua_m134221250_ip_tab.tggopfclfw2ahc3ij02incnm dw	INT8	Packet s	Number of IP data packets received by the Gi interface, based on background traffic class	Sum	hugactpb h, hugpbph
Background_cla ss_outgoing_IP _data_Kbytes	hua_m134221250_ip_tab.tggopg1lfw2ahc3ij02incn mdw	INT8	Kb	Number of IP data kbytes sent by the Gi interface, based on background traffic class	Sum	hugactpb h, hugpbph
Background_cla ss_outgoing_IP _	hua_m134221250_ip_tab.tggopfklfw2ahc3ij02incnm	INT8	Packet s	Number of IP data packets	Sum	hugactpb h,

data_Packets	dw			sent by the Gi interface, based on background traffic class		hugpbhb
Conversational_class_incoming_IP_data_Kbytes	hua_m134221250_ip_tab.tggopfmlfw2ahc3ij02incnmdw	INT8	Kb	Number of IP data kbytes received by the Gi interface, based on conversational traffic class	Sum	hugactpbh, hugpbhb
Conversational_class_incoming_IP_data_Packets	hua_m134221250_ip_tab.tggopf3lfw2ahc3ij02incnmdw	INT8	Packet s	Number of IP data packets received by the Gi interface, based on conversational traffic class	Sum	hugactpbh, hugpbhb
Conversational_class_outgoing_IP_data_Kbytes	hua_m134221250_ip_tab.tggopfulfw2ahc3ij02incnmdw	INT8	Kb	Number of IP data kbytes sent by the Gi interface, based on conversational traffic class	Sum	hugactpbh, hugpbhb
Conversational_class_outgoing_IP_data_Packets	hua_m134221250_ip_tab.tggopfelffw2ahc3ij02incnmdw	INT8	Packet s	Number of IP data packets sent by the Gi interface, based on conversational traffic class	Sum	hugactpbh, hugpbhb
Interactive_class_incoming_IP_data_Kbytes	hua_m134221250_ip_tab.tggopfqqlfw2ahc3ij02incnmdw	INT8	Kb	Number of IP data kbytes received by the Gi interface, based on interactive	Sum	hugactpbh, hugpbhb

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				traffic class		
Interactive_class_incoming_IP_data_Packets	hua_m134221250_ip_tab.t ggopfalfw2ahc3ij02incnm dw	INT8	Packet s	Number of IP data packets received by the Gi interface, based on interactive traffic class	Sum	hugactpb h, hugbpbh
Interactive_class_outgoing_IP_data_Kbytes	hua_m134221250_ip_tab.t ggopfylfw2ahc3ij02incnm dw	INT8	Kb	Number of IP data kbytes sent by the Gi interface, based on interactive traffic class	Sum	hugactpb h, hugbpbh
Interactive_class_outgoing_IP_data_Packets	hua_m134221250_ip_tab.t ggopfilfw2ahc3ij02incnm dw	INT8	Packet s	Number of IP data packets sent by the Gi interface, based on interactive traffic class	Sum	hugactpb h, hugbpbh
Streaming_class_incoming_IP_data_Kbytes	hua_m134221250_ip_tab.t ggopfolfw2ahc3ij02incnm dw	INT8	Kb	Number of IP data kbytes received by the Gi interface, based on streaming traffic class	Sum	hugactpb h, hugbpbh
Streaming_class_incoming_IP_data_Packets	hua_m134221250_ip_tab.t ggopf5lfw2ahc3ij02incnm dw	INT8	Packet s	Number of IP data packets received by the Gi interface, based on streaming traffic class	Sum	hugactpb h, hugbpbh
Streaming_class_outgoing_IP_data_Kbytes	hua_m134221250_ip_tab.t ggopfwlfw2ahc3ij02incn mdw	INT8	Kb	Number of IP data kbytes sent by the Gi interface, based on streaming traffic class	Sum	hugactpb h, hugbpbh
Streaming_class	hua_m134221250_ip_tab.t	INT8	Packet	Number of IP	Sum	hugactpb

_outgoing_IP_data_Packets	ggopfgfw2ahc3ij02incmdw	s	data packets sent by the Gi interface, based on streaming traffic class		h, hugpbph
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### 6.3.17 GGSN.Huawei.GPRS.IPV6\_transport

IPv6 transport measurement

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
IPv6_Gi_DL_byte_peak_throughput	hua_ggsn_iptransport_tab.t xigoroo152aidm0r02uay2n vm	INTEGRER	bps	Peak IPV6 Gi downlink byte forwarding rate during a period.	Average	hugactpb h, hugpbph, Sum, Minimu m, Maximu m
IPv6_Gi_DL_pkts_peak_throughput	hua_ggsn_iptransport_tab.t xigorso152aidm0r02uay2n vm	INTEGRER	unit/s	Peak IPV6 Gi downlink packet forwarding rate during a period.	Average	hugactpb h, hugpbph, Sum, Minimu m, Maximu m
IPv6_Gi_downlink_traffic_in_packets	hua_ggsn_iptransport_tab.t xigos1o152aidm0r02uay2 nvm	INTEGRER	#	Downlink forwarding packets on IPV6 Gi interface in the statistical period.	Sum	hugactpb h, hugpbph
IPv6_Gi_downlink_traffic	hua_ggsn_iptransport_tab.t xigorwo152aidm0r02uay2	INTEGRER	bytes	Downlink forwarding byte	Sum	hugactpb h,

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	nvm			on IPV6 Gi interface in the statistical period.		hugbpbh
IPv6_Gi_UL_byte_peak_througput	hua_ggsn_iptransport_tab.t xigormo152aidm0r02uay2nvm	INTEGRER	bps	Peak IPV6 Gi uplink byte forwarding rate during a period.	Average	hugactpbh, hugbpbh, Sum, Minimun, Maximum
IPv6_Gi_UL_pkts_peak_througput	hua_ggsn_iptransport_tab.t xigorqo152aidm0r02uay2nvm	INTEGRER	unit/s	Peak IPV6 Gi uplink packet forwarding rate during a period.	Average	hugactpbh, hugbpbh, Sum, Minimun, Maximum
IPv6_Gi_uplink_traffic_in_packets	hua_ggsn_iptransport_tab.t xigoryo152aidm0r02uay2nvm	INTEGRER	#	Uplink forwarding packets on IPV6 Gi interface in the statistical period.	Sum	hugactpbh, hugbpbh
IPv6_Gi_uplink_traffic	hua_ggsn_iptransport_tab.t xigoruo152aidm0r02uay2nvm	INTEGRER	bytes	Uplink forwarding byte on IPV6 Gi interface in the statistical period.	Sum	hugactpbh, hugbpbh
IPv6_Gn_DL_byte_peak_througput	hua_ggsn_iptransport_tab.t xigor5o152aidm0r02uay2nvm	INTEGRER	bps	Peak IPV6 Gn downlink byte forwarding rate during a period.	Average	hugactpbh, hugbpbh, Sum, Minimun, Maximum
IPv6_Gn_DL_	hua_ggsn_iptransport_tab.t	INTEGR	unit/s	Peak IPV6 Gn	Average	hugactpb

pkts_peak_throughput	xigorco152aidm0r02uay2n vm	ER		downlink packet forwarding rate during a period.		h, hugpbh, Sum, Minim um, Maxim um
IPv6_Gn_dow nlink_traffic_in _packets	hua_ggsn_iptransport_tab.t xigorko152aidm0r02uay2n vm	INTEG ER	#	Downlink forwarding packets on IPV6 Gn interface in the statistical period.	Sum	hugactpb h, hugpbh
IPv6_Gn_dow nlink_traffic	hua_ggsn_iptransport_tab.t xigorgo152aidm0r02uay2n vm	INTEG ER	bytes	Downlink forwarding byte on IPV6 Gn interface in the statistical period.	Sum	hugactpb h, hugpbh
IPv6_Gn_UL_ byte_peak_thro ughput	hua_ggsn_iptransport_tab.t xigor3o152aidm0r02uay2n vm	INTEG ER	bps	Peak IPV6 Gn uplink byte forwarding rate during a period.	Average	hugactpb h, hugpbh, Sum, Minim um, Maxim um
IPv6_Gn_UL_ pkts_peak_thro ughput	hua_ggsn_iptransport_tab.t xigorao152aidm0r02uay2n vm	INTEG ER	unit/s	Peak IPV6 Gn uplink packet forwarding rate during a period.	Average	hugactpb h, hugpbh, Sum, Minim um, Maxim um
IPv6_Gn_uplin k_traffic_in_pa	hua_ggsn_iptransport_tab.t xigorio152aidm0r02uay2n	INTEG ER	#	Uplink forwarding	Sum	hugactpb h,

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ckets	vm			packets on IPV6 Gn interface in the statistical period.		hugpbph
IPv6_Gn_uplink_traffic	hua_ggsn_iptransport_tab.t xigoreo152aidm0r02uay2n vm	INTEGRER	bytes	Uplink forwarding byte on IPV6 Gn interface in the statistical period.	Sum	hugactpbh, hugpbph
One_Tunnel_downlink_traffic	hua_ggsn_iptransport_tab.t xigor1o152aidm0r02uay2n vm	INTEGRER	kB	One Tunnel downlink traffic in KB	Sum	hugactpbh, hugpbph
One_Tunnel_uplink_traffic	hua_ggsn_iptransport_tab.t xigoqyo152aidm0r02uay2nvm	INTEGRER	kB	One Tunnel uplink traffic in KB	Sum	hugactpbh, hugpbph
Received_gtp_ip_fragment_flows	hua_ggsn_iptransport_tab.t xigoqwo152aidm0r02uay2nvm	INTEGRER	#	Received gtp ip fragment flows	Sum	hugactpbh, hugpbph
Received_user_ip_fragment_flows	hua_ggsn_iptransport_tab.t xigoquo152aidm0r02uay2nvm	INTEGRER	#	Received user ip fragment flows	Sum	hugactpbh, hugpbph

### 6.3.18 GGSN.Huawei.GPRS.L2TP

L2TP performance measurement

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
%_L2TP_session_setup_successes	100 * {L2TP_session_setup_successes}/ {L2TP_session_setup_attempts}	FLOAT	%	Percentage of successful establishing an L2TP session between the GGSN and the LNS	Average	hugactpbh, hugpbph
%_L2TP_tunnel_setup_successes	100 * {L2TP_tunnel_setup_successes}/	FLOAT	%	Percentage of successful establishing an	Average	hugactpbh, hugpbph

es	{L2TP_tunnel_setup_attempts}			L2TP tunnel between the GGSN and the LNS		
Current_act_L2TP_sessions	hua_l2tp_tab.txigos3o152aidm0r02uay2nvm	FLOAT	#	Current act L2TP sessions	Average	hugactpbh, hugbpbh, Maximum, Minimum, Sum
Current_act_L2TP_tunnels	hua_l2tp_tab.txigosco152aidm0r02uay2nvm	FLOAT	#	Current act L2TP tunnels	Average	hugactpbh, hugbpbh, Maximum, Minimum, Sum
L2TP_session_setup_attempts	hua_l2tp_tab.so1it4qxuubqbud63kxj64mxcr	INTEGR	#	Attempts of establishing an L2TP session between the GGSN and the LNS	Sum	hugactpbh, hugbpbh
L2TP_session_setup_successes	hua_l2tp_tab.tlauq2gi5hcfsdgykiwococmd3	INTEGR	#	Successful times of establishing an L2TP session between the GGSN and the LNS	Sum	hugactpbh, hugbpbh
L2TP_tunnel_setup_attempts	hua_l2tp_tab.t0brmcmappcy0r2ky1riaib2mu	INTEGR	#	Attempts of establishing an L2TP tunnel between the GGSN and the LNS	Sum	hugactpbh, hugbpbh

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L2TP_tunnel_setup_successes	hua_l2tp_tab.vt51m2ang4c3ouhwggyjdff40i	INTEGRER	#	Successful times of establishing an L2TP tunnel between the GGSN and the LNS	Sum	hugactpbh, hugbpbh
Maximum_L2TP_sessions	hua_l2tp_tab.txigos5o152aidm0r02uay2nvm	FLOAT	#	Maximum L2TP sessions	Average	hugactpbh, hugbpbh, Maximum, Minimum, Sum
Received_invalid_L2TP_control_pckts	hua_l2tp_tab.texauao4ebb42eooh6ds1y6du1	INTEGRER	#	The number of invalid L2TP control packets sent to the GGSN by the LNS	Sum	hugactpbh, hugbpbh
Received_L2TP_control_packets	hua_l2tp_tab.ro6gg2pkd4bs5e4am5v6site4u	INTEGRER	#	The number of L2TP control packets sent to the GGSN by the LNS	Sum	hugactpbh, hugbpbh
Succ_L2TP_session_deactivations	hua_l2tp_tab.txigosa152aidm0r02uay2nvm	INTEGRER	#	Successful L2TP session deactivations	Sum	hugactpbh, hugbpbh
Succ_L2TP_session_setups_APN	hua_l2tp_tab.txigoseo152aidm0r02uay2nvm	INTEGRER	#	Successful L2TP session setups(APN)	Sum	hugactpbh, hugbpbh
Transmitted_L2TP_control_packets	hua_l2tp_tab.sjhiwv1v6xc3jcl16wxxygypy	INTEGRER	#	The number of L2TP control packets sent to the LNS by the GGSN	Sum	hugactpbh, hugbpbh

### 6.3.19 GGSN.Huawei.GPRS.Layer7\_parser

Layer 7 parser for packet and Mbyte traffic

KPI Name	Expression	Data	Units	Description	Default	Other
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		Type			Aggregat or	Aggrega tors
L7_parser_aver age_packet_th roughput	hua_m134221254_tab.tgg ophalfw2ahc3ij02incnmd w	FLOAT	Packet s/s	L7 parser average packet throughput	Average	hugactpb h, hugbpbh, Maximum, Minimum, Sum
L7_parser_DNS _downlink_K bytes	hua_m134221254_tab.txig osyo152aidm0r02uay2nv m	INT8	kB	L7 parser DNS downlink Kbytes	Sum	hugactpb h, hugbpbh
L7_parser_DNS _downlink_packets	hua_m134221254_tab.txig osuo152aidm0r02uay2nv m	INTEG ER	#	L7 parser DNS downlink packets.	Sum	hugactpb h, hugbpbh
L7_parser_DNS _uplink_Kbytes	hua_m134221254_tab.txig oswo152aidm0r02uay2nv m	INT8	kB	L7 parser DNS uplink Kbytes	Sum	hugactpb h, hugbpbh
L7_parser_DNS _uplink_packets	hua_m134221254_tab.txig osso152aidm0r02uay2nv m	INTEG ER	#	L7 parser DNS uplink packets.	Sum	hugactpb h, hugbpbh
L7_parser_downlink_Kbytes	hua_m134221254_tab.tgg ophglfw2ahc3ij02incnmd w	INT8	Kb	L7 parser downlink Mbytes	Sum	hugactpb h, hugbpbh
L7_parser_downlink_packets	hua_m134221254_tab.tgg ophilfw2ahc3ij02incnmdw	INT8	Packet s	L7 parser downlink packets	Sum	hugactpb h, hugbpbh
L7_parser_FTP _downlink_K bytes	hua_m134221254_tab.tgg opiulfw2ahc3ij02incnmdw	INT8	Kb	L7 parser FTP downlink Mbytes	Sum	hugactpb h, hugbpbh
L7_parser_FTP _downlink_packets	hua_m134221254_tab.tgg opiqlfw2ahc3ij02incnmdw	INT8	Packet s	L7 parser FTP downlink packets	Sum	hugactpb h, hugbpbh
L7_parser_FTP _uplink_Kbytes	hua_m134221254_tab.tgg opislfw2ahc3ij02incnmdw	INT8	Kb	L7 parser FTP uplink Mbytes	Sum	hugactpb h,

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es						hugpbph
L7_parser_FT P_uplink_packets	hua_m134221254_tab.tgg opiolfw2ahc3ij02incnmdw	INT8	Packet s	L7 parser FTP uplink packets	Sum	hugactpb h, hugpbph
L7_parser_HT TP_downlink_Kbytes	hua_m134221254_tab.tgg ophulfw2ahc3ij02incnmdw	INT8	Kb	L7 parser HTTP downlink Mbytes	Sum	hugactpb h, hugpbph
L7_parser_HT TP_Downlink_packets	hua_m134221254_tab.tgg ophqlfw2ahc3ij02incnmdw	INT8	Packet s	L7 parser HTTP downlink packets	Sum	hugactpb h, hugpbph
L7_parser_HT TP_uplink_Kbytes	hua_m134221254_tab.tgg ophslfw2ahc3ij02incnmdw	INT8	Kb	L7 parser HTTP uplink Mbytes	Sum	hugactpb h, hugpbph
L7_parser_HT TP_uplink_packets	hua_m134221254_tab.tgg ophlfw2ahc3ij02incnmdw	INT8	Packet s	L7 parser HTTP uplink packets	Sum	hugactpb h, hugpbph
L7_parser_IM _downlink_Kbytes	hua_m134221254_tab.txig ouqo152aidm0r02uay2nv m	INT8	kB	L7 parser IM downlink Kbytes	Sum	hugactpb h, hugpbph
L7_parser_IM _downlink_packets	hua_m134221254_tab.txig oumo152aidm0r02uay2nv m	INTEGR	#	L7 parser IM downlink packets.	Sum	hugactpb h, hugpbph
L7_parser_IM _uplink_Kbytes	hua_m134221254_tab.txig ouoo152aidm0r02uay2nv m	INT8	kB	L7 parser IM uplink Kbytes	Sum	hugactpb h, hugpbph
L7_parser_IM _uplink_packets	hua_m134221254_tab.txig ouko152aidm0r02uay2nv m	INTEGR	#	L7 parser IM uplink packets.	Sum	hugactpb h, hugpbph
L7_parser_IM AP_downlink_Kbytes	hua_m134221254_tab.txig otqo152aidm0r02uay2nvm	INT8	kB	L7 parser IMAP downlink Kbytes	Sum	hugactpb h, hugpbph
L7_parser_IM AP_downlink_packets	hua_m134221254_tab.txig otmo152aidm0r02uay2nv m	INTEGR	#	L7 parser IMAP downlink packets.	Sum	hugactpb h, hugpbph

L7_parser_IM_AP_uplink_Kbytes	hua_m134221254_tab.txig otoo152aidm0r02uay2nvm	INT8	kB	L7 parser IMAP uplink Kbytes	Sum	hugactpb h, hugpbpbh
L7_parser_IM_AP_uplink_packets	hua_m134221254_tab.txig otko152aidm0r02uay2nvm	INTEGR	#	L7 parser IMAP uplink packets.	Sum	hugactpb h, hugpbpbh
L7_parser_M_MSP_downlink_Kbytes	hua_m134221254_tab.txig ouao152aidm0r02uay2nvm	INT8	kB	L7 parser MMSP downlink Kbytes	Sum	hugactpb h, hugpbpbh
L7_parser_M_MSP_downlink_packets	hua_m134221254_tab.txig ou3o152aidm0r02uay2nvm	INTEGR	#	L7 parser MMSP downlink packets.	Sum	hugactpb h, hugpbpbh
L7_parser_M_MSP_uplink_Kbytes	hua_m134221254_tab.txig ou5o152aidm0r02uay2nvm	INT8	kB	L7 parser MMSP uplink Kbytes	Sum	hugactpb h, hugpbpbh
L7_parser_M_MSP_uplink_packets	hua_m134221254_tab.txig ou1o152aidm0r02uay2nvm	INTEGR	#	L7 parser MMSP uplink packets.	Sum	hugactpb h, hugpbpbh
L7_parser_P2P_downlink_Kbytes	hua_m134221254_tab.tgg opiylfw2ahc3ij02incnmdw	INT8	Kb	Total downlink P2P traffic received by Layer 7 Parser.	Sum	hugactpb h, hugpbpbh
L7_parser_P2P_downlink_packets	hua_m134221254_tab.txig oueo152aidm0r02uay2nvm	INTEGR	#	L7 parser P2P downlink packets.	Sum	hugactpb h, hugpbpbh
L7_parser_P2P_uplink_Kbytes	hua_m134221254_tab.tgg opiwlfw2ahc3ij02incnmdw	INT8	Kb	Total uplink P2P traffic received by Layer 7 Parser.	Sum	hugactpb h, hugpbpbh
L7_parser_P2P_uplink_packets	hua_m134221254_tab.txig ouco152aidm0r02uay2nvm	INTEGR	#	L7 parser P2P uplink packets.	Sum	hugactpb h, hugpbpbh
L7_parser_pea	hua_m134221254_tab.tgg	FLOAT	Packet	L7 parser peak	Average	hugactpb

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k_packet_thro ughput	oph5lfw2ahc3ij02incnmd w		s/s	packet throughput		h, hugbpbh, Maximu m, Minimu m, Sum
L7_parser_peak_throughput	hua_m134221254_tab.tgg oph3lfw2ahc3ij02incnmd w	FLOAT	Kb/s	L7 parser peak throughput	Average	hugactpb h, hugbpbh, Maximu m, Minimu m, Sum
L7_parser_PO P3_downlink_Kbytes	hua_m134221254_tab.txig otio152aidm0r02uay2nvm	INT8	kB	L7 parser POP3 downlink Kbytes	Sum	hugactpb h, hugbpbh
L7_parser_PO P3_downlink_packets	hua_m134221254_tab.txig oteo152aidm0r02uay2nvm	INTEG ER	#	L7 parser POP3 downlink packets.	Sum	hugactpb h, hugbpbh
L7_parser_PO P3_uplink_Kbytes	hua_m134221254_tab.txig otgo152aidm0r02uay2nvm	INT8	kB	L7 parser POP3 uplink Kbytes	Sum	hugactpb h, hugbpbh
L7_parser_PO P3_uplink_packets	hua_m134221254_tab.txig otco152aidm0r02uay2nvm	INTEG ER	#	L7 parser POP3 uplink packets.	Sum	hugactpb h, hugbpbh
L7_parser_RT SP_downlink_Kbytes	hua_m134221254_tab.tgg opimlfw2ahc3ij02incnmd w	INT8	Kb	L7 parser RTSP downlink Mbytes	Sum	hugactpb h, hugbpbh
L7_parser_RT SP_downlink_packets	hua_m134221254_tab.tgg opiilfw2ahc3ij02incnmdw	INT8	Packet s	L7 parser RTSP downlink packets	Sum	hugactpb h, hugbpbh
L7_parser_RT SP_uplink_Kbytes	hua_m134221254_tab.tgg opiklfw2ahc3ij02incnmdw	INT8	Kb	L7 parser RTSP uplink Mbytes	Sum	hugactpb h, hugbpbh
L7_parser_RT SP_uplink_packets	hua_m134221254_tab.tgg opiglfw2ahc3ij02incnmdw	INT8	Packet s	L7 parser RTSP uplink	Sum	hugactpb h,

kets				packets		hugpbph
L7_parser_SM TP_downlink_Kbytes	hua_m134221254_tab.txig otao152aidm0r02uay2nvm	INT8	kB	L7 parser SMTP downlink Kbytes	Sum	hugactpb h, hugpbph
L7_parser_SM TP_downlink_packets	hua_m134221254_tab.txig ot3o152aidm0r02uay2nvm	INTEGR	#	L7 parser SMTP downlink packets.	Sum	hugactpb h, hugpbph
L7_parser_SM TP_uplink_Kbytes	hua_m134221254_tab.txig ot5o152aidm0r02uay2nvm	INT8	kB	L7 parser SMTP uplink Kbytes	Sum	hugactpb h, hugpbph
L7_parser_SM TP_uplink_packets	hua_m134221254_tab.txig ot1o152aidm0r02uay2nvm	INTEGR	#	L7 parser SMTP uplink packets.	Sum	hugactpb h, hugpbph
L7_parser_success_transmit_packets	hua_m134221254_tab.tkrx df1r452aidm2j02uay2nvm	INTEGR	#	L7 parser success transmit packets.	Sum	hugactpb h, hugpbph
L7_parser_TF TP_downlink_Kbytes	hua_m134221254_tab.txig otyo152aidm0r02uay2nvm	INT8	kB	L7 parser TFTP downlink Kbytes	Sum	hugactpb h, hugpbph
L7_parser_TF TP_downlink_packets	hua_m134221254_tab.txig otuo152aidm0r02uay2nvm	INTEGR	#	L7 parser TFTP downlink packets.	Sum	hugactpb h, hugpbph
L7_parser_TF TP_uplink_Kbytes	hua_m134221254_tab.txig otwo152aidm0r02uay2nvm	INT8	kB	L7 parser TFTP uplink Kbytes	Sum	hugactpb h, hugpbph
L7_parser_TF TP_uplink_packets	hua_m134221254_tab.txig ots0152aidm0r02uay2nvm	INTEGR	#	L7 parser TFTP uplink packets.	Sum	hugactpb h, hugpbph
L7_parser_total_Kbytes	hua_m134221254_tab.rvx ydlusuhy2aidm5r02uay2nvm	INTEGR	kB	L7 parser total Kbytes.	Sum	hugactpb h,

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	m					hugpbph
L7_parser_total_packets	hua_m134221254_tab.t6sf u0ouhy2aidm5r02uay2nv m	INTEGR	#	L7 parser total packets.	Sum	hugactpb h, hugpbph
L7_parser_transmit_packets	hua_m134221254_tab.safe 2a1r452aidm2j02uay2nvm	INTEGR	#	L7 parser transmit packets.	Sum	hugactpb h, hugpbph
L7_parser_transmit_success_ratio	hua_m134221254_tab.tgg ophmlfw2ahc3ij02incnmd w	FLOAT	%	L7 parser transmit success ratio	Average	hugactpb h, hugpbph, Maximum, Minimum, Sum
L7_parser_uplink_error_packets	hua_m134221254_tab.tgg ophklfw2ahc3ij02incnmd w	INT8	Packet s	L7 parser uplink error packets	Sum	hugactpb h, hugpbph
L7_parser_uplink_Kbytes	hua_m134221254_tab.tgg ophclf2ahc3ij02incnmd w	INT8	Kb	L7 parser uplink Mbytes	Sum	hugactpb h, hugpbph
L7_parser_uplink_packets	hua_m134221254_tab.tgg ophlfw2ahc3ij02incnmd w	INT8	Packet s	L7 parser uplink packets	Sum	hugactpb h, hugpbph
L7_parser_VOIP_downlink_Kbytes	hua_m134221254_tab.tgg opj3lfw2ahc3ij02incnmdw	INT8	Kb	Total downlink VoIP traffic received by Layer 7 parser.	Sum	hugactpb h, hugpbph
L7_parser_VOIP_downlink_packets	hua_m134221254_tab.txig ouio152aidm0r02uay2nvm	INTEGR	#	L7 parser VOIP downlink packets.	Sum	hugactpb h, hugpbph
L7_parser_VOIP_uplink_Kbytes	hua_m134221254_tab.tgg opj1lfw2ahc3ij02incnmdw	INT8	Kb	Total uplink VoIP traffic received by Layer 7 Parser.	Sum	hugactpb h, hugpbph
L7_parser_VOIP_uplink_packets	hua_m134221254_tab.txig ougo152aidm0r02uay2nvm	INTEGR	#	L7 parser VOIP uplink packets.	Sum	hugactpb h, hugpbph
L7_parser_W	hua_m134221254_tab.tgg	INT8	Kb	L7 parser	Sum	hugactpb

AP1_X_downlink_Kbytes	opi3lfw2ahc3ij02incnmdw			WAP1.X downlink Mbytes		h, hugpbph
L7_parser_W_AP1_X_downlink_packets	hua_m134221254_tab.tgg ophylfw2ahc3ij02incnmdw	INT8	Packet s	L7 parser WAP1.X downlink packets	Sum	hugactpb h, hugpbph
L7_parser_W_AP1_x_uplink_Kbytes	hua_m134221254_tab.tgg opi1lfw2ahc3ij02incnmdw	INT8	Kb	L7 parser WAP1.X uplink Mbytes	Sum	hugactpb h, hugpbph
L7_parser_W_AP1_X_uplink_packets	hua_m134221254_tab.tgg ophwlfw2ahc3ij02incnmdw	INT8	Packet s	L7 parser WAP1.X uplink packets	Sum	hugactpb h, hugpbph
L7_parser_W_AP2_0_downlink_Kbytes	hua_m134221254_tab.tgg opielfw2ahc3ij02incnmdw	INT8	Kb	L7 parser WAP2.0 downlink Mbytes	Sum	hugactpb h, hugpbph
L7_parser_W_AP2_0_downlink_packets	hua_m134221254_tab.tgg opialfw2ahc3ij02incnmdw	INT8	Packet s	L7 parser WAP2.0 downlink packets	Sum	hugactpb h, hugpbph
L7_parser_W_AP2_0_uplink_Kbytes	hua_m134221254_tab.tgg opiclfw2ahc3ij02incnmdw	INT8	Kb	L7 parser WAP2.0 uplink Mbytes	Sum	hugactpb h, hugpbph
L7_parser_W_AP2_0_uplink_packets	hua_m134221254_tab.tgg opi5lfw2ahc3ij02incnmdw	INT8	Packet s	L7 parser WAP2.0 uplink packets	Sum	hugactpb h, hugpbph
L7_protocol_identify_fail_service_flow_numbers	hua_m134221254_tab.txig ouuo152aidm0r02uay2nm	INTEGR	#	L7 protocol identify fail service flow numbers	Sum	hugactpb h, hugpbph
L7_protocol_identify_success_service_flow_numbers	hua_m134221254_tab.txig ouso152aidm0r02uay2nm	INTEGR	#	L7 protocol identify success service flow numbers	Sum	hugactpb h, hugpbph

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### 6.3.20 GGSN.Huawei.GPRS.MBMS

MBMS session stop and start from/to BMSC or SGSN

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
Current_MBM S_GTP_connec tion	hua_m134221257_tab.txig ov1o152aidm0r02uay2nv m	INTEG ER	#	Number of current MBMS GTP connection	Sum	hugactpb h, hugbpbh
Current_MBM S_Session	hua_m134221257_tab.txig ouyo152aidm0r02uay2nv m	INTEG ER	#	Number of the current MBMS sessions.	Sum	hugactpb h, hugbpbh
Gi_downlink_ MBMS_traffic	hua_m134221257_tab.txig ov3o152aidm0r02uay2nv m	INTEG ER	kB	MBMS downlink multicast data packets expressed in kilobytes and received through the Gi interface by the SPU when the system starts to work.	Sum	hugactpb h, hugbpbh
Gn_downlink_ MBMS_traffic	hua_m134221257_tab.txig ov5o152aidm0r02uay2nv m	INTEG ER	kB	MBMS downlink multicast data packets expressed in kilobytes and received through the Gn interface by the SPU when the system starts to work.	Sum	hugactpb h, hugbpbh
MBMS_sessio n_start_request _from_BMSC	hua_m134221257_tab.tgg opl3lfw2ahc3ij02incnmdw	INTEG ER	#	Number of MBMS session start requests from the BMSC received by the	Sum	hugactpb h, hugbpbh

				GGSN		
MBMS_session_start_request_to_SGSN	hua_m134221257_tab.tgg oplelfw2ahc3ij02incnmdw	INTEGR	#	Number of MBMS session start requests to the SGSN sent by the GGSN	Sum	hugactpbh, hugbpbh
MBMS_session_start_response_from_SGSN	hua_m134221257_tab.tgg oplglfw2ahc3ij02incnmdw	INTEGR	#	Number of MBMS session start responses from the SGSN received by the GGSN	Sum	hugactpbh, hugbpbh
MBMS_session_start_response_to_BMSC	hua_m134221257_tab.tgg opl5lfw2ahc3ij02incnmdw	INTEGR	#	Number of MBMS session start responses to the BMSC sent by the GGSN	Sum	hugactpbh, hugbpbh
MBMS_session_stop_request_from_BMSC	hua_m134221257_tab.tgg oplalfw2ahc3ij02incnmdw	INTEGR	#	Number of MBMS session stop requests from the BMSC received by the GGSN	Sum	hugactpbh, hugbpbh
MBMS_session_stop_request_to_SGSN	hua_m134221257_tab.tgg oplilfw2ahc3ij02incnmdw	INTEGR	#	Number of MBMS session stop requests to the SGSN sent by the GGSN	Sum	hugactpbh, hugbpbh
MBMS_session_stop_response_from_SGSN	hua_m134221257_tab.tgg oplklfw2ahc3ij02incnmdw	INTEGR	#	Number of MBMS session stop responses from the BMSC received by the GGSN	Sum	hugactpbh, hugbpbh
MBMS_session	hua_m134221257_tab.tgg	INTEG	#	Number of	Sum	hugactpb

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n_stop_responses_to_BMSC	oplclf2ahc3ij02incnmdw	ER	MBMS session stop responses to the BMSC sent by the GGSN	h, hugbpbh
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### 6.3.21 GGSN.Huawei.GPRS.MIP\_FA

\*\*Obsolete in GGSN/V800R006 C02. MIP FA performance measurement

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
Deny_aaa_authentication_fail	hua_mip_fa_tab.ymytw5ekpecrfdy1qhmoclaaec	INTEGR	#	Obsolete from GGSN/V800R006 C01B010:Total number of registration requests that are denied by FA as a result of failed registration authentication to a mobile node	Sum	hugactpb h, hugbpbh
Deny_admin_prohibit	hua_mip_fa_tab.wiqoodhox2bl0cytvoujyogrky	INTEGR	#	Obsolete from GGSN/V800R006 C01B010:Total number of registration requests that are denied by FA as a result of prohibition in administration (such as intended configuration or functions not being	Sum	hugactpb h, hugbpbh

				supported)		
Deny_ha_authentication_fail	hua_mip_fa_tab.rir50guiatc3yuijacwq3dtnak	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:Total number of registration replies that are denied by FA as a result of failed authentication by HA	Sum	hugactpb h, hugpbph
Deny_ha_reply_poor_form	hua_mip_fa_tab.tgwuw5k3gectusc1m4hr1a5rba	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:Total number of registration replies that are denied by FA as a result of wrong format of a registration reply	Sum	hugactpb h, hugpbph
Deny_ha_unreachable	hua_mip_fa_tab.xrfchnbfw4csrtrarwpdxg5gmo	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:Total number of registration requests that are denied by FA as a result of unreachable HA	Sum	hugactpb h, hugpbph
Deny_lifetime_too_long	hua_mip_fa_tab.rlblbm00xnsbhxsdwngpeoc5y6g	INTEGR	#	Obsolete from GGSN/V800R0	Sum	hugactpb h,

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				06 C01B010:Total number of registration requests that are denied by FA as a result of the registration lifetime solicited by a mobile node being too long		hugpbh
Deny_poor_form	hua_mip_fa_tab.rgxbo0u22ct2cygc2owlp2ann	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:Total number of registration requests that are denied by FA as a result of wrong format of a registration request	Sum	hugactpbh, hugpbh
Deny_poor_resource	hua_mip_fa_tab.ulrep0o6yactcu2qdbkcqdqpc6	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:Total number of registration requests that are denied by FA as a result of insufficient resource	Sum	hugactpbh, hugpbh
Deny_unknown	hua_mip_fa_tab.vsnr023ivjb6jcowh5ui4b0nqx	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:Total number of registration requests that	Sum	hugactpbh, hugpbh

				are denied by FA for unknown reasons		
Deny_unsupport_encapsulation	hua_mip_fa_tab.ukuppok2slb4kr35khad44ry2s	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:Total number of registration requests that are denied by FA as a result of invalid encapsulation mode of a registration request	Sum	hugactpb h, hugpbph
Deny_vj_compress	hua_mip_fa_tab.sucj4j0pr5ckxdiq6k3nwdefs5	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:Total number of registration requests that are denied by FA as a result of invalid VJ compression	Sum	hugactpb h, hugpbph
Receive_valid_registration_reply	hua_mip_fa_tab.tebuuyedvccxhu4isrbng6ccqi	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:Total number of valid registration replies that FA receives from HA	Sum	hugactpb h, hugpbph

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Relay_to_ha	hua_mip_fa_tab.weehty22 25bw2b5af6rfsercik	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:Total number of registration requests that are successfully forwarded by FA	Sum	hugactpb h, hugpbph
Relay_valid_registration_reply	hua_mip_fa_tab.s2gs6yfrx kbhgтикgn0jrwpw0	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:Total number of valid registration replies that are forwarded by FA to mobile nodes	Sum	hugactpb h, hugpbph
Valid_registration_request	hua_mip_fa_tab.xuk5jxdlq gc2mdymqqpxwsm011	INTEGR	#	Obsolete from GGSN/V800R0 06 C01B010:Total number of valid registration requests recorded by FA	Sum	hugactpb h, hugpbph

### 6.3.22 GGSN.Huawei.GPRS.PCC\_Session\_GGSN

Policy and Charging Control (PCC) session on GGSN

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
Activated_PDP_Contexts_With_PCC_Enabled	hua_ggsn_pcc_tab.txigoyyo152aidm0r02uay2nvm	INTEGR	#	Activated PDP Contexts With PCC Enabled (APN)	Sum	hugactpb h, hugpbph
Activated_PDP_Sessions_With_PCC_Enabled	hua_ggsn_pcc_tab.txigoyyo152aidm0r02uay2nvm	INTEGR	#	Activated PDP Sessions With PCC Enabled	Sum	hugactpb h, hugpbph

				(APN)		
Deactivated_PDP_Contexts_With_PCC_Enabled	hua_ggsn_pcc_tab.txigp01o152aidm0r02uay2nvm	INTEGR	#	Deactivated PDP Contexts With PCC Enabled (APN)	Sum	hugactpbh, hugpbph
Deactivated_PDP_Sessions_with_PCC_Enabled	hua_ggsn_pcc_tab.txigoywo152aidm0r02uay2nvm	INTEGR	#	Deactivated PDP Sessions with PCC Enabled (APN)	Sum	hugactpbh, hugpbph

### 6.3.23 GGSN.Huawei.GPRS.PPPC

PPPC performance measurement

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
%_IPCP_negotiation_successes	100 * {IPCP_negotiation_successes}/ {IPCP_negotiation_attempts}	FLOAT	%	Percentage of successful IPCP negotiation between the MS/LNS and the GGSN	Average	hugactpbh, hugpbph
%_LCP_negotiation_successes	100 * {LCP_negotiation_successes}/ {LCP_negotiation_attempts}	FLOAT	%	Percentage of successful LCP negotiation between the MS/LNS and the GGSN	Average	hugactpbh, hugpbph
IPCP_negotiation_attempts	hua_pppc_tab.slhylhodctce1ukmmlx5r3ydxo	INTEGR	#	Attempts of IPCP negotiation between the MS/LNS and the GGSN	Sum	hugactpbh, hugpbph
IPCP_negotiation	hua_pppc_tab.xknnyrqyk	INTEG	#	Successful	Sum	hugactpb

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on_successes	cjksbkd2lb33uccp	ER		times of IPCP negotiation between the MS/LNS and the GGSN		h, hugpbh
LCP_negotiation_attempts	hua_pppc_tab.rcc4qfnебtc msuqrgbj2u6ndsc	INTEGR	#	Attempts of LCP negotiation between the MS/LNS and the GGSN	Sum	hugactpb h, hugpbh
LCP_negotiation_successes	hua_pppc_tab.urqej5dg51c f3soyeh4tflj13n	INTEGR	#	Successful times of LCP negotiation between the MS/LNS and the GGSN	Sum	hugactpb h, hugpbh
Received_inv_PPP_negotiation_pckts	hua_pppc_tab.ucylgbcklwb jrcerse4cxcjkngl	INTEGR	#	The number of invalid PPP negotiation packets sent to the GGSN by the MS/LNS	Sum	hugactpb h, hugpbh
Received_PPP_negotiation_packets	hua_pppc_tab.sjqr01bltuci ysyily6fcyv0p3	INTEGR	#	The number of PPP negotiation packets sent to the GGSN by the MS/LNS	Sum	hugactpb h, hugpbh
Transmitted_PPP_negotiation_packets	hua_pppc_tab.ykn6oyywk db1ncj4evmmchv2rq	INTEGR	#	The number of PPP negotiation packets sent to the MS/LNS by the GGSN	Sum	hugactpb h, hugpbh

### 6.3.24 GGSN.Huawei.GPRS.Prepay

Prepay service

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
CCR_Event_Request_Success	hua_m134221256_tab.tggo pl1lfw2ahc3ij02incnmdw	INTEGER	#	Obsolete from GGSN/V800R 006 C01B010:Number of CCR (Event) request successes	Sum	hugactpbh, hugbpbh
CCR_Event_Request	hua_m134221256_tab.tggo pkylfw2ahc3ij02incnmdw	INTEGER	#	Obsolete from GGSN/V800R 006 C01B010:Number of CCR (Event) requests	Sum	hugactpbh, hugbpbh
CCR_Initial_request_success	hua_m134221256_tab.tggo pkilfw2ahc3ij02incnmdw	INTEGER	#	Obsolete from GGSN/V800R 006 C01B010:Number of CCR (Initial) request successes	Sum	hugactpbh, hugbpbh
CCR_Initial_request	hua_m134221256_tab.tggo pkklfw2ahc3ij02incnmdw	INTEGER	#	Number of CCR (Initial) requests	Sum	hugactpbh, hugbpbh
CCR_Termination_request_success	hua_m134221256_tab.tggo pkqlfw2ahc3ij02incnmdw	INTEGER	#	Obsolete from GGSN/V800R 006 C01B010:Number of CCR (Termination) request successes	Sum	hugactpbh, hugbpbh
CCR_Termination_request	hua_m134221256_tab.tggo pkslfw2ahc3ij02incnmdw	INTEGER	#	Number of CCR	Sum	hugactpbh,

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				(Termination) requests			hugpbph
CCR_Update_request_success	hua_m134221256_tab.tggo_pkmlfw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R 006 C01B010:Number of CCR (Update) request successes	Sum		hugactpb h, hugpbph
CCR_Update_request	hua_m134221256_tab.tggo_pkolfw2ahc3ij02incnmdw	INTEGR	#	Number of CCR (Update) requests	Sum		hugactpb h, hugpbph
Deactive_user_number_because_of_OCS_fault	hua_m134221256_tab.uqg xp6yqqa2aidm2002uay2nv m	INTEGR	#	Deactive user number because of OCS fault	Sum		hugactpb h, hugpbph
Failover_resend_message	hua_m134221256_tab.uqg xp6wqqa2aidm2002uay2n vm	INTEGR	#	Failover resend message	Sum		hugactpb h, hugpbph
OCS_communication_fault	hua_m134221256_tab.tggo pjmlfw2ahc3ij02incnmdw	INTEGR	#	Number of OCS communication faults	Sum		hugactpb h, hugpbph
OCS_redirection	hua_m134221256_tab.tggo pjolfw2ahc3ij02incnmdw	INTEGR	#	Number of OCS redirection	Sum		hugactpb h, hugpbph
OCS_send_inactivation_request_success	hua_m134221256_tab.tggo pkwlfw2ahc3ij02incnmdw	INTEGR	#	Obsolete from GGSN/V800R 006 C01B010:Number of OCS inactivation request successes	Sum		hugactpb h, hugpbph
OCS_send_inactivation_request	hua_m134221256_tab.tggo pkulfw2ahc3ij02incnmdw	INTEGR	#	Number of OCS inactivation requests	Sum		hugactpb h, hugpbph
Prepay_users	hua_m134221256_tab.tggo	INTEG	#	Number of	Sum		hugactpb

	pk3lfw2ahc3ij02incnmdw	ER		prepaid users		h, hugpbph
Receive_ASR_message	hua_m134221256_tab.tggo pjylfw2ahc3ij02incnmdw	INTEG ER	#	Times of receiving ASR message	Sum	hugactpb h, hugpbph
Receive_CCA_message	hua_m134221256_tab.tggo pjslfw2ahc3ij02incnmdw	INTEG ER	#	Times of receiving CCA message	Sum	hugactpb h, hugpbph
Receive_packets_with_result_code_1	hua_m134221256_tab.tggo pk5lfw2ahc3ij02incnmdw	INTEG ER	Packet s	Number of received packets with result code 1	Sum	hugactpb h, hugpbph
Receive_packets_with_result_code_2	hua_m134221256_tab.tggo pkalfw2ahc3ij02incnmdw	INTEG ER	Packet s	Number of received packets with result code 2	Sum	hugactpb h, hugpbph
Receive_packets_with_result_code_3	hua_m134221256_tab.tggo pkclfw2ahc3ij02incnmdw	INTEG ER	Packet s	Number of received packets with result code 3	Sum	hugactpb h, hugpbph
Receive_packets_with_result_code_4	hua_m134221256_tab.tggo pkelfw2ahc3ij02incnmdw	INTEG ER	Packet s	Number of received packets with result code 4	Sum	hugactpb h, hugpbph
Receive_packets_with_result_code_5	hua_m134221256_tab.tggo pkglfw2ahc3ij02incnmdw	INTEG ER	Packet s	Number of received packets with result code 5	Sum	hugactpb h, hugpbph
Receive_RAR_message	hua_m134221256_tab.tggo pjulfw2ahc3ij02incnmdw	INTEG ER	#	Times of receiving RAR message	Sum	hugactpb h, hugpbph
Send ASA message	hua_m134221256_tab.tggo pk1lfw2ahc3ij02incnmdw	INTEG ER	#	Times of sending ASA message	Sum	hugactpb h, hugpbph
Send CCR message	hua_m134221256_tab.tggo	INTEG	#	Times of	Sum	hugactpb

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ssage	pjqlfw2ahc3ij02incnmdw	ER		sending CCR message		h, hugpbph
Send_RAA_message	hua_m134221256_tab.tggo pjwlfw2ahc3ij02incnmdw	INTEGR	#	Times of sending RAA message	Sum	hugactpb h, hugpbph

### 6.3.25 GGSN.Huawei.GPRS.SBR\_traffic

SRB uplink and downlink traffic in packets and Kbytes

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
SBR_downlink_traffic_dropped_in_KB	hua_m134221229_tab.tgg opaalfw2ahc3ij02incnmdw	INT8	Kb	SBR downlink traffic dropped in KB	Sum	hugactpb h, hugpbph
SBR_downlink_traffic_dropped_in_packets	hua_m134221229_tab.tgg opa5lfw2ahc3ij02incnmdw	INTEGR	Packet s	SBR downlink traffic dropped in packets	Sum	hugactpb h, hugpbph
SBR_downlink_traffic_in_KB	hua_m134221229_tab.tgg opa3lfw2ahc3ij02incnmdw	INT8	Kb	SBR downlink traffic in KB	Sum	hugactpb h, hugpbph
SBR_downlink_traffic_in_packets	hua_m134221229_tab.tgg opa1lfw2ahc3ij02incnmdw	INTEGR	Packet s	SBR downlink traffic in packets	Sum	hugactpb h, hugpbph
SBR_uplink_traffic_dropped_in_KB	hua_m134221229_tab.tgg op6ylfw2ahc3ij02incnmdw	INT8	Kb	SBR uplink traffic dropped in KB	Sum	hugactpb h, hugpbph
SBR_uplink_traffic_dropped_in_packets	hua_m134221229_tab.tgg op6wlfw2ahc3ij02incnmdw	INTEGR	Packet s	SBR uplink traffic dropped in packets	Sum	hugactpb h, hugpbph
SBR_uplink_traffic_in_KB	hua_m134221229_tab.tgg op6ulfw2ahc3ij02incnmdw	INT8	Kb	SBR uplink traffic in KB	Sum	hugactpb h, hugpbph
SBR_uplink_traffic_in_packets	hua_m134221229_tab.tgg op6slfw2ahc3ij02incnmdw	INTEGR	Packet s	SBR uplink traffic in packets	Sum	hugactpb h, hugpbph

### 6.3.26 GGSN.Huawei.GPRS.Signal\_message\_error\_cause

Signal message error cause measurement

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
IE_Duplicated	hua_signal_mess_err_tab.r needcrugc5vbmsbrq5buw 22n	INTEGER	#	Number of duplicated IEs	Sum	hugactpb h, hugbpbh
IE_Out_of_Order	hua_signal_mess_err_tab. uysrhfc13chwsqhajxfdney k5	INTEGER	#	Number of IEs out of order	Sum	hugactpb h, hugbpbh
IE_Uncorrected	hua_signal_mess_err_tab.s tsn0b011ncabbimiy2ivu2q 5c	INTEGER	#	Number of unexpected IEs	Sum	hugactpb h, hugbpbh
IE_Unknown	hua_signal_mess_err_tab. yqwkjtwwrscf3ducwy4s6r amlv	INTEGER	#	Number of unknown IEs	Sum	hugactpb h, hugbpbh
Mandatory_IE_Incorrect	hua_signal_mess_err_tab.t igrhyp034cjcs2fwfa06ml1 kh	INTEGER	#	Number of errors of mandatory IEs	Sum	hugactpb h, hugbpbh
Mandatory_IE_Missing	hua_signal_mess_err_tab. waxrub1osbc5jbrybvrifka q5	INTEGER	#	Number of loss of mandatory IEs	Sum	hugactpb h, hugbpbh
Message_Too_Short	hua_signal_mess_err_tab. xttirnp2ewbotd6udh1c3py ki5	INTEGER	#	Number of extra-shot messages that are received	Sum	hugactpb h, hugbpbh
Optional_IE_Incorrect	hua_signal_mess_err_tab.t t5u0iybjubstr4hnmc30or5u 4	INTEGER	#	Number of errors of optional IEs	Sum	hugactpb h, hugbpbh
Optional_IE_Invalid	hua_signal_mess_err_tab.t xlficxvdpcdrukb3siqshpg o	INTEGER	#	Number of invalidation of optional IEs	Sum	hugactpb h, hugbpbh
Packet_filters_	hua_signal_mess_err_tab.r	INTEGER	#	Number of	Sum	hugactpb

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with_semantic_errors	fulqpe5jkc2icaot6tboticdw	ER		semantic errors of packet filters		h, hugpbph
Packet_filters_with_syntactic_errors	hua_signal_mess_err_tab.tduvbssxxxcherd565jgeoumnq	INTEGR	#	Number of syntactic errors of packet filters	Sum	hugactpbh, hugpbph
PDP_context_without_TFT_a lready_exists	hua_signal_mess_err_tab.yrrehquduvcoquumcpCVE12k43	INTEGR	#	Number of PDP contexts without TFT that already exists	Sum	hugactpbh, hugpbph
TFTs_with_se mantic_errors	hua_signal_mess_err_tab.waeakajlmdcdbrdriajp2xb53x1b	INTEGR	#	Number of TFT semantic errors	Sum	hugactpbh, hugpbph
TFTs_with_sy naptic_errors	hua_signal_mess_err_tab.rnce10fnmncbicnwdx10fc30t	INTEGR	#	Number of TFT syntactic errors	Sum	hugactpbh, hugpbph
Unknown_Mes sage	hua_signal_mess_err_tab.yogoexgiu0cxduBakm42vaperl	INTEGR	#	Number of unknown messages that are received	Sum	hugactpbh, hugpbph
Version_Not_S upported	hua_signal_mess_err_tab.wwltqjjbqqbocc6jqr3ryrgssr	INTEGR	#	Number of packets that are not supported by the version	Sum	hugactpbh, hugpbph

### 6.3.27 GGSN.Huawei.GPRS.Transport

Transport performance measurement

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
%_Device_Downlink_transpo rt_success	hua_transport_tab.t44xmpf acvc53dglick0262kw5	FLOAT	%	Gn Downlink packets/Gi Downlink packets * 100%	Average	hugactpbh, hugpbph, Maximum, Minimum, Sum
%_Device_Upli	hua_transport_tab.v2da203 ooub6mufcwq6kg0sl25	FLOAT	%	Gi Uplink packets/Gn	Average	hugactpbh,

nk_transport_success				Uplink packets * 100%		hugpbph, Maximum, Minimum, Sum
Avg_packet_throughput	hua_transport_tab.usnxxbd rqbbfjdpysgw4w1dqve	FLOAT	#	Average forwarding rate of both Gn and Gi interfaces in statistics period	Average	hugactpbh, hugpbph, Maximum, Minimum, Sum
Background_class_background_discarded_GTP_data_packets	hua_transport_tab.tkqotquuhabjgryrp0n00jihs0	INTEGR	Packet s	Number of discarded GTP packets of Background class	Sum	hugactpbh, hugpbph
Conversational_class_conversation_discarded_GTP_data_packets	hua_transport_tab.sb04l4yca2ck6bcnosml53wctu	INTEGR	Packet s	Number of discarded GTP packets of Conversational class	Sum	hugactpbh, hugpbph
Downlink_in_MB	{Gn_Downlink_in_MB} + {Gi_Downlink_in_MB}	INT8	Mbytes	Downlink forwarding bytes on Gn and Gi interfaces in statistics period	Sum	hugactpbh, hugpbph
Gi_downlink_Average_Packet_Throughput	hua_transport_tab.sg4m2k16jhc2asxrsgj3tsbitk	FLOAT	Packet s/s	Average Gi downlink packet forwarding rate during a period	Average	hugactpbh, hugpbph, Maximum, Minimum, Sum
Gi_downlink_Average_Throughput	hua_transport_tab.rx4ogb4mp4cylt13q0nmanemxr	FLOAT	Mbps	Average Gi downlink byte	Average	hugactpbh,

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hput_in_MB				forwarding rate during a period		hugpbph, Maximum, Minimum, Sum
Gi_downlink_error_L2TP_packets	hua_transport_tab.ukwxvh1ywpc2iex5tyvgfwcmhy	INTEGR	Packet s	Number of downlink erroneous L2TP packets over the Gi interface	Sum	hugactpb h, hugpbph
Gi_Downlink_in_MB	hua_transport_tab.tqxrlen2p2bnvrrpmy6tiiigt2	INT8	Mbytes	Downlink forwarding bytes on Gi interface in statistics period	Sum	hugactpb h, hugpbph
Gi_downlink_L2TP_packet_in_MB	hua_transport_tab.rtbkbmijkqcwyepo5cw5wcwq0j	INTEGR	Mbytes	Megabytes of downlink L2TP packets over the Gi interface	Sum	hugactpb h, hugpbph
Gi_downlink_L2TP_packets	hua_transport_tab.vdhhq4ojfnb55uwgbnmd0i3n04	INTEGR	Packet s	Number of downlink L2TP packets over the Gi interface	Sum	hugactpb h, hugpbph
Gi_Downlink_packets	hua_transport_tab.tj6l1drl6bcy1d4wlvmtv6jpvc	INTEGR	Packet s	Downlink forwarding packets on Gi interface in statistics period	Sum	hugactpb h, hugpbph
Gi_downlink_Peak_Packet_Throughput	hua_transport_tab.u531b5k51kcovds5ncrs4uijq0	FLOAT	Packet s/s	Peak Gi downlink packet forwarding rate during a period	Average	hugactpb h, hugpbph, Maximum, Minimum, Sum
Gi_downlink_peak_throughput_in_KB	hua_transport_tab.tggop6mlfw2ahc3ij02incnmdw	FLOAT	Kb/s	Peak Gi downlink byte forwarding rate	Average	hugactpb h, hugpbph,

					during a period		Maximum, Minimum, Sum
Gi_downlink_Peak_Throughput_in_MB	hua_transport_tab.ygs1q1b kyscinvhxgtbbdv6xx	FLOAT	Mbps	Peak Gi downlink byte forwarding rate during a period	Average	hugactpbh, hugbpbh, Maximum, Minimum, Sum	
Gi_downlink_traffic_in_KB	hua_transport_tab.tggop6e lfw2ahc3ij02incnmdw	INT8	Kb	Downlink forwarding bytes on Gi interface in the statistical period	Sum	hugactpbh, hugbpbh	
Gi_IP_data_packets_discarded_for_error	hua_transport_tab.tggop5y lfw2ahc3ij02incnmdw	INTEGR	Packet s	The number of the IP data packets that is discard on the Gi interface due to error	Sum	hugactpbh, hugbpbh	
Gi_Peak_Packet_Throughput	hua_transport_tab.sbvna0x 411c6udfmqsmtppbbhwr	INTEGR	Packet s	Maximum packet forwarding rate on Gi interface in statistics period	Average	hugactpbh, hugbpbh, Maximum, Minimum, Sum	
Gi_peak_throughput_in_KB	hua_transport_tab.tggop63 lfw2ahc3ij02incnmdw	FLOAT	Kb/s	The maximum byte forwarding rate on Gi interface in the statistical period	Average	hugactpbh, hugbpbh, Maximum, Minimum, Sum	

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Gi_Peak_Throughput_in_MB	hua_transport_tab.rt33ryl51jbmprnh2t0r3ny0fn	INT8	Mbytes	Maximum byte forwarding rate on Gi interface in statistics period	Average	hugactpbh, hugbpbh, Maximum, Minimum, Sum
Gi_Uplink_Average_Packet_Throughput	hua_transport_tab.rae3k35tw1cx fuug0vsc5qv k1s	FLOAT	Packet s/s	Average Gi uplink packet forwarding rate during a period	Average	hugactpbh, hugbpbh, Maximum, Minimum, Sum
Gi_Uplink_Average_Throughput_in_MB	hua_transport_tab.xlvxr uiowmc2fdvbd2jckia0rw	FLOAT	Mbps	Average Gi uplink byte forwarding rate during a period	Average	hugactpbh, hugbpbh, Maximum, Minimum, Sum
Gi_Uplink_in_MB	hua_transport_tab.uchpyic a1fb0ir6yq22361a atc	INT8	Mbytes	Uplink forwarding bytes on Gi interface in statistics period	Sum	hugactpbh, hugbpbh
Gi_uplink_L2TP_packet_in_MB	hua_transport_tab.yhxf5t0j phb14tf tao4qsi ov rh	INTEGR	Mbytes	Megabytes of uplink L2TP packets over the Gi interface	Sum	hugactpbh, hugbpbh
Gi_uplink_L2TP_packets	hua_transport_tab.t6oi2ld11cbsjrsk6daurjq qjp	INTEGR	Packet s	Number of uplink L2TP packets over the Gi interface	Sum	hugactpbh, hugbpbh
Gi_Uplink_packets	hua_transport_tab.wncsbps h6scc2bix0l6btuhw rp	INTEGR	Packet s	Uplink forwarding packets on Gi interface in statistics period	Sum	hugactpbh, hugbpbh
Gi_Uplink_Peak_Packet_Thro	hua_transport_tab.rmjklud ug3bcadqpf6ckohwair	FLOAT	Packet s/s	Peak Gi uplink packet	Average	hugactpbh,

ughput					forwarding rate during a period		hugbpbh, Maximum, Minimum, Sum
Gi_uplink_peak_throughput_in_KB	hua_transport_tab.tggop6il fw2ahc3ij02incnmdw	FLOAT	Kb/s		Peak Gi uplink byte forwarding rate during a period	Average	hugactpbh, hugbpbh, Maximum, Minimum, Sum
Gi_Uplink_Peak_Throughput_in_MB	hua_transport_tab.yml1cpf 0xobneb4qnayhrk4wmh	FLOAT	Mbps		Peak Gi uplink byte forwarding rate during a period	Average	hugactpbh, hugbpbh, Maximum, Minimum, Sum
Gi_uplink_traffic_in_KB	hua_transport_tab.tggop6c lfw2ahc3ij02incnmdw	INT8	Kb		Uplink forwarding bytes on Gi interface in the statistical period	Sum	hugactpbh, hugbpbh
Gn_downlink_Average_Packet_Throughput	hua_transport_tab.swmvdi ny2hcqrs36psyte0jliu	FLOAT	Packet s/s		Average Gn downlink packet forwarding rate during a period	Average	hugactpbh, hugbpbh, Maximum, Minimum, Sum
Gn_downlink_Average_Throughput_in_MB	hua_transport_tab.yuhrerq povb0dt4mylywpa0oft	FLOAT	Mbps		Average Gn downlink byte forwarding rate during a period	Average	hugactpbh, hugbpbh, Maximum, Minimum

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						m, Sum
Gn_Downlink_in_MB	hua_transport_tab.v3wgwm0iqdcm0c3k1fqety5kjq	INT8	Mbytes	Downlink forwarding bytes on Gn interface in statistics period	Sum	hugactpbh, hugbpbh
Gn_Downlink_packets	hua_transport_tab.v1nnntfi6jcoutpbqkvmqoslk	INTEGR	Packet s	Downlink forwarding packets on Gn interface in statistics period	Sum	hugactpbh, hugbpbh
Gn_downlink_Peak_Packet_Throughput	hua_transport_tab.ycomit0mp4cftukit5pyx3pqhj	FLOAT	Packet s/s	Peak Gn downlink packet forwarding rate during a period	Average	hugactpbh, hugbpbh, Maximum, Minimum, Sum
Gn_downlink_peak_throughput_in_KB	hua_transport_tab.tggop6klfw2ahc3ij02incnmdw	FLOAT	Kb/s	Peak Gn downlink byte forwarding rate during a period	Average	hugactpbh, hugbpbh, Maximum, Minimum, Sum
Gn_downlink_Peak_Throughput_in_MB	hua_transport_tab.wjo1cyskeicgwbm204x2eqjs2l	FLOAT	Mbps	Peak Gn downlink byte forwarding rate during a period	Average	hugactpbh, hugbpbh, Maximum, Minimum, Sum
Gn_downlink_PPP_packet_in_MB	hua_transport_tab.sea0nnfy22bpteui0bexwiklo5	INTEGR	Mbytes	Megabytes of downlink PPP packets over the Gn interface	Sum	hugactpbh, hugbpbh
Gn_downlink_PPP_packets	hua_transport_tab.ty6l1fgue6cdcbu0dsb6p2hbdf	INTEGR	Packet s	The number of downlink PPP packets over the Gn	Sum	hugactpbh, hugbpbh

				interface		
Gn_downlink_traffic_in_KB	hua_transport_tab.tggop6a lfw2ahc3ij02incnmdw	INT8	Kb	Downlink forwarding bytes on Gn interface in the statistical period	Sum	hugactpb h, hugbpbh
Gn_Peak_Packet_Throughput	hua_transport_tab.vu3mxn tdedbhtt1ij1sjyp2m5m	INTEGR	Packet s	Maximum packet forwarding rate on Gn interface in statistics period	Average	hugactpb h, hugbpbh, Maximum, Minimum, Sum
Gn_peak_throughput_in_KB	hua_transport_tab.tggop61 lfw2ahc3ij02incnmdw	FLOAT	Kb/s	The maximum byte forwarding rate on Gn interface in the statistical period	Average	hugactpb h, hugbpbh, Maximum, Minimum, Sum
Gn_Peak_Throughput_in_MB	hua_transport_tab.sbvatem ljucgtdae300ts314o3	INT8	Mbytes	Maximum byte forwarding rate on Gn interface in statistics period	Average	hugactpb h, hugbpbh, Maximum, Minimum, Sum
Gn_Uplink_Average_Packet_Throughput	hua_transport_tab.svhwrjb 0smcsat1lmneptkkfx1	FLOAT	Packet s/s	Average Gn uplink packet forwarding rate during a period	Average	hugactpb h, hugbpbh, Maximum, Minimum, Sum
Gn_Uplink_Average_Through	hua_transport_tab.t21jgqk oxycpvequmqjkt6xsjp	FLOAT	Mbps	Average Gn uplink byte	Average	hugactpb h,

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put_in_MB				forwarding rate during a period		hugpbhb, Maximum, Minimum, Sum
Gn_uplink_error_PPP_packets	hua_transport_tab.selxkqbchfcxtetxodu1c6i1a	INTEGR	Packet s	Number of uplink erroneous PPP packets over the Gn interface	Sum	hugactpb h, hugpbhb
Gn_Uplink_in_MB	hua_transport_tab.v2i0tic3cnbpmdqoex6so5xmpt	INT8	Mbytes	Uplink forwarding bytes on Gn interface in statistics period	Sum	hugactpb h, hugpbhb
Gn_Uplink_packets	hua_transport_tab.wi6vu62wkgckcbdpmujhfhqrl	INTEGR	Packet s	Uplink forwarding packets on Gn interface in statistics period	Sum	hugactpb h, hugpbhb
Gn_Uplink_Peak_Packet_Throughput	hua_transport_tab.rbet6t6tl1csyblq2df0ee5wno	FLOAT	Packet s/s	Peak Gn uplink packet forwarding rate during a period	Average	hugactpb h, hugpbhb, Maximum, Minimum, Sum
Gn_uplink_peak_throughput_in_KB	hua_transport_tab.tggop6glfw2ahc3ij02incnmdw	FLOAT	Kb/s	Peak Gn uplink byte forwarding rate during a period	Average	hugactpb h, hugpbhb, Maximum, Minimum, Sum
Gn_Uplink_Peak_Throughput_in_MB	hua_transport_tab.w2ppb2rujdc5mbtvxqafetymtg	FLOAT	Mbps	Peak Gn uplink byte forwarding rate during a period	Average	hugactpb h, hugpbhb, Maximum, Minimum, Sum

Gn_uplink_PPP_packet_in_MB	hua_transport_tab.tfljg6xmo5cocepcnhuafsjufx	INTEGRER	Mbytes	Megabytes of uplink PPP packets over the Gn interface	Sum	hugactpbh, hugbpbh
Gn_uplink_PPP_packets	hua_transport_tab.w1m4vxwrctbi4sydyb1qiyfdda	INTEGRER	Packet s	Number of uplink PPP packets over the Gn interface	Sum	hugactpbh, hugbpbh
Gn_uplink_traffic_in_KB	hua_transport_tab.tggop65lfw2ahc3ij02incnmdw	INT8	Kb	Uplink forwarding bytes on Gn interface in the statistical period	Sum	hugactpbh, hugbpbh
Interactive_classes_interactive_discarded_GTP_data_packets	hua_transport_tab.xv2wsxe cfqcouewybejnhusxlo	INTEGRER	Packet s	Number of discarded GTP packets of Interactive class	Sum	hugactpbh, hugbpbh
Packet_Numer s_of_Layer_7_Parsing	hua_transport_tab.tggop60lfw2ahc3ij02incnmdw	INT8	Packet s	Number of packets of Layer 7 parsing in each measurement period.	Sum	hugactpbh, hugbpbh
Packets_exceed _1500_bytes	hua_transport_tab.xfx2lf4x4bbpxt6c4e2gtsm0rx	INTEGRER	Packet s	Downlink forwarding packets exceed 1500 bytes on Gi interface in statistics period	Sum	hugactpbh, hugbpbh
Peak_Packet_N umbers_of_Lay er_7_Parsing	hua_transport_tab.tggop6qlfw2ahc3ij02incnmdw	FLOAT	Packet s/s	Peak packets of Layer 7 parsing in each measurement	Average	hugactpbh, hugbpbh, Maximu

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				period.		m, Minimu m, Sum
Peak_packet_throughput	hua_transport_tab.rcvtqcj1rlc3lc0mdmjymf6d0n	INTEGR	#	Maximum value of forwarding rate of both Gn and Gi interfaces in statistics period	Average	hugactpbh, hugbpbh, Maximu m, Minimu m, Sum
Streaming_classes_streaming_discarded_GTP_data_packets	hua_transport_tab.t1v033jbvxcf1e231p4kbrl3o4	INTEGR	Packet s	Number of discarded GTP packets of Streaming class	Sum	hugactpbh, hugbpbh
Total_Gn_Gi_packets	hua_transport_tab.yigrh6brdycbdckixaoud2fj	INT8	Packet s	Uplink and Downlink packets on Gn and Gi interface in statistics period	Sum	hugactpbh, hugbpbh
Unexpected_G_PDU_messages	hua_transport_tab.wobn4u3oaobekcvefvldf3ucm3	INTEGR	Packet s	Unexpected uplink GPDUs messages on Gn	Sum	hugactpbh, hugbpbh
Uplink_and_Downlink_in_MB	{Gn_Uplink_in_MB} + {Gi_Uplink_in_MB} + {Gn_Downlink_in_MB} + {Gi_Downlink_in_MB}	INT8	Mbytes	Uplink and Downlink bytes on Gn and Gi interface in statistics period	Sum	hugactpbh, hugbpbh
Uplink_in_MB	{Gn_Uplink_in_MB} + {Gi_Uplink_in_MB}	INT8	Mbytes	Uplink forwarding bytes on Gn and Gi interfaces in statistics period	Sum	hugactpbh, hugbpbh

### 6.3.28 GGSN.Huawei.GPRS.Tunnels

Tunnels measurement

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
number_of_attempts_of_IPSec_tunnel_establishments	hua_m134221700_tab.uqgxpa5qqa2aidm2002uay2nvm	INTEGRER	#	number of attempts of IPSec tunnel establishments	Sum	hugactpbh, hugbpbh
number_of_IKE_tunnels	hua_m134221700_tab.uqgxpa1qqa2aidm2002uay2nvm	INTEGRER	#	number of IKE tunnels	Sum	hugactpbh, hugbpbh
number_of_IPSec_tunnels	hua_m134221700_tab.uqgxpa3qqa2aidm2002uay2nvm	INTEGRER	#	number of IPSec tunnels	Sum	hugactpbh, hugbpbh
number_of_successful_IPSec_tunnel_establishments	hua_m134221700_tab.uqgxpaqqqa2aidm2002uay2nvm	INTEGRER	#	number of successful IPSec tunnel establishments	Sum	hugactpbh, hugbpbh

### 6.3.29 GGSN.Huawei.GPRS.Users\_number

Number of subscribers with PDP context

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
Average_subscribers_with_act_PDP_context	hua_m134221251_tab.tggopg5lfw2ahc3ij02incnmdw	FLOAT	#	Average number of subscribers with PDP context	Average	hugactpbh, hugbpbh, Maximum, Minimum, Sum
Maximum_subscribers_with_act_PDP_context	hua_m134221251_tab.tggopgalfw2ahc3ij02incnmdw	INTEGRER	#	Maximum number of subscribers with PDP context	Average	hugactpbh, hugbpbh, Maximum,

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						Minimum, Sum
Subscribers_with_PDP_Context	hua_m134221251_tab.tgg opg3lwf2ahc3ij02incnmdw	INTEGER	#	Number of subscribers with PDP context	Sum	hugactpbh, hugbpbh

## 6.4 GGSN\_Board Performance Indicators

- [GGSN\\_Board.Huawei.GPRS.Flow\\_nodes](#)
- [GGSN\\_Board.Huawei.GPRS.System\\_resource](#)

### 6.4.1 GGSN\_Board.Huawei.GPRS.Flow\_nodes

\*\*Obsolete in GGSN/V800R006 C02. Flow node created, used and aged.

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
Average_Value_of_Flow_Nodes_Used	hua_m134221261_tab.tgg oppqlfw2ahc3ij02incnmdw	FLOAT	#	Obsolete from GGSN/V800R006 C01B010:Average value of flow nodes used in each measurement period.	Average	hugactpbh, hugbpbh, Maximum, Minimum, Sum
Current_Value_of_Flow_Nodes_Used	hua_m134221261_tab.tgg oppolfw2ahc3ij02incnmdw	INTEGER	#	Obsolete from GGSN/V800R006 C01B010:Number of currently used flow nodes in each measurement period.	Sum	hugactpbh, hugbpbh
Flow_Nodes_Numbers_Aged	hua_m134221261_tab.tgg oppilfw2ahc3ij02incnmdw	INTEGER	#	Obsolete from GGSN/V800R006 C01B010:Number of aged flow	Sum	hugactpbh, hugbpbh

				nodes in each measurement period.		
Flow_Nodes_Numbers_Created	hua_m134221261_tab.tgg oppklfw2ahc3ij02incnmdw	INTEGRER	#	Obsolete from GGSN/V800R0 06 C01B010:Number of increased flow nodes in each measurement period.	Sum	hugactpbh, hugbpbh
Peak_Value_of_Flow_Nodes_Aged	hua_m134221261_tab.tgg oppmlfw2ahc3ij02incnmdw	INTEGRER	#	Obsolete from GGSN/V800R0 06 C01B010:Peak value of aged flow nodes in each measurement period.	Average	hugactpbh, hugbpbh, Maximum, Minimum, Sum
Peak_Value_of_Flow_Nodes_Created	hua_m134221261_tab.tgg oppklfw2ahc3ij02incnmdw	INTEGRER	#	Obsolete from GGSN/V800R0 06 C01B010:Peak value of increased flow nodes in each measurement period.	Average	hugactpbh, hugbpbh, Maximum, Minimum, Sum
Peak_Value_of_Flow_Nodes_Used	hua_m134221261_tab.tgg oppslfw2ahc3ij02incnmdw	INTEGRER	#	Obsolete from GGSN/V800R0 06 C01B010:Peak value of flow nodes used in each measurement	Average	hugactpbh, hugbpbh, Maximum, Minimum, Sum

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				period.	
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#### 6.4.2 GGSN\_Board.Huawei.GPRS.System\_resource

System resource measurement

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
Avg_CPU_occu pation_ratio	hua_system_resource_tab. xwuu12ys3ecldc15hkvfynu 2js	FLOAT	%	Obsolete from GGSN/V800R0 06 C01B010:Perfo rm the statistics of the average value of the board CPU occupation in a period	Average	hugactpb h, hugbpbh, Maximu m, Minimu m, Sum
Avg_harddisk_ utilization_ratio	hua_system_resource_tab. wj50i0gd0wcf0t34iarl3rht w6	FLOAT	%	Average hard disk utilization ratio during a period	Average	hugactpb h, hugbpbh, Maximu m, Minimu m, Sum
Avg_memory_u tilization_ratio	hua_system_resource_tab. r2qoofj4g5c50sllsgdvqwu ook	FLOAT	%	Obsolete from GGSN/V800R0 06 C01B010:Perfo rm the statistics of the average value of the board memory occupation in a period	Average	hugactpb h, hugbpbh, Maximu m, Minimu m, Sum
CDR_hard_disk _usage	hua_system_resource_tab.t xigoxco152aidm0r02uay2 nvm	FLOAT	%	CDR hard disk usage	Average	hugactpb h, hugbpbh, Maximu m, Minimu m, Sum

Peak_CPU_occupation_ratio	hua_system_resource_tab. wteouc62pjbuwuef1vwnqp mllc	FLOAT	%	Obsolete from GGSN/V800R0 06 C01B010:Peak CPU occupation ratio of a board during a period	Average	hugactpbh, hugbpbh, Maximum, Minimum, Sum
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## 6.5 GPRS\_Tunnel Performance Indicators

- [GPRS\\_Tunnel.Huawei.GPRS.Tunnels](#)

### 6.5.1 GPRS\_Tunnel.Huawei.GPRS.Tunnels

GGSN tunnel measurement

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
number_of_attempts_of_IPSec_tunnel_establishments_TUNNEL	hua_m134221701_tab.ykf qocyqqr2aidm2002uay2nvm	INTEGER	#	number of attempts of IPSec tunnel establishments(TUNNEL)	Sum	hugactpbh, hugbpbh
number_of_IKE_tunnels_TUNNEL	hua_m134221701_tab.ykf qocuqqr2aidm2002uay2nvm	INTEGER	#	number of IKE tunnels(TUNNEL)	Sum	hugactpbh, hugbpbh
number_of_IPSec_tunnels_TUNNEL	hua_m134221701_tab.ykf qocwqqr2aidm2002uay2nvm	INTEGER	#	number of IPSec tunnels(TUNNEL)	Sum	hugactpbh, hugbpbh
number_of_successful_IPSec_tunnel_establishments_TUNNEL	hua_m134221701_tab.ykf qod1qqr2aidm2002uay2nvm	INTEGER	#	number of successful IPSec tunnel establishments(TUNNEL)	Sum	hugactpbh, hugbpbh

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## 6.6 HPLMN Performance Indicators

- [HPLMN.Huawei.GPRS.HPLMN\\_session](#)

### 6.6.1 HPLMN.Huawei.GPRS.HPLMN\_session

HPLMN session measurement

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
Down_Kbytes	hua_hplmn_session_tab.tg goprifw2ahc3ij02incnmd w	INT8	Kb	Downstream KB based	Sum	
HPLMN_active_PDP_context	hua_hplmn_session_tab.xg kvqaomwvb2huy0kpvla4k 3ln	INTEGER	#	Number of PDP contexts that are currently activated based on HPLMN	Average	Maximum, Minimum, Sum
HPLMN_GGSN_PDP_context_deactivate_request	hua_hplmn_session_tab.td 4a03l030cfndd3gumbmulhoc	INTEGER	#	Number of PDP context deactivation requests initiated by the GGSN and based on HPLMN	Sum	
HPLMN_GGSN_PDP_context_deactivate_success	hua_hplmn_session_tab.xd 6gbaaq36cqysno4jj2tm2i1k	INTEGER	#	Number of successful PDP context deactivation initiated by the GGSN and based on HPLMN	Sum	
HPLMN_MS_PDP_context_deactivate_request	hua_hplmn_session_tab.vq rcfouchmcwdcuh5tmhq2d6n1	INTEGER	#	Number of PDP context deactivation requests initiated by MS and based on HPLMN	Sum	

HPLMN_MS_PDP_context_deactivate_success	hua_hplmn_session_tab.sp ye406oglcudterjn143qsjxt	INTEGR	#	Number of successful PDP context deactivation initiated by MS and based on HPLMN	Sum	
HPLMN_PDP_context_activate_failure	hua_hplmn_session_tab.t2 mssqkwqob1xt6d5ga14do5sc	INTEGR	#	Number of failed PDP context activation initiated by MS and based on HPLMN	Sum	
HPLMN_PDP_context_activate_request	hua_hplmn_session_tab.y1 yn1vdsqxbe4tobtsy6noqk4t	INTEGR	#	Number of PDP context activation requests initiated by MS and based on HPLMN	Sum	
HPLMN_PDP_context_activate_success	hua_hplmn_session_tab.yq plqtkqjvbwlkkd5ixsxuj4w	INTEGR	#	Number of successful PDP context activation initiated by MS and based on HPLMN	Sum	
Uplink_Kbytes	hua_hplmn_session_tab.tg goprglfw2ahc3ij02incnmdw	INT8	Kb	Upstream KB based	Sum	

## 6.7 IMSI Performance Indicators

- [IMSI.Huawei.GPRS.User\\_bill](#)

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### 6.7.1 IMSI.Huawei.GPRS.User\_bill

User bill measurement

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
%_CDRs_create_success	100 * {CDRs_create_success}/({CDRs_create_success} + {CDRs_create_fault})	FLOAT	%	Perform the statistics about the specific users bills which are created successfully	Average	
CDRs_create_fault	hua_user_bill_tab.tl26dwt pccbxdhlyhohsdpmge	INTEGER	#	Perform the statistics about the specific users bills which are created unsuccessfully	Sum	
CDRs_create_success	hua_user_bill_tab.v02vdx ukf5bkvb5mcpkeh0vglik	INTEGER	#	Perform the statistics about the specific users bills which are created successfully	Sum	

## 6.8 PCRF Performance Indicators

- [PCRF.Huawei.GPRS.Gx\\_interface\\_performance\\_PCRF](#)
- [PCRF.Huawei.GPRS.PCC\\_Session\\_PCRF](#)

### 6.8.1 PCRF.Huawei.GPRS.Gx\_interface\_performance\_PCRF

Gx interface performance on PCRF

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators

PCC_Received _ASR_Messages_PCRF	hua_pcrf_gx_tab.uqgxp3yq qa2aidm2002uay2nvm	INTEGRER	#	PCC Received ASR Messages (PCRF)	Sum	
PCC_Received _CCAI_Messages_PCRF	hua_pcrf_gx_tab.uqgxp3kq qa2aidm2002uay2nvm	INTEGRER	#	PCC Received CCA-I Messages (PCRF)	Sum	
PCC_Received _CCAT_Message_PCRF	hua_pcrf_gx_tab.uqgxp3sq qa2aidm2002uay2nvm	INTEGRER	#	PCC Received CCA-T Message (PCRF)	Sum	
PCC_Received _CCAU_Messages_PCRF	hua_pcrf_gx_tab.uqgxp3oq qa2aidm2002uay2nvm	INTEGRER	#	PCC Received CCA-U Messages (PCRF)	Sum	
PCC_Received _Messages_PCRF	hua_pcrf_gx_tab.uqgxp3gq qa2aidm2002uay2nvm	INTEGRER	#	PCC Received Messages (PCRF)	Sum	
PCC_Received _RAR_Messages_PCRF	hua_pcrf_gx_tab.uqgxp3uq qa2aidm2002uay2nvm	INTEGRER	#	PCC Received RAR Messages (PCRF)	Sum	
PCC_Sent_AS A_Messages_P CRF	hua_pcrf_gx_tab.uqgxp41q qa2aidm2002uay2nvm	INTEGRER	#	PCC Sent ASA Messages (PCRF)	Sum	
PCC_Sent_CC RI_Messages_P CRF	hua_pcrf_gx_tab.uqgxp3iq qa2aidm2002uay2nvm	INTEGRER	#	PCC Sent CCR-I Messages (PCRF)	Sum	
PCC_Sent_CC RT_Messages_P CRF	hua_pcrf_gx_tab.uqgxp3qq qa2aidm2002uay2nvm	INTEGRER	#	PCC Sent CCR-T Messages (PCRF)	Sum	
PCC_Sent_CC RU_Messages_P CRF	hua_pcrf_gx_tab.uqgxp3m qqa2aidm2002uay2nvm	INTEGRER	#	PCC Sent CCR-U Messages	Sum	

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				(PCRF)		
PCC_Sent_Messages_PCRF	hua_pcif_gx_tab.uqgxp3eq qa2aidm2002uay2nvm	INTEGR	#	PCC Sent Messages (PCRF)	Sum	
PCC_Sent_RA A_Messages_PCRF	hua_pcif_gx_tab.uqgxp3w qqa2aidm2002uay2nvm	INTEGR	#	PCC Sent RAA Messages (PCRF)	Sum	

### 6.8.2 PCRF.Huawei.GPRS.PCC\_Session\_PCRF

Policy and Charging Control (PCC) session on PCRF

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
Activated_PDP_Contexts_With_PCC_Enabled_PCRF	hua_pcif_pcc_tab.uqgxp4e qqa2aidm2002uay2nvm	INTEGR	#	Activated PDP Contexts With PCC Enabled (PCRF)	Sum	
Activated_PDP_Sessions_With_PCC_Enabled_PCRF	hua_pcif_pcc_tab.uqgxp4a qqa2aidm2002uay2nvm	INTEGR	#	Activated PDP Sessions With PCC Enabled (PCRF)	Sum	
Deactivated_PDP_Contexts_With_PCC_Enabled_PCRF	hua_pcif_pcc_tab.uqgxp4g qqa2aidm2002uay2nvm	INTEGR	#	Deactivated PDP Contexts With PCC Enabled (PCRF)	Sum	
Deactivated_PDP_Sessions_With_PCC_Enabled_PCRF	hua_pcif_pcc_tab.uqgxp4c qqa2aidm2002uay2nvm	INTEGR	#	Deactivated PDP Sessions with PCC Enabled (PCRF)	Sum	

## 6.9 Physical\_Port Performance Indicators

- [Physical\\_Port.Huawei.GPRS.Physical\\_port](#)

### 6.9.1 Physical\_Port.Huawei.GPRS.Physical\_port

Physical port measurement

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
Physical_Port_traffic_receive_d_PORT	hua_physical_port_tab.uqgxp43qqa2aidm2002uay2nvm	INTEGER	#	Physical Port traffic received in MB(PORT)	Sum	hugactpbh, hugbpbh
Physical_Port_traffic_sent_PORT	hua_physical_port_tab.uqgxp45qqa2aidm2002uay2nvm	INTEGER	#	Physical Port traffic sent in MB(PORT)	Sum	hugactpbh, hugbpbh

## 6.10 Processor Performance Indicators

- [Processor.Huawei.GPRS.Service\\_resources](#)
- [Processor.Huawei.GPRS.System\\_resources](#)

### 6.10.1 Processor.Huawei.GPRS.Service\_resources

Service resources measurement

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
Average_Value_of_Five_Items_Used	hua_proc_srvc_tab.txigovk0152aidm0r02uay2nvm	FLOAT	#	Average Value of Five Items Used	Average	hupcbh, Sum, Minimum, Maximum
Average_value_of_rating_group_nodes_used	hua_proc_srvc_tab.txigowco152aidm0r02uay2nvm	FLOAT	#	Average value of rating group nodes used	Average	hupcbh, Sum, Minimum, Maximum
Current_Value_of_Five_Item	hua_proc_srvc_tab.txigovi0152aidm0r02uay2nvm	FLOAT	#	Current Value of Five Items	Average	hupcbh, Sum,

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s_Used				Used		Minimu m, Maximu m
Current_value_of_rating_group_nodes_used	hua_proc_srvc_tab.txigowa0152aidm0r02uay2nvm	FLOAT	#	Current value of rating group nodes used	Average	hupcbh, Sum, Minimu m, Maximu m
DNS_used_five_items_node_number	hua_proc_srvc_tab.txigowgo152aidm0r02uay2nvm	INTEGR	#	DNS used five items node number	Sum	hupcbh
Five_Items_Numbers_Aged	hua_proc_srvc_tab.txigovco152aidm0r02uay2nvm	INTEGR	#	Five Items Numbers Aged	Sum	hupcbh
Five_Items_Numbers_Created	hua_proc_srvc_tab.txigova0152aidm0r02uay2nvm	INTEGR	#	Five Items Numbers Created	Sum	hupcbh
FTP_used_five_items_node_number	hua_proc_srvc_tab.txigovo152aidm0r02uay2nvm	INTEGR	#	FTP used five items node number	Sum	hupcbh
HTTP_used_five_items_node_number	hua_proc_srvc_tab.txigovo152aidm0r02uay2nvm	INTEGR	#	HTTP used five items node number	Sum	hupcbh
IM_used_five_items_node_number	hua_proc_srvc_tab.txigowo152aidm0r02uay2nvm	INTEGR	#	IM used five items node number	Sum	hupcbh
IMAP_used_five_items_node_number	hua_proc_srvc_tab.txigomo152aidm0r02uay2nvm	INTEGR	#	IMAP used five items node number	Sum	hupcbh
MMSP_used_five_items_node_number	hua_proc_srvc_tab.txigowqo152aidm0r02uay2nvm	INTEGR	#	MMSP used five items node number	Sum	hupcbh
P2P_used_five_items_node_number	hua_proc_srvc_tab.txigows0152aidm0r02uay2nvm	INTEGR	#	P2P used five items node number	Sum	hupcbh
Peak_Value_of_Five_Items_Aged	hua_proc_srvc_tab.txigovgo152aidm0r02uay2nvm	FLOAT	#	Peak Value of Five Items Aged	Average	hupcbh, Sum, Minimu m

						m, Maximum
Peak_Value_of_Five_Items_Created	hua_proc_srvc_tab.txigovo152aidm0r02uay2nvm	FLOAT	#	Peak Value of Five Items Created	Average	hupcbh, Sum, Minimum, Maximum
Peak_Value_of_Five_Items_Used	hua_proc_srvc_tab.txigovo152aidm0r02uay2nvm	FLOAT	#	Peak Value of Five Items Used	Average	hupcbh, Sum, Minimum, Maximum
Peak_Value_of_rating_group_nodes_aged	hua_proc_srvc_tab.txigow5o152aidm0r02uay2nvm	FLOAT	#	Peak Value of rating group nodes aged	Average	hupcbh, Sum, Minimum, Maximum
Peak_value_of_rating_group_nodes_created	hua_proc_srvc_tab.txigow3o152aidm0r02uay2nvm	FLOAT	#	Peak value of rating group nodes created	Average	hupcbh, Sum, Minimum, Maximum
Peak_value_of_rating_group_nodes_used	hua_proc_srvc_tab.txigoweo152aidm0r02uay2nvm	FLOAT	#	Peak value of rating group nodes used	Average	hupcbh, Sum, Minimum, Maximum
POP3_used_five_items_node_number	hua_proc_srvc_tab.txigowko152aidm0r02uay2nvm	INTEGR	#	POP3 used five items node number	Sum	hupcbh

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Rating_group_nodes_number_s_aged	hua_proc_srvc_tab.txigow1o152aidm0r02uay2nvm	INTEGRER	#	Rating group nodes Numbers aged	Sum	hupcbh
Rating_group_nodes_number_s_created	hua_proc_srvc_tab.txigovyo152aidm0r02uay2nvm	INTEGRER	#	Rating group nodes numbers created	Sum	hupcbh
RTSP_used_five_items_node_number	hua_proc_srvc_tab.txigovuo152aidm0r02uay2nvm	INTEGRER	#	RTSP used five items node number	Sum	hupcbh
SMTP_used_five_items_node_number	hua_proc_srvc_tab.txigowi0152aidm0r02uay2nvm	INTEGRER	#	SMTP used five items node number	Sum	hupcbh
TFTP_used_five_items_node_number	hua_proc_srvc_tab.txigowoo152aidm0r02uay2nvm	INTEGRER	#	TFTP used five items node number	Sum	hupcbh
VOIP_used_five_items_node_number	hua_proc_srvc_tab.txigowuo152aidm0r02uay2nvm	INTEGRER	#	VOIP used five items node number	Sum	hupcbh
WAP1X_used_five_items_node_number	hua_proc_srvc_tab.txigovso152aidm0r02uay2nvm	INTEGRER	#	WAP1.X used five items node number	Sum	hupcbh
WAP20_used_five_items_node_number	hua_proc_srvc_tab.txigovqo152aidm0r02uay2nvm	INTEGRER	#	WAP2.0 used five items node number	Sum	hupcbh

### 6.10.2 Processor.Huawei.GPRS.System\_resources

System resources measurement

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
Average_CPU_usage	hua_proc_syst_tab.txigox3o152aidm0r02uay2nvm	FLOAT	%	Average CPU utilization on the boards in a measurement period.	Average	hupcbh, Sum, Minimum, Maximum
Average_memory_usage	hua_proc_syst_tab.txigoxao152aidm0r02uay2nvm	FLOAT	%	Average utilization of the	Average	hupcbh, Sum,

				dynamic memory on the boards in a measurement period.		Minimum, Maximum
CPU_usage	hua_proc_syst_tab.txigowy0152aidm0r02uay2nvm	FLOAT	%	Current CPU utilization on the boards in a measurement period.	Average	hupcbh, Sum, Minimum, Maximum
Memory_usage	hua_proc_syst_tab.txigox1o152aidm0r02uay2nvm	FLOAT	%	Current utilization of the dynamic memory on the boards in a measurement period.	Average	hupcbh, Sum, Minimum, Maximum
Peak_CPU_usage	hua_proc_syst_tab.txigox5o152aidm0r02uay2nvm	FLOAT	%	Maximum CPU utilization on the boards in a measurement period.	Average	hupcbh, Sum, Minimum, Maximum

## 6.11 SGSN\_IP Performance Indicators

- [SGSN\\_IP.Huawei.GPRS.SGSN\\_session](#)

### 6.11.1 SGSN\_IP.Huawei.GPRS.SGSN\_session

SGSN session measurement

KPI Name	Expression	Data Type	Units	Description	Default Aggregator	Other Aggregators
PDPcntx_act_fa	hua_sgsn_session_tab.txig	INTEG	#	PDP context	Sum	

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iled_APN_Rest iction_type_inc ompatibility_S GSN	osqo152aidm0r02uay2nvm	ER		act. failed - APN Restriction type incompatibility (SGSN)		
SG_Dynamic_a ddress_activate _session_reques t	hua_sgsn_session_tab.uew v44nsx1btws2fupi6sn6lci	INTEG ER	#	Attempts of dynamic PDP context activating program initiated by MS, based on SGSN IP	Sum	
SG_Dynamic_a ddress_activate _session_succee d	hua_sgsn_session_tab.xaix 0ijfcabvotuvqav1wqewgs	INTEG ER	#	Successful times of dynamic PDP context activating program initiated by MS, based on SGSN IP	Sum	
SG_GGSN_dea ctivate_session_- request	hua_sgsn_session_tab.vfx4 05vgboba5r16britek10me	INTEG ER	#	Attempts of PDP context deactivation program initiated by GGSN, based on SGSN IP	Sum	
SG_GGSN_dea ctivate_session_- succeed	hua_sgsn_session_tab.ufij2 0ffwlbtcd4rl3devtgh11	INTEG ER	#	Successful times of PDP context deactivation program initiated by GGSN, based on SGSN IP	Sum	
SG_GGSN_mo dify_session_re quest	hua_sgsn_session_tab.tjlnc dxnhcc1dtr4fk3li13u6f	INTEG ER	#	Attempts of PDP context modification program initiated by	Sum	

				GGSN, based on SGSN IP		
SG_GGSN_modify_session_succeed	hua_sgsn_session_tab.yiqk5py32abhfe0rjegvfqtifm	INTEGR	#	Successful times of PDP context modification program initiated by GGSN, based on SGSN IP	Sum	
SG_MS_activate_PDP_context_satisfy_QOS	hua_sgsn_session_tab.xi16yq4hlabn6bwt5wc10gjsfu	INTEGR	#	Times of PDP context activation QOS promising initiated by MS, based on SGSN IP	Sum	
SG_MS_deactivate_session_request	hua_sgsn_session_tab.xbjn iaifntchpd06562xqpiup2	INTEGR	#	Attempts of PDP context deactivating program initiated by MS, based on SGSN IP	Sum	
SG_MS_deactivate_session_succeed	hua_sgsn_session_tab.yliwhh4uk4b40sbkr1hgej5nho	INTEGR	#	Successful times of PDP context deactivating program initiated by MS, based on SGSN IP	Sum	
SG_MS_launch_second_active_request	hua_sgsn_session_tab.wqdfqjsnvkbvbe320b5fwlpw1j	INTEGR	#	Times that PDP context secondary activation request, based on SGSN IP	Sum	

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SG_MS_launch_second_active_succeed	hua_sgsn_session_tab.vjxeg2b2svc5tbuwmtfh14gkwb	INTEGR	#	Successful times of PDP context secondary activating, based on SGSN IP	Sum	
SG_MS_modify_session_request	hua_sgsn_session_tab.vt4avjwypcpt3ctsbx5mhj2iuc	INTEGR	#	Attempts of PDP context modification program initiated by MS, based on SGSN IP	Sum	
SG_MS_modify_session_succeeded	hua_sgsn_session_tab.snmel6t1c4qe1x1tgbyajj0a	INTEGR	#	Successful times of PDP context modification program initiated by MS, based on SGSN IP	Sum	
SG_MS_PDP_context_active_failed_by_auth_failed	hua_sgsn_session_tab.ripw4tgpecb14tox5hsr3flwf	INTEGR	#	MS PDP context activation failed times caused by the authentication failure	Sum	
SG_MS_PDP_context_active_failed_by_no_resource	hua_sgsn_session_tab.sgkdsir4d5cdjtqtif1k03jl5t	INTEGR	#	MS PDP context activation failed times caused by no available resources	Sum	
SG_MS_PDP_context_active_failed_by_other_reason	hua_sgsn_session_tab.tv4snxd2igb2br2ptewbjcfqhe	INTEGR	#	MS PDP context activation failed times caused by other reasons	Sum	

SG_MS_PDP_context_active_failed_by_system_fault	hua_sgsn_session_tab.wuljvi6wl6b5seqrsw4orky5bl	INTEGR	#	MS PDP context activation failed times caused by the system faults	Sum	
SG_PDP_act_fail_by_no_dynamic_PDP_addresses	hua_sgsn_session_tab.x5vy5whuqfc52bqsu4lkjdwoxh	INTEGR	#	Times of failed PDP context activation caused by no dynamic PDP addresses	Sum	
SG_PDP_act_fail_by_no_memory	hua_sgsn_session_tab.xh3fvxnqkibgydw2ptgqjjwmhc	INTEGR	#	Times of failed PDP context activation caused by no free memory	Sum	
SG_PDP_act_fail_by_PDP_without_TFT_already_act	hua_sgsn_session_tab.vk1pfitehtblketcu1cevsavy	INTEGR	#	Times of failed PDP context activation caused by no activated TFT context	Sum	
SG_PDP_act_fail_by_semantic_err_in_packet_filter	hua_sgsn_session_tab.u01kcw6221bm2b3rv4o5nbessd1	INTEGR	#	Times of failed PDP context activation caused by semantic error during packet filtering	Sum	
SG_PDP_act_fail_by_semantic_err_in_the_TFT_operation	hua_sgsn_session_tab.ruehniu0jrccqddvt24445jsfy	INTEGR	#	Times of failed PDP context activation caused by semantic error of TFT operations	Sum	

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SG_PDP_act_fail_by_syntactic_err_in_packet_filter	hua_sgsn_session_tab.tj3pmpejagblqejlwvqjmy62r4	INTEGR	#	Times of failed PDP context activation caused by syntax error during packet filtering	Sum	
SG_PDP_act_fail_by_syntactic_err_in_the_TF_T_operation	hua_sgsn_session_tab.t5w2fawav2cg5uiylcqf3a4rkp	INTEGR	#	Times of failed PDP context activation caused by syntax error of TFT operations	Sum	
SG_PDP_act_fail_by_unknown_PDP_address_or_PDP_type	hua_sgsn_session_tab.su3jsy5c5vb5qcscwusnr3gi5i	INTEGR	#	GGSN sends a message telling ?Create PDP Context Response? to the SGSN, and the Cause value of failed activation is ? No memory is available?	Sum	
SG_PDP_context_activate_request	hua_sgsn_session_tab.twkwcs2kbecg1e2rigndtbvpeq	INTEGR	#	Attempts of PDP context activation program initiated by MS, based on SGSN IP	Sum	
SG_PDP_context_activate_success_ratio	hua_sgsn_session_tab.wfslkdhi60c4ftniy3moxpjxd5	INTEGR	%	Successful rate of PDP context activation program initiated by MS, based on SGSN IP	Average	Maximum, Minimum, Sum
SG_PDP_context_activate_success	hua_sgsn_session_tab.wib0oh2qoocqlcnmx2f64w6bxb	INTEGR	#	Successful times of PDP context activating program	Sum	

				initiated by MS, based on SGSN IP		
SG_PDP_deact_fail_by_non_existent	hua_sgsn_session_tab.sc4gxmwg2rba5r51hjg5oq240y	INTEGR	#	Times of failed PDP context deactivation caused by non-existence of PDP	Sum	
SG_total_number_of_downstream_kbytes	hua_sgsn_session_tab.vkio bwr4b1bunclxcedc1ke5vy	INT8	Kbytes	Obsolete from GGSN/V800R 006 C01B010:Downstream Kbytes based on SGSN IP	Sum	
SG_total_number_of_upstream_and_downstream_kbytes	hua_sgsn_session_tab.rejp squaljbxau4ph2smxxpa5	INT8	Kbytes	Obsolete from GGSN/V800R 006 C01B010:Upstream and downstream Kbytes based on SGSN IP	Sum	
SG_total_number_of_upstream_kbytes	hua_sgsn_session_tab.tsay bjmcqtb1lclydwmmejkhny	INT8	Kbytes	Obsolete from GGSN/V800R 006 C01B010:Upstream Kbytes based on SGSN IP	Sum	

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# 7 Database Schema

## 7.1 Hierarchy Tables

This section lists the hierarchy ("NC") tables that are included in this technology pack module's database schema.

### 7.1.1 NC\_APN

Column Name	Data Type	Time-Tracked?	Loader Block/Mapping
NC_ID	NUMBER		
APN_ID	VARCHAR2(50)		[M134221244] GGSN_ID & "/" & APN_ID
GGSN_ID	VARCHAR2(50)	Y	[M134221244] GGSN_ID
REGION_ID	VARCHAR2(50)	Y	[M134221244] lookup("nc_ggsn","region_id",utime(START_DATE & " " & START_TIME, "%Y-%m-%d %R"), GGSN_ID)
NETWORK_ID	VARCHAR2(50)	Y	[M134221244] NETWORK_ID
TIMESTAMP	DATE		
ENDSTAMP	DATE		
APN_NAME	VARCHAR2(255)		[M134221244] GGSN_ID & "/" & APN_ID
APN_VERSION	VARCHAR2(50)		
APN_TYPE	VARCHAR2(50)		

TECHNOLOGY	VARCHAR2(50)	[M134221244] "GPRS"
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### 7.1.2 NC(CG)\_IP

Column Name	Data Type	Time-Tracked?	Loader Block/Mapping
NC_ID	NUMBER		
CG_IP_ID	VARCHAR2(50)		[M134221234] GGSN_ID & "/" & CG_IP_ID
REGION_ID	VARCHAR2(50)	Y	[M134221234] REGION_ID
NETWORK_ID	VARCHAR2(50)	Y	[M134221234] NETWORK_ID
TIMESTAMP	DATE		
ENDSTAMP	DATE		
CG_IP_NAME	VARCHAR2(255)		[M134221234] GGSN_ID & "/" & CG_IP_ID
CG_ID	VARCHAR2(255)		[M134221234] "Populated by the customer"

### 7.1.3 NC\_GGSN\_BOARD

Column Name	Data Type	Time-Tracked?	Loader Block/Mapping
NC_ID	NUMBER		
GGSN_BOARD_ID	VARCHAR2(50)		[M134221233] GGSN_ID & "/" & FN_ID & "-" & GGSN_BOARD_ID
GGSN_ID	VARCHAR2(50)	Y	[M134221233] GGSN_ID

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REGION_ID	VARCHAR2(50)	Y	[M134221233] lookup("nc_ggsn","region_id",utime(STAR T_DATE & " " & START_TIME, "%Y- %m-%d %R"), GGSN_ID)
NETWORK_ID	VARCHAR2(50)	Y	[M134221233] NETWORK_ID
TIMESTAMP	DATE		
ENDSTAMP	DATE		
GGSN_BOARD_NAME	VARCHAR2(255)		[M134221233] GGSN_ID & "/" & FN_ID & "-" & GGSN_BOARD_ID

#### 7.1.4 NC\_GGSN

Column Name	Data Type	Time- Tracke d?	Loader Block/Mapping
NC_ID	NUMBER		
GGSN_ID	VARCHAR2(50)		[M134221228] GGSN_ID
REGION_ID	VARCHAR2(50)	Y	[M134221228] REGION_ID
NETWORK_ID	VARCHAR2(50)	Y	[M134221228] NETWORK_ID
TIMESTAMP	DATE		
ENDSTAMP	DATE		
GGSN_NAME	VARCHAR2(255)		[M134221228] GGSN_ID
GGSN_IP_ADDRESS	VARCHAR2(64)		[M134221228] "Populated by the customer"
GGSN_VERSION	VARCHAR2(50)		[M134221228] "R007"
MAX_SUBSCRIBER	NUMBER		
MAX_PDP	NUMBER		
MAX_PDP_PER_SUBSCRIBER	NUMBER		

MAX_TRAFFIC_RATE	FLOAT		
PDP_SESSION_TIMEOUT	VARCHAR2(50)		
PDP_IDLE_TIMEOUT	VARCHAR2(50)		
TECHNOLOGY	VARCHAR2(50)		[M134221228] "GPRS"
DHCP_ID	VARCHAR2(50)		
RADIUS_ID	VARCHAR2(50)		
DNS_ID	VARCHAR2(50)		

### 7.1.5 NC\_GPRS\_TUNNEL

Column Name	Data Type	Time-Tracked?	Loader Block/Mapping
NC_ID	NUMBER		
GTP_ID	VARCHAR2(50)		[M134221701] GGSN_ID & "/" & Object_ID
SGSN_ID	VARCHAR2(50)	Y	
GGSN_ID	VARCHAR2(50)	Y	[M134221701] GGSN_ID
REGION_ID	VARCHAR2(50)	Y	[M134221701] REGION_ID
NETWORK_ID	VARCHAR2(50)	Y	[M134221701] NETWORK_ID
TIMESTAMP	DATE		

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ENDSTAMP	DATE		
GTP_NAME	VARCHAR2(255)		[M134221701] GGSN_ID & "/" & Object_ID
GTP_VERSION	VARCHAR2(50)		
GTP_PDP_CAPACITY	NUMBER		
GTP_ROLE	VARCHAR2(50)		
GTP_STATUS	VARCHAR2(50)		
TECHNOLOGY	VARCHAR2(50)		[M134221701] "GPRS"

#### 7.1.6 NC\_HPLMN

Column Name	Data Type	Time-Tracked?	Loader Block/Mapping
NC_ID	NUMBER		
HPLMN_ID	VARCHAR2(50)		[M134221246] GGSN_ID & "/" & MCC_ID & "/" & MNC_ID
NETWORK_ID	VARCHAR2(50)	Y	[M134221246] NETWORK_ID
REGION_ID	VARCHAR2(50)	Y	[M134221246] REGION_ID
TIMESTAMP	DATE		
ENDSTAMP	DATE		
HPLMN_NAME	VARCHAR2(255)		[M134221246] MCC_ID & "/" & MNC_ID
HPLMN_INFO	VARCHAR2(255)		[M134221246] "Populated by the customer"
HPLMN_TYPE	VARCHAR2(255)		[M134221246] "Populated by the customer"

### **7.1.7 NC\_IMSI**

<b>Column Name</b>	<b>Data Type</b>	<b>Time-Tracked?</b>	<b>Loader Block/Mapping</b>
NC_ID	NUMBER		
IMSI_ID	VARCHAR2(50)		[M134221238] GGSN_ID & "/" & IMSI_ID
NETWORK_ID	VARCHAR2(50)	Y	[M134221238] NETWORK_ID
TIMESTAMP	DATE		
ENDSTAMP	DATE		
IMSI_NAME	VARCHAR2(255)		[M134221238] GGSN_ID & "/" & IMSI_ID
IMSI_INFO	VARCHAR2(255)		[M134221238] "Populated by the customer"

### **7.1.8 NC\_NETWORK**

<b>Column Name</b>	<b>Data Type</b>	<b>Time-Tracked?</b>	<b>Loader Block/Mapping</b>
NC_ID	NUMBER		
NETWORK_ID	VARCHAR2(50)		[M134221228] NETWORK_ID
TIMESTAMP	DATE		
ENDSTAMP	DATE		
NETWORK_TYPE	VARCHAR2(50)		[M134221228] "GPRS"
DEFAULT_LINK_SPEED	FLOAT		[M134221228] 64000
NETWORK_NAME	VARCHAR2(255)		[M134221228] NETWORK_ID

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### **7.1.9 NC\_PCRF**

<b>Column Name</b>	<b>Data Type</b>	<b>Time-Tracked?</b>	<b>Loader Block/Mapping</b>
NC_ID	NUMBER		
PCRF_ID	VARCHAR2(50)		[M134221267] GGSN_ID & "/" & Object_ID [M134221266] GGSN_ID & "/" & Object_ID
REGION_ID	VARCHAR2(50)	Y	[M134221267] REGION_ID [M134221266] REGION_ID
NETWORK_ID	VARCHAR2(50)	Y	[M134221267] NETWORK_ID [M134221266] NETWORK_ID
TIMESTAMP	DATE		
ENDSTAMP	DATE		
PCRF_NAME	VARCHAR2(255)		[M134221267] GGSN_ID & "/" & Object_ID [M134221266] GGSN_ID & "/" & Object_ID
TECHNOLOGY	VARCHAR2(255)		[M134221267] "GPRS" [M134221266] "GPRS"

### **7.1.10 NC\_PHYSICAL\_PORT**

<b>Column Name</b>	<b>Data Type</b>	<b>Time-Tracked?</b>	<b>Loader Block/Mapping</b>
NC_ID	NUMBER		
PHYSICAL_PORT_ID	VARCHAR2(50)		[M134221264_PORT] GGSN_ID & "/" & Object_ID
GGSN_ID	VARCHAR2(50)	Y	[M134221264_PORT] GGSN_ID
REGION_ID	VARCHAR2(50)	Y	[M134221264_PORT] REGION_ID
NETWORK_ID	VARCHAR2(50)	Y	[M134221264_PORT] NETWORK_ID

	50)		
TIMESTAMP	DATE		
ENDSTAMP	DATE		
PHYSICAL_PORT_NAME	VARCHAR2(255)		[M134221264_PORT] GGSN_ID & "/" & Object_ID

### 7.1.11 NC\_PROCESSOR

Column Name	Data Type	Time-Tracked?	Loader Block/Mapping
NC_ID	NUMBER		
PROCESSOR_ID	VARCHAR2(50)		[M134221262] GGSN_ID & "/" & PROC_ID
NODE_ID	VARCHAR2(50)	Y	[M134221262] GGSN_ID
REGION_ID	VARCHAR2(50)	Y	[M134221262] REGION_ID
NETWORK_ID	VARCHAR2(50)	Y	[M134221262] NETWORK_ID
TIMESTAMP	DATE		
ENDSTAMP	DATE		
NODE_NAME	VARCHAR2(255)		[M134221262] GGSN_ID
NODE_TYPE	VARCHAR2(50)		[M134221262] "GGSN"
PROCESSOR_NAME	VARCHAR2(255)		[M134221262] GGSN_ID & "/" & PROC_ID
PROCESSOR_TYPE	VARCHAR2(50)		
TECHNOLOGY	VARCHAR2(50)		[M134221262] "GPRS"

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	50)		
PROCESSOR_VERSION	VARCHAR2(50)		[M134221262] "R007"

#### 7.1.12 NC\_REGION

Column Name	Data Type	Time-Tracked?	Loader Block/Mapping
NC_ID	NUMBER		
REGION_ID	VARCHAR2(50)		[M134221228] REGION_ID
NETWORK_ID	VARCHAR2(50)	Y	[M134221228] NETWORK_ID
TIMESTAMP	DATE		
ENDSTAMP	DATE		
REGION_NAME	VARCHAR2(255)		[M134221228] REGION_ID

#### 7.1.13 NC\_SGSN\_IP

Column Name	Data Type	Time-Tracked?	Loader Block/Mapping
NC_ID	NUMBER		
SGSN_IP_ID	VARCHAR2(50)		[M134221247] GGSN_ID & "/" & SGSN_IP_ID
SGSN_ID	VARCHAR2(50)	Y	
REGION_ID	VARCHAR2(50)	Y	[M134221247] REGION_ID
NETWORK_ID	VARCHAR2(50)	Y	[M134221247] NETWORK_ID
TIMESTAMP	DATE		
ENDSTAMP	DATE		

SGSN_IP_NAME	VARCHAR2(255)	[M134221247] GGSN_ID & "/" & SGSN_IP_ID
TECHNOLOGY	VARCHAR2(255)	[M134221247] "GPRS"

## 7.2 Raw Performance Tables

This section lists the performance tables that are included in this technology pack module's database schema, grouped by the network object to which they relate, as follows:

- [APN](#)
- [CG\\_IP](#)
- [GGSN](#)
- [GGSN\\_Board](#)
- [GPRS\\_Tunnel](#)
- [HPLMN](#)
- [IMSI](#)
- [PCRF](#)
- [Physical\\_Port](#)
- [Processor](#)
- [SGSN\\_IP](#)

## 7.3 Raw APN Tables

### 7.3.1 HUA\_APN\_AAA\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
APN_ID		VARCHAR2(50)	[M134221239] GGSN_ID & "/" & APN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
T3KXKSQKC4B21RQLGGB4LT266A	G134706781	NUMBER	[M134221239] G134706781
STDCTW2MX1BHFUPDPAFCLAPE6J	G134706782	NUMBER	[M134221239] G134706782

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VWVUUMRALVB21T0ECYQ VEUNY0X	G134706783	FLOAT	[M134221239] G134706783
THG3AMX21HCVFS22DD5R4 CKIYP	G134706784	NUMBER	[M134221239] G134706784
RDFLI6TLTBB4LRGFWADFY 352XY	G134706785	NUMBER	[M134221239] G134706785
S5JX4MBJDOB3GUAUS1WFT F2VUN	G134706786	FLOAT	[M134221239] G134706786
WJRCDK2CBOCJASGP3WRH PARLSD	G134706787	NUMBER	[M134221239] G134706787
VIVN20N4T5CNDUONXI3OR 4AOHO	G134706788	NUMBER	[M134221239] G134706788
WKA6RFWOV4BVME4VGRB CD4UQAV	G134706789	NUMBER	[M134221239] G134706789
ULWHT5IYQ3BRACJFSFLX0 EV2Y4	G134706790	NUMBER	[M134221239] G134706790
R60B63I14MBOBSPVSF6LR00 R6M	G134706791	NUMBER	[M134221239] G134706791

### 7.3.2 HUA\_APN\_GX\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
APN_ID		VARCHAR R2(50)	[M134221265_APN] GGSN_ID & "/" & APN_ID [M134221266_APN] GGSN_ID & "/" & APN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TXIGOY3O152AIDM0R02U AY2NVM	G134709401	NUMBER	[M134221265_APN] G134709401 [M134221266_APN] G134709401
TXIGOY5O152AIDM0R02U AY2NVM	G134709402	NUMBER	[M134221265_APN] G134709402 [M134221266_APN] G134709402

TXIGOYAO152AIDM0R02U AY2NVM	G134709403	NUMBER	[M134221265_APN] G134709403 [M134221266_APN] G134709403
TXIGOYCO152AIDM0R02U AY2NVM	G134709404	NUMBER	[M134221265_APN] G134709404 [M134221266_APN] G134709404
TXIGOYEO152AIDM0R02U AY2NVM	G134709405	NUMBER	[M134221265_APN] G134709405 [M134221266_APN] G134709405
TXIGOYGO152AIDM0R02U AY2NVM	G134709406	NUMBER	[M134221265_APN] G134709406 [M134221266_APN] G134709406
TXIGOYIO152AIDM0R02UA Y2NVM	G134709407	NUMBER	[M134221265_APN] G134709407 [M134221266_APN] G134709407
TXIGOYKO152AIDM0R02U AY2NVM	G134709408	NUMBER	[M134221265_APN] G134709408 [M134221266_APN] G134709408
TXIGOYMO152AIDM0R02U AY2NVM	G134709409	NUMBER	[M134221265_APN] G134709409 [M134221266_APN] G134709409
TXIGOYOO152AIDM0R02U AY2NVM	G134709410	NUMBER	[M134221265_APN] G134709410 [M134221266_APN] G134709410
TXIGOYQO152AIDM0R02U AY2NVM	G134709411	NUMBER	[M134221265_APN] G134709411 [M134221266_APN] G134709411

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TXIGOYSO152AIDM0R02U AY2NVM	G134709412	NUMBER	[M134221265_APN] G134709412 [M134221266_APN] G134709412
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### 7.3.3 HUA\_APN\_PCC\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
APN_ID		VARCHAR2(50)	[M134221268_APN] GGSN_ID & "/" & APN_ID [M134221269_APN] GGSN_ID & "/" & APN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TXIGP03O152AIDM0R02U AY2NVM	G134709701	NUMBER	[M134221268_APN] G134709701 [M134221269_APN] G134709701
TXIGP05O152AIDM0R02U AY2NVM	G134709702	NUMBER	[M134221268_APN] G134709702 [M134221269_APN] G134709702
TXIGP0AO152AIDM0R02U AY2NVM	G134709703	NUMBER	[M134221268_APN] G134709703 [M134221269_APN] G134709703
TXIGP0CO152AIDM0R02U AY2NVM	G134709704	NUMBER	[M134221268_APN] G134709704 [M134221269_APN] G134709704

### 7.3.4 HUA\_APN\_STATUS\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
APN_ID		VARCHAR2(50)	[M134221237] GGSN_ID & "/" & APN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	

TGGOPN5LFW2AHC3IJ02INC NMDW	G134706636	NUMBER	[M134221237] G134706636
TGGOPNALFW2AHC3IJ02INC NMDW	G134706637	FLOAT	[M134221237] G134706637
TGGOPNCLFW2AHC3IJ02INC NMDW	G134706638	NUMBER	[M134221237] G134706638
RBM3PBQCP1BRKBPHATVL 5EUS66	G134706619	NUMBER	[M134221237] G134706619
TAH4UTMMMVBXRD6Q4MQ Q1PO0QB	G134706620	NUMBER	[M134221237] G134706620
VWKUHO5VWTCT4RLPSBD5 Q1HXOS	G134706621	NUMBER	[M134221237] G134706621
WRKXWFL1NOCO0SFHMRP L0DEVQ5	G134706622	NUMBER	[M134221237] G134706622
YSBFNMOBSNBB5RIX3YP5G PB1FO	G134706623	NUMBER	[M134221237] G134706623
YHUJXBM3EVCSLC1FDOVJE K1ELM	G134706624	NUMBER	[M134221237] G134706624
T4O1AN12UVCGLUMOUWW UNGYE0T	G134706633	NUMBER	[M134221237] G134706633
TUCKL4ABEECTWDG2YD2U FBPVUN	G134706634	NUMBER	[M134221237] G134706634
XQI135TP6KB4BR4EJWDU2R 3XHB	G134706635	NUMBER	[M134221237] G134706635

### 7.3.5 HUA\_APN\_TRANSPORT\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
APN_ID		VARCHAR R2(50)	[M134221244] GGSN_ID & "/" & APN_ID
TSTAMP		DATE	

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INSTANCE_ID		NUMBER	
TGGOPPULFW2AHC3IJ02IN CNMDW	G134706916	NUMBER	[M134221244] G134706916
TGGOPPWLFW2AHC3IJ02IN CNMDW	G134706917	NUMBER	[M134221244] G134706917
VCGFXLWJLYCYERKPCLET QYHVKD	G134706881	NUMBER	[M134221244] G134706881
VX22UN54MPCMECICQ2UU 2CKQYM	G134706882	NUMBER	[M134221244] G134706882
UPW4V4PUSMCOSDYIMMO 15BT45J	G134706883	NUMBER	[M134221244] G134706883
XKLMF6VO2KBSETJLYN6C VUAJ1F	G134706884	NUMBER	[M134221244] G134706884
SRNEW6L44EC6VUVOO2X0 F2TDTX	G134706885	NUMBER	[M134221244] G134706885
WVEGRR4OM0BJGD2N5UC1 LPCTGJ	G134706886	NUMBER	[M134221244] G134706886
YCOSKK6PAPBQLB5KHMM Q2O5UFU	G134706887	NUMBER	[M134221244] G134706887
UUNI22DNB0CDRDRTVTST4 PX261	G134706888	NUMBER	[M134221244] G134706888
U25NQNGPNB55RQJFELX WPPD4W	G134706889	FLOAT	[M134221244] G134706889
XMFJ504DJ2BOJUGNR4KSU CWPOQ	G134706890	NUMBER	[M134221244] G134706890
Y2VLNCTJOJCDEEISKFO036 X4FW	G134706891	NUMBER	[M134221244] G134706891
VXFRAHMYGSCY6RH35JS4 DIVLRX	G134706892	FLOAT	[M134221244] G134706892
SFEBESJ6SICEWUT1SM6QB CUOQH	G134706893	FLOAT	[M134221244] G134706893
SBSHY5KILLBIHTB3TXHTY S3KQQ	G134706894	NUMBER	[M134221244] G134706894
TL2FOVLBI5B5DC4CFALVP XKJLK	G134706895	NUMBER	[M134221244] G134706895

WO3RUW4FJLB11RV1MENH KR66SA	G134706896	NUMBER	[M134221244] G134706896
SOXSGF5FRCCVYDIOL2XXJ F5I0E	G134706897	NUMBER	[M134221244] G134706897
W5RCO3M5G5CSLUYOV5TU W6KCLD	G134706913	NUMBER	[M134221244] G134706913
R6GYD1NSLCDCT4LR5UT V5I06T	G134706914	NUMBER	[M134221244] G134706914
XTBFMTCDV1BT5RE3K66M 66TQBI	G134706915	NUMBER	[M134221244] G134706915

### 7.3.6 HUA\_GTPV0\_APN\_SESSION\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
APN_ID		VARCHA R2(50)	[M134221236] GGSN_ID & "/" & APN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
UQGXP65QQA2AIDM2002UA Y2NVM	G134686769	NUMBER	[M134221236] G134686769
UQGXP6AQQA2AIDM2002U AY2NVM	G134686770	NUMBER	[M134221236] G134686770
UQGXP6CQQA2AIDM2002U AY2NVM	G134686771	NUMBER	[M134221236] G134686771
UQGXP6EQQA2AIDM2002U AY2NVM	G134686772	NUMBER	[M134221236] G134686772
UQGXP6GQQA2AIDM2002U AY2NVM	G134686773	NUMBER	[M134221236] G134686773
UQGXP6IQQA2AIDM2002UA Y2NVM	G134686774	NUMBER	[M134221236] G134686774
UQGXP6KQQA2AIDM2002U	G134686775	NUMBER	[M134221236] G134686775

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AY2NVM			
UQGXP6MQQA2AIDM2002U AY2NVM	G134686776	NUMBER	[M134221236] G134686776
UQGXP6OQQQA2AIDM2002U AY2NVM	G134686777	NUMBER	[M134221236] G134686777
UQGXP6QQQA2AIDM2002U AY2NVM	G134686778	NUMBER	[M134221236] G134686778
UQGXP6SQQA2AIDM2002UA Y2NVM	G134686779	NUMBER	[M134221236] G134686779
UQGXP6UQQQA2AIDM2002U AY2NVM	G134706640	NUMBER	[M134221236] G134706640
VHRRRUAO31BVLDUAEXR QMOJVTT	G134706601	NUMBER	[M134221236] G134706601
RHR3BDSWKLBX5RU12UN2 UOYTHT	G134706602	NUMBER	[M134221236] G134706602
S2FS5JHHJQBVTT6XINKJ06 OX3G	G134706603	NUMBER	[M134221236] G134706603
W3NN5OE33JCOME6SAPH1 MEBX3O	G134706604	NUMBER	[M134221236] G134706604
W2OTI3FJBGBTXCVXFA6FC6 YR6S	G134706605	NUMBER	[M134221236] G134706605
XC2BY1CN2ICXUE6XW0WA TRLAEP	G134706606	NUMBER	[M134221236] G134706606
RWILHA26CXBODTMWJLTI EGF4LG	G134706607	NUMBER	[M134221236] G134706607
SKXM2K4YOYCMPR2WK41 BLCSNJE	G134706608	NUMBER	[M134221236] G134706608
UUBQO2IKV0BEHT0NPKVT NPHGJP	G134706609	NUMBER	[M134221236] G134706609
WR5IE1604RBXTRSEERHFA RWCKS	G134706610	NUMBER	[M134221236] G134706610
V25ONKD4TNCAUTFUULC LHXAOH	G134706611	NUMBER	[M134221236] G134706611
RT52QUMEVECB2SSXTDGK KWXXTG	G134706612	NUMBER	[M134221236] G134706612

SH0CS32XX1CDIRMOAXILE 16PJT	G134706613	NUMBER	[M134221236] G134706613
XOGEOCVNP2BKOUFM6SU EPCSW1S	G134706614	NUMBER	[M134221236] G134706614
WFDQBJUDQICX1TUUOE1F Q22XWT	G134706615	NUMBER	[M134221236] G134706615
R3TM3QRIHGBJYBUT3K16N LSEAN	G134706616	NUMBER	[M134221236] G134706616
SBLLSUBXF2CQESPLMLBN DP6GT6	G134706617	NUMBER	[M134221236] G134706617
UYVMFVGE2KC1WRUPKUQ 1EFOUKT	G134706618	NUMBER	[M134221236] G134706618

### 7.3.7 HUA\_GTPV1\_APN\_SESSION\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
APN_ID		VARCHAR R2(50)	[M134221235] GGSN_ID & "/" & APN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
YIFTALM0HOBUDTDKOKQ XG5XGBU	G134706581	NUMBER	[M134221235] G134706581
XLS3LJQ1ISC33RDSWGJRN2 F3YW	G134706582	NUMBER	[M134221235] G134706582
W6BJW3KM2QBTERVVL3R6 YT3ECE	G134706583	NUMBER	[M134221235] G134706583
S3C5FDK5YBCDWCB3LCP HWVJMP	G134706584	NUMBER	[M134221235] G134706584
TLUBRAUCVKBP2RSSYL6E WWN1MA	G134706585	NUMBER	[M134221235] G134706585
WDRE4S30IBCIWT2CNG1HL	G134706586	NUMBER	[M134221235] G134706586

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LDVRQ			
SQTAUFF5CFBFLBQ1SFYJQ6 GRAR	G134706587	NUMBER	[M134221235] G134706587
YD0QXDD1JIBAQDN2Y6OLS RF1KL	G134706588	NUMBER	[M134221235] G134706588
U0VGQM50L5BPJDUE3CV6Q J3R32	G134706589	NUMBER	[M134221235] G134706589
V4JO3TIS6HCHAETXOG4YW ORYRV	G134706590	NUMBER	[M134221235] G134706590
RFQWFE42LHBVTBLT31T5D JB0YW	G134706591	NUMBER	[M134221235] G134706591
VBKWAZY4XHCKRT2F5IM SYBDCNJ	G134706592	NUMBER	[M134221235] G134706592
URFVJSHSHRB2TCPTY3PNW PJYRD	G134706593	NUMBER	[M134221235] G134706593
WRODEYBUJ4BU0DO4SL0T YPDH3S	G134706594	NUMBER	[M134221235] G134706594
WL1KAX6NMPCGIC4DPOSM I35PYD	G134706595	NUMBER	[M134221235] G134706595
RU1REPMS5QBGAEYEB0M2 LY4FP4	G134706596	NUMBER	[M134221235] G134706596
TC2RYOORIRCJGSNPA0DT1 015AN	G134706597	NUMBER	[M134221235] G134706597
VFW1TV0YV0CXRUUDENR31 BKJXRS	G134706598	NUMBER	[M134221235] G134706598
WS3BB1YP5VBNXB3RVVFV X3HLW2	G134706599	NUMBER	[M134221235] G134706599
RG2H2UL0UGB3ECPH4LFKIJ FB1S	G134706600	NUMBER	[M134221235] G134706600
VSHPANBJUQCMHSTQBLV XWDMH60	G134706625	NUMBER	[M134221235] G134706625
YJX46QEVIQC02UKT1WF4A Y1MP0	G134706626	NUMBER	[M134221235] G134706626
VTD4ORY4GXBCDT0IDGB41 L4VWM	G134706627	NUMBER	[M134221235] G134706627

SJUSVJ1JPXBCKTATJ6DEAY YDUC	G134706628	NUMBER	[M134221235] G134706628
VLVMV1CRNMCU4CCPY04I 1FCTX0	G134706629	NUMBER	[M134221235] G134706629
WFXAFB2YRBC1VD0045QH E4T0O1	G134706630	NUMBER	[M134221235] G134706630
TTGG1EVNKXB5ACOVUAX UULDN26	G134706631	NUMBER	[M134221235] G134706631
X3J6EIMIJJCR1SD1GEKQ04T IIS	G134706632	NUMBER	[M134221235] G134706632
UQGXP5EQQA2AIDM2002UA Y2NVM	G134686757	NUMBER	[M134221235] G134686757
UQGXP5GQQA2AIDM2002U AY2NVM	G134686758	NUMBER	[M134221235] G134686758
UQGXP5IQQA2AIDM2002UA Y2NVM	G134686759	NUMBER	[M134221235] G134686759
UQGXP5KQQA2AIDM2002U AY2NVM	G134686760	NUMBER	[M134221235] G134686760
UQGXP5MQQA2AIDM2002U AY2NVM	G134686761	NUMBER	[M134221235] G134686761
UQGXP5OQQA2AIDM2002U AY2NVM	G134686762	NUMBER	[M134221235] G134686762
UQGXP5QQQA2AIDM2002U AY2NVM	G134686763	NUMBER	[M134221235] G134686763
UQGXP5SQQQA2AIDM2002UA Y2NVM	G134686764	NUMBER	[M134221235] G134686764
UQGXP5UQQA2AIDM2002U AY2NVM	G134686765	NUMBER	[M134221235] G134686765
UQGXP5WQQA2AIDM2002U AY2NVM	G134686766	NUMBER	[M134221235] G134686766
UQGXP5YQQA2AIDM2002U	G134686767	NUMBER	[M134221235] G134686767

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AY2NVM			
UQGXP61QQA2AIDM2002UA Y2NVM	G134686768	NUMBER	[M134221235] G134686768
UQGXP63QQA2AIDM2002UA Y2NVM	G134706639	NUMBER	[M134221235] G134706639

### 7.3.8 HUA\_M134221252\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
APN_ID		VARCHAR R2(50)	[M134221252] GGSN_ID & "/" & APN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TGGOPPYLFW2AHC3IJ02IN CNMDW	G134706961	NUMBER	[M134221252] G134706961
TGGOPQ1LFW2AHC3IJ02IN CNMDW	G134706962	NUMBER	[M134221252] G134706962
TGGOPQ3LFW2AHC3IJ02IN CNMDW	G134706963	NUMBER	[M134221252] G134706963
TGGOPQ5LFW2AHC3IJ02IN CNMDW	G134706964	NUMBER	[M134221252] G134706964
TGGOPQALFW2AHC3IJ02I NCNMDW	G134706965	NUMBER	[M134221252] G134706965
TGGOPQCLFW2AHC3IJ02I NCNMDW	G134706966	NUMBER	[M134221252] G134706966
TGGOPQELFW2AHC3IJ02I NCNMDW	G134706967	NUMBER	[M134221252] G134706967

### 7.3.9 HUA\_M134221259\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
APN_ID		VARCHAR R2(50)	[M134221259] GGSN_ID & "/" & APN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	

TGGOPQGLFW2AHC3IJ02IN CNMDW	G134708601	NUMBER	[M134221259] G134708601
TGGOPQILFW2AHC3IJ02IN CNMDW	G134708602	NUMBER	[M134221259] G134708602
TGGOPQKLFW2AHC3IJ02IN CNMDW	G134708603	NUMBER	[M134221259] G134708603
TGGOPQOLFW2AHC3IJ02IN CNMDW	G134708604	NUMBER	[M134221259] G134708604
TGGOPQQLFW2AHC3IJ02IN CNMDW	G134708605	NUMBER	[M134221259] G134708605
TGGOPQSLFW2AHC3IJ02IN CNMDW	G134708606	NUMBER	[M134221259] G134708606
TGGOPQWLFW2AHC3IJ02I NCNMDW	G134708607	NUMBER	[M134221259] G134708607
TGGOPQYLFW2AHC3IJ02IN CNMDW	G134708608	NUMBER	[M134221259] G134708608
TGGOPR1LFW2AHC3IJ02IN CNMDW	G134708609	NUMBER	[M134221259] G134708609
TGGOPR5LFW2AHC3IJ02IN CNMDW	G134708610	NUMBER	[M134221259] G134708610
TGGOPRALFW2AHC3IJ02IN CNMDW	G134708611	NUMBER	[M134221259] G134708611
TGGOPRELFW2AHC3IJ02IN CNMDW	G134708612	NUMBER	[M134221259] G134708612

## 7.4 Raw CG\_IP Tables

### 7.4.1 HUA\_GTPP\_CGIP\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
CG_IP_ID		VARCHAR R2(50)	[M134221234] GGSN_ID & "/" & CG_IP_ID

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TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TGGOPMWLFW2AHC3IJ02IN CNMDW	G134696591	NUMBER	[M134221234] G134696591
TGGOPMYLFW2AHC3IJ02INC NMDW	G134696592	NUMBER	[M134221234] G134696592
TGGOPN1LFW2AHC3IJ02INC NMDW	G134696593	NUMBER	[M134221234] G134696593
TGGOPN3LFW2AHC3IJ02INC NMDW	G134696594	NUMBER	[M134221234] G134696594
TXIGOSGO152AIDM0R02UAY 2NVM	G134696595	NUMBER	[M134221234] G134696595
TXIGOSIO152AIDM0R02UAY 2NVM	G134696596	NUMBER	[M134221234] G134696596
TXIGOSKO152AIDM0R02UAY 2NVM	G134706918	NUMBER	[M134221234] G134706918
TXIGOSMO152AIDM0R02UA Y2NVM	G134706919	NUMBER	[M134221234] G134706919
TXIGOSOO152AIDM0R02UAY 2NVM	G134706920	NUMBER	[M134221234] G134706920
V2KQF6326GCVNRRXYOAV ASUXU1	G134696581	NUMBER	[M134221234] G134696581
TXFB3AXB2VBVWDFYXPHF W2PCK3	G134696582	NUMBER	[M134221234] G134696582
SBT5OHMTOVCJLRQVWGY MURJ3UG	G134696583	NUMBER	[M134221234] G134696583
X65CTP1H1LCH3DDTKN513R NK1K	G134696584	NUMBER	[M134221234] G134696584
XPHLAJJ6MACHJE5RCVGID X4UOJ	G134696585	NUMBER	[M134221234] G134696585
UDK36PC4NECL3RCNC1HXU HF4XA	G134696586	NUMBER	[M134221234] G134696586
VJVWBHWUWACJTTAK3BC W2LYGHQ	G134696587	NUMBER	[M134221234] G134696587
VM2SN3SQ5GCTYBGADSJVR	G134696588	NUMBER	[M134221234] G134696588

XGVCS			
R02EO0KNY6CWAU13HSNQ YFHEGY	G134696589	NUMBER	[M134221234] G134696589
XJMK2CCNWBBNBBPHIWW ROLOGNR	G134696590	NUMBER	[M134221234] G134696590

## 7.5 Raw GGSN Tables

### 7.5.1 HUA\_AAA\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_ID		VARCHAR R2(50)	[M134221232] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TGGOPAGLFW2AHC3IJ02INC NMDW	G134686990	NUMBER	[M134221232] G134686990
TGGOPAILFW2AHC3IJ02INCN MDW	G134686991	NUMBER	[M134221232] G134686991
TGGOPAKLFW2AHC3IJ02INC NMDW	G134686992	NUMBER	[M134221232] G134686992
SJNKPPU23ECY6EAUJKT5Y2 R5HN	G134686981	NUMBER	[M134221232] G134686981
UESHKTN6AUB42B14OEWYF R5VLD	G134686982	NUMBER	[M134221232] G134686982
WVOF5ECQFSB32DPQANOIUI AJXE	G134686983	NUMBER	[M134221232] G134686983
UKTJUSJ5Q4BJCSNTCU6M1H L4J4	G134686984	NUMBER	[M134221232] G134686984
SXKB5ADRMXCIXER4EO4EV 6H6KX	G134686985	NUMBER	[M134221232] G134686985

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YTHTV4KV0GB25TPOVV4YT OIPFC	G134686986	NUMBER	[M134221232] G134686986
RUN2WGWH3UCVDTSSQMA O5HBWEA	G134686987	NUMBER	[M134221232] G134686987
W3HN2S3XYGBPND4NP5HOY DDCFE	G134686988	NUMBER	[M134221232] G134686988
WVQX2R1OHFBR6B0EEK5WC MI5WN	G134686989	NUMBER	[M134221232] G134686989

### 7.5.2 HUA\_BASIC\_SESSION\_IPV6\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_ID		VARCHAR2(50)	[M134221228] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
UQGXPAKQQA2AIDM2002U AY2NVM	G134686650	NUMBER	[M134221228] G134686650
UQGXPAMQQA2AIDM2002U AY2NVM	G134686651	NUMBER	[M134221228] G134686651
UQGXPAQQQA2AIDM2002U AY2NVM	G134686652	NUMBER	[M134221228] G134686652
UQGXPASQQQA2AIDM2002U AY2NVM	G134686653	NUMBER	[M134221228] G134686653
UQGXPAUQQQA2AIDM2002U AY2NVM	G134686654	NUMBER	[M134221228] G134686654
UQGXPAWQQQA2AIDM2002U AY2NVM	G134686655	NUMBER	[M134221228] G134686655
UQGXPAYQQQA2AIDM2002U AY2NVM	G134686656	NUMBER	[M134221228] G134686656
UQGXPB1QQQA2AIDM2002U AY2NVM	G134686657	NUMBER	[M134221228] G134686657
UQGXPB3QQQA2AIDM2002U AY2NVM	G134686658	NUMBER	[M134221228] G134686658
UQGXPB5QQQA2AIDM2002U	G134686659	NUMBER	[M134221228] G134686659

AY2NVM			
UQGXPBAQQA2AIDM2002U AY2NVM	G134686660	NUMBER	[M134221228] G134686660
UQGXPBCQQA2AIDM2002U AY2NVM	G134686661	NUMBER	[M134221228] G134686661
UQGXPBEQQA2AIDM2002U AY2NVM	G134686662	NUMBER	[M134221228] G134686662
UQGXPBGQQA2AIDM2002U AY2NVM	G134686663	NUMBER	[M134221228] G134686663
UQGXPBIQQA2AIDM2002U AY2NVM	G134686664	NUMBER	[M134221228] G134686664
UQGXPBKQQA2AIDM2002U AY2NVM	G134686665	NUMBER	[M134221228] G134686665
UQGXPBMQQA2AIDM2002U AY2NVM	G134686666	NUMBER	[M134221228] G134686666
UQGXPBOQQA2AIDM2002U AY2NVM	G134686667	NUMBER	[M134221228] G134686667
UQGXPBQQQA2AIDM2002U AY2NVM	G134686668	NUMBER	[M134221228] G134686668
UQGXPBSQQA2AIDM2002U AY2NVM	G134686669	NUMBER	[M134221228] G134686669
UQGXPBUQQA2AIDM2002U AY2NVM	G134686670	NUMBER	[M134221228] G134686670

### 7.5.3 HUA\_BASIC\_SESSION\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_ID		VARCHAR R2(50)	[M134221228] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	

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S11ABQLXQ0CJBRXD6C36RGP XIA	G134686581	NUMBER	[M134221228] G134686581
WG2K0AUDCGBRPREGT60X62 R1OH	G134686582	NUMBER	[M134221228] G134686582
XBHQKWU3KMCOYEWWSU1 DO6OWM4	G134686583	NUMBER	[M134221228] G134686583
V1DIGL1HIXB6JSA4B3JWJDJF SA	G134686584	NUMBER	[M134221228] G134686584
WA2CVHQJOYBRNDWHE4RN ODFU14	G134686585	NUMBER	[M134221228] G134686585
UN5QE5LJKRBM3TX4JB6TIBE KKX	G134686586	NUMBER	[M134221228] G134686586
XTVYWFODQBM5ESCU0Y BHUh2D	G134686587	NUMBER	[M134221228] G134686587
W0I0CFAIRGBC6COW2S4VJA HU4U	G134686588	NUMBER	[M134221228] G134686588
R0P2D3URLPBABTA54CR230V NLK	G134686589	NUMBER	[M134221228] G134686589
YJSP5PE003CA6BNUBB6HFCK 04T	G134686590	NUMBER	[M134221228] G134686590
RNVT0D35N2CICRVBKSEM JHJD	G134686591	NUMBER	[M134221228] G134686591
TBCITUJCEDBRDRFMEUG4M NYP5J	G134686592	NUMBER	[M134221228] G134686592
Y1LWA230SVBBKUTESNLXW XARRY	G134686593	FLOAT	[M134221228] G134686593
YJ1MKTCNDNKBUR5V0NAYN P612P	G134686594	NUMBER	[M134221228] G134686594
WDESOIS3NXC2XCIAK4AAE6 TLDN	G134686595	NUMBER	[M134221228] G134686595
W0KRUVMKEJCQLU6AGIX4B KUGOY	G134686596	NUMBER	[M134221228] G134686596
XIO6GYDM4QBHUTS5ACJGA QSKSE	G134686597	NUMBER	[M134221228] G134686597
UHCIBPA3GEBGJD31PVRW3IU	G134686598	NUMBER	[M134221228] G134686598

JHL			
TFVCHL0FDQBRLDVQ4R6662 PYI2	G134686599	NUMBER	[M134221228] G134686599
VE50CDWVFJBOXEQLWMFO 6EQA1H	G134686600	NUMBER	[M134221228] G134686600
RA16NIV33KCBQBT15X0MS5I 00B	G134686601	NUMBER	[M134221228] G134686601
RCDJX120J1CMXRFGR5465ME P0T	G134686602	NUMBER	[M134221228] G134686602
W1RGYKBBQSBF2UXL5WU4 LYHXR	G134686603	NUMBER	[M134221228] G134686603
SK0RNC4PXBBQ4TNTQPYKN HEWCR	G134686604	NUMBER	[M134221228] G134686604
YXNGUEUST0CQLSI6TMW3W T5JKO	G134686605	NUMBER	[M134221228] G134686605
W4SV3PD6HEC1NEVT3E55TR KLTJ	G134686606	NUMBER	[M134221228] G134686606
TPOJ614CEUC5CBWWCXROFP ARYE	G134686607	NUMBER	[M134221228] G134686607
W0FAMBSKOPBLYUDUAJWQ 6KPYR4	G134686608	NUMBER	[M134221228] G134686608
T1BPGXR514B54UCY1X4GIAH 6HR	G134686609	NUMBER	[M134221228] G134686609
RIPG1MDE6MC3HE2KDGLGIU 1I3M	G134686610	NUMBER	[M134221228] G134686610
V5GITHT15XC5YS5OV6UT5F5 4DR	G134686611	NUMBER	[M134221228] G134686611
W4N4PQ3TLEBACUJMRTYEACQLXO	G134686612	NUMBER	[M134221228] G134686612
W3DN1X6RUJBXSEMRIBGJKHQJ0Y	G134686613	NUMBER	[M134221228] G134686613

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WI0CTKJ4EKC4PCFVCEP5RD60QJ	G134686614	NUMBER	[M134221228] G134686614
X6VYBYOTW1BQTUACY3NWGX3DUT	G134686615	NUMBER	[M134221228] G134686615
RXEUIHCT1QCTSSWODE04TABPPY	G134686616	NUMBER	[M134221228] G134686616
U30Q5NKKVOCU5R44H1Y5W0NCHN	G134686617	NUMBER	[M134221228] G134686617
RKTRKNV55OCORT5G6CB26ROXPV	G134686618	NUMBER	[M134221228] G134686618
UV6P4OELGWC5OD4GEYF060ODFW	G134686619	NUMBER	[M134221228] G134686619
WG4OY5JHX5BQXUB2Q4445H1MCJ	G134686620	NUMBER	[M134221228] G134686620
TUXPF1RXKNBCBXUPY0BRXWBOIW5	G134686621	NUMBER	[M134221228] G134686621
TSYW5BQO0QB1BCEN0G22B6146Q	G134686622	NUMBER	[M134221228] G134686622
WDJ3G3UL0KCT4ERFRS44M0WUBR	G134686623	NUMBER	[M134221228] G134686623
YRVMV2PSCACAPRDEFRH43QFE0T	G134686624	NUMBER	[M134221228] G134686624
SSXG36N32XCDOU6UVKNQ203GP4	G134686625	NUMBER	[M134221228] G134686625
XCM55KH5H5C3SRF6NLMRAFL06B	G134686626	NUMBER	[M134221228] G134686626
WJ00CVKTHHBF5DISR2WTHR3T4S	G134686627	NUMBER	[M134221228] G134686627
SF31P2MPC6BYRSMWW5TMNTJU4X	G134686628	NUMBER	[M134221228] G134686628
UYGCMKO3DFCBDDHIHVI2G4QP4F	G134686629	NUMBER	[M134221228] G134686629
SN3SURF3XUCW4B3XNUBRVPSOUP	G134686630	NUMBER	[M134221228] G134686630
W0O4O5FOOCB3ND6LP3J3GW	G134686631	NUMBER	[M134221228] G134686631

RG2W			
ULBWV313UKCROSRLSQLW Q1SGD	G134686632	NUMBER	[M134221228] G134686632
WTJ1YKQPXBDEUWTVG65 KYA6ES	G134686633	NUMBER	[M134221228] G134686633
WXPXQKNVUKBIHRXHAI6KF I1E2G	G134686634	NUMBER	[M134221228] G134686634
YVMB4G2RO0BVCCRRILSNC OGCL2	G134686635	NUMBER	[M134221228] G134686635
VM3WLJO6OKC5YBYBHPUR0 AMCGF	G134686636	NUMBER	[M134221228] G134686636
UB3CORBEONBPECKX5ARWO BRHML	G134686637	NUMBER	[M134221228] G134686637
U2QU5SCMQKBSUB3GY0J4NJ 6QE4	G134686638	NUMBER	[M134221228] G134686638
YR0SPTF1UOCDXCSG2SF3UC GXLA	G134686639	NUMBER	[M134221228] G134686639
S11CNBLWWYCOJSBO2QVP3 MM5L5	G134686640	NUMBER	[M134221228] G134686640
XRK2AEY0PMBCNTVILU3HA3 DJGD	G134686641	NUMBER	[M134221228] G134686641
TGGOP5ULFW2AHC3IJ02INCN MDW	G134686642	NUMBER	[M134221228] G134686642
TGGOP5WLFW2AHC3IJ02INCN MDW	G134686643	NUMBER	[M134221228] G134686643
TXIGOYO152AIDM0R02UAY 2NVM	G134686644	NUMBER	[M134221228] G134686644
TXIGOP1O152AIDM0R02UAY2 NVM	G134686645	NUMBER	[M134221228] G134686645
TXIGOP3O152AIDM0R02UAY2 NVM	G134686646	NUMBER	[M134221228] G134686646

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TXIGOPAO152AIDM0R02UAY2 NVM	G134686647	NUMBER	[M134221228] G134686647
TXIGOPCO152AIDM0R02UAY2 NVM	G134686648	NUMBER	[M134221228] G134686648
TXIGOPGO152AIDM0R02UAY2 NVM	G134686649	NUMBER	[M134221228] G134686649
UQGXP4IQQA2AIDM2002UAY 2NVM	G134686780	NUMBER	[M134221228] G134686780
UQGXP4KQQQA2AIDM2002UAY 2NVM	G134686671	NUMBER	[M134221228] G134686671
UQGXP4MQQA2AIDM2002UA Y2NVM	G134686672	NUMBER	[M134221228] G134686672
UQGXP4OQQQA2AIDM2002UAY 2NVM	G134686673	NUMBER	[M134221228] G134686673
UQGXP4QQQA2AIDM2002UAY 2NVM	G134686674	NUMBER	[M134221228] G134686674
UQGXP4SQQA2AIDM2002UAY 2NVM	G134686675	NUMBER	[M134221228] G134686675
UQGXP4UQQQA2AIDM2002UAY 2NVM	G134686676	NUMBER	[M134221228] G134686676
UQGXP4WQQQA2AIDM2002UA Y2NVM	G134686677	NUMBER	[M134221228] G134686677
UQGXP4YQQQA2AIDM2002UAY 2NVM	G134686678	NUMBER	[M134221228] G134686678
UQGXP51QQQA2AIDM2002UAY 2NVM	G134686679	NUMBER	[M134221228] G134686679
UQGXP53QQQA2AIDM2002UAY 2NVM	G134686680	NUMBER	[M134221228] G134686680
UQGXP55QQQA2AIDM2002UAY 2NVM	G134686754	NUMBER	[M134221228] G134686754
UQGXP5AQQA2AIDM2002UAY 2NVM	G134686755	NUMBER	[M134221228] G134686755
UQGXP5CQQQA2AIDM2002UAY 2NVM	G134686756	NUMBER	[M134221228] G134686756

#### 7.5.4 HUA\_DHCP\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_ID		VARCHAR R2(50)	[M134221243] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TGAVSNUHJYBKDC2644YL3XCTIP	G134687381	NUMBER	[M134221243] G134687381
TX4XQIUFV1BBKT13JWWAN4ECJQ	G134687382	NUMBER	[M134221243] G134687382
UVDSK4JH1LB2GB6JHCJJMJKUAR	G134687383	NUMBER	[M134221243] G134687383

#### 7.5.5 HUA\_G\_CDR\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_ID		VARCHAR R2(50)	[M134221230] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TGGOPACLFW2AHC3IJ02INCNMDW	G134686787	NUMBER	[M134221230] G134686787
TGGOPAELFW2AHC3IJ02INCNMDW	G134686788	NUMBER	[M134221230] G134686788
YAVDB5ELEDBLJBSN6CWGH34KCP	G134686781	NUMBER	[M134221230] G134686781
SXTCOXND3CBB5EIK6OCA3ALA JL	G134686782	NUMBER	[M134221230] G134686782
W5QOWYYQ25BNWB2JNEXTGBCAB1	G134686783	NUMBER	[M134221230] G134686783
VQTVTUWB2SBUXSN5SRR1	G134686784	NUMBER	[M134221230] G134686784

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MFQTWY			
SMF2XGPH5ABVJCQU56XE E2HQAC	G134686785	NUMBER	[M134221230] G134686785
XVE56FXYHRBO3SK5RDTF WIVRWS	G134686786	NUMBER	[M134221230] G134686786

#### 7.5.6 HUA\_GGSN\_GX\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_ID		VARCHAR2(50)	[M134221264_GGSN] GGSN_ID [M134221265_GGSN] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TXIGOXEO152AIDM0R02U AY2NVM	G134709301	NUMBER	[M134221264_GGSN] G134709301 [M134221265_GGSN] G134709301
TXIGOXGO152AIDM0R02U AY2NVM	G134709302	NUMBER	[M134221264_GGSN] G134709302 [M134221265_GGSN] G134709302
TXIGOXIO152AIDM0R02UA Y2NVM	G134709303	NUMBER	[M134221264_GGSN] G134709303 [M134221265_GGSN] G134709303
TXIGOXKO152AIDM0R02U AY2NVM	G134709304	NUMBER	[M134221264_GGSN] G134709304 [M134221265_GGSN] G134709304
TXIGOXMO152AIDM0R02U AY2NVM	G134709305	NUMBER	[M134221264_GGSN] G134709305 [M134221265_GGSN] G134709305
TXIGOXOO152AIDM0R02U AY2NVM	G134709306	NUMBER	[M134221264_GGSN] G134709306 [M134221265_GGSN]

			G134709306
TXIGOXQO152AIDM0R02U AY2NVM	G134709307	NUMBER	[M134221264_GGSN] G134709307 [M134221265_GGSN] G134709307
TXIGOXSO152AIDM0R02U AY2NVM	G134709308	NUMBER	[M134221264_GGSN] G134709308 [M134221265_GGSN] G134709308
TXIGOXUO152AIDM0R02U AY2NVM	G134709309	NUMBER	[M134221264_GGSN] G134709309 [M134221265_GGSN] G134709309
TXIGOXWO152AIDM0R02U AY2NVM	G134709310	NUMBER	[M134221264_GGSN] G134709310 [M134221265_GGSN] G134709310
TXIGOXYO152AIDM0R02U AY2NVM	G134709311	NUMBER	[M134221264_GGSN] G134709311 [M134221265_GGSN] G134709311
TXIGOY1O152AIDM0R02U AY2NVM	G134709312	NUMBER	[M134221264_GGSN] G134709312 [M134221265_GGSN] G134709312

### 7.5.7 HUA\_GGSN\_IPTRANSPORT\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_ID		VARCHAR R2(50)	[M134221229] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TXIGOQUO152AIDM0R02U	G134686750	NUMBER	[M134221229] G134686750

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AY2NVM			
TXIGOQWO152AIDM0R02U AY2NVM	G134686751	NUMBER	[M134221229] G134686751
TXIGOQYO152AIDM0R02U AY2NVM	G134686752	NUMBER	[M134221229] G134686752
TXIGOR1O152AIDM0R02U AY2NVM	G134686753	NUMBER	[M134221229] G134686753
TXIGOR3O152AIDM0R02U AY2NVM	G134710200	NUMBER	[M134221229] G134710200
TXIGOR5O152AIDM0R02U AY2NVM	G134710201	NUMBER	[M134221229] G134710201
TXIGORAO152AIDM0R02U AY2NVM	G134710202	NUMBER	[M134221229] G134710202
TXIGORCO152AIDM0R02U AY2NVM	G134710203	NUMBER	[M134221229] G134710203
TXIGOREO152AIDM0R02U AY2NVM	G134710204	NUMBER	[M134221229] G134710204
TXIGORGO152AIDM0R02U AY2NVM	G134710205	NUMBER	[M134221229] G134710205
TXIGORIO152AIDM0R02UA Y2NVM	G134710206	NUMBER	[M134221229] G134710206
TXIGORKO152AIDM0R02U AY2NVM	G134710207	NUMBER	[M134221229] G134710207
TXIGORMO152AIDM0R02U AY2NVM	G134710208	NUMBER	[M134221229] G134710208
TXIGOROO152AIDM0R02U AY2NVM	G134710209	NUMBER	[M134221229] G134710209
TXIGORQO152AIDM0R02U AY2NVM	G134710210	NUMBER	[M134221229] G134710210
TXIGORSO152AIDM0R02U AY2NVM	G134710211	NUMBER	[M134221229] G134710211
TXIGORUO152AIDM0R02U AY2NVM	G134710212	NUMBER	[M134221229] G134710212
TXIGORWO152AIDM0R02U AY2NVM	G134710213	NUMBER	[M134221229] G134710213

TXIGORYO152AIDM0R02U AY2NVM	G134710214	NUMBER	[M134221229] G134710214
TXIGOS1O152AIDM0R02UA Y2NVM	G134710215	NUMBER	[M134221229] G134710215

### 7.5.8 HUA\_GGSN\_PCC\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_ID		VARCHA R2(50)	[M134221267_GGSN] GGSN_ID [M134221268_GGSN] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TXIGOYUO152AIDM0R02U AY2NVM	G134709601	NUMBER	[M134221267_GGSN] G134709601 [M134221268_GGSN] G134709601
TXIGOYWO152AIDM0R02U AY2NVM	G134709602	NUMBER	[M134221267_GGSN] G134709602 [M134221268_GGSN] G134709602
TXIGOYYO152AIDM0R02U AY2NVM	G134709603	NUMBER	[M134221267_GGSN] G134709603 [M134221268_GGSN] G134709603
TXIGP01O152AIDM0R02UA Y2NVM	G134709604	NUMBER	[M134221267_GGSN] G134709604 [M134221268_GGSN] G134709604

### 7.5.9 HUA\_GTPP\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping

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GGSN_ID		VARCHAR2(50)	[M134221231] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
VRFKIAVKXRC1EDBF4J3E2YAFMR	G134686881	NUMBER	[M134221231] G134686881
YUMFXPGRNRBKRBQYQIROXKGCI21	G134686882	NUMBER	[M134221231] G134686882
SN0JTBTX03BJES6MJBQWXVGQS1	G134686883	NUMBER	[M134221231] G134686883
UBPVGXNSBSCB2SBUDVX4ATXN11	G134686884	NUMBER	[M134221231] G134686884
V0VMFCNGXQC3JB6S6WVI5RGGYG	G134686885	NUMBER	[M134221231] G134686885
V4010DR4QSCRWULLEYPKU3VFAV	G134686886	NUMBER	[M134221231] G134686886

#### 7.5.10 HUA\_INTELLIGENT\_SERVICE\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_ID		VARCHAR2(50)	[M134221242] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
XVMFK4FME2C1CU2JAL4BFDL1FD	G134687281	NUMBER	[M134221242] G134687281
Y4TJSUUJIVCJ1SWB0XK44C1EBY	G134687282	NUMBER	[M134221242] G134687282
YBRSUNKICBBWXUVII4O6BYCAWA	G134687283	NUMBER	[M134221242] G134687283
XXFWWJQGSUBUMTLUWCMKGTJQXU	G134687284	NUMBER	[M134221242] G134687284
WMPPIKCBB4CFRB35YS45E5URJ6	G134687285	NUMBER	[M134221242] G134687285
URONDF5Y0JBE3E3YUCMO16	G134687286	NUMBER	[M134221242] G134687286

WJNI			
THWXUI13YWCAMTCVXQ3SOBIARE	G134687287	FLOAT	[M134221242] G134687287
WAADEVTNPBB64RT5WOHXCM3AIK	G134687288	NUMBER	[M134221242] G134687288
XH6EQBWB6PCGHU4PS0C0MK0JMN	G134687289	NUMBER	[M134221242] G134687289

### 7.5.11 HUA\_L2TP\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_ID		VARCHAR R2(50)	[M134221241] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TXIGOS3O152AIDM0R02UAY2NVM	G134800000	FLOAT	[M134221241] G134800000
TXIGOS5O152AIDM0R02UAY2NVM	G134800001	FLOAT	[M134221241] G134800001
TXIGOSAO152AIDM0R02UAY2NVM	G134800002	NUMBER	[M134221241] G134800002
TXIGOSCO152AIDM0R02UAY2NVM	G134800003	FLOAT	[M134221241] G134800003
TXIGOSEO152AIDM0R02UAY2NVM	G134800100	NUMBER	[M134221241] G134800100
RO6GG2PKD4BS5E4AM5V6SITE4U	G134687181	NUMBER	[M134221241] G134687181
TEXAUAO4EBB42EOOH6DS1Y6DU1	G134687182	NUMBER	[M134221241] G134687182
SJHIWV1V6XC3JCL16WXXVYGYPY	G134687183	NUMBER	[M134221241] G134687183

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T0BRMCMAPPCY0R2KY1RI AIB2MU	G134687184	NUMBER	[M134221241] G134687184
VT51M2ANG4C3OUHWGGY JDFF40I	G134687185	NUMBER	[M134221241] G134687185
SO1IT4QXUUBQBUD63KXJ 64MXCR	G134687186	NUMBER	[M134221241] G134687186
TLAUQ2GI5HCFSDGYKIWO COCMD3	G134687187	NUMBER	[M134221241] G134687187

#### 7.5.12 HUA\_M134221229\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_ID		VARCHAR2(50)	[M134221229] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TGGOP6SLFW2AHC3IJ02IN CNMDW	G134686742	NUMBER	[M134221229] G134686742
TGGOP6ULFW2AHC3IJ02IN CNMDW	G134686743	NUMBER	[M134221229] G134686743
TGGOP6WLFW2AHC3IJ02I NCNMDW	G134686744	NUMBER	[M134221229] G134686744
TGGOP6YLFW2AHC3IJ02IN CNMDW	G134686745	NUMBER	[M134221229] G134686745
TGGOPA1LFW2AHC3IJ02IN CNMDW	G134686746	NUMBER	[M134221229] G134686746
TGGOPA3LFW2AHC3IJ02IN CNMDW	G134686747	NUMBER	[M134221229] G134686747
TGGOPA5LFW2AHC3IJ02IN CNMDW	G134686748	NUMBER	[M134221229] G134686748
TGGOPAALFW2AHC3IJ02I NCNMDW	G134686749	NUMBER	[M134221229] G134686749

#### 7.5.13 HUA\_M134221249\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping

GGSN_ID		VARCHA R2(50)	[M134221249] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TGGOPAULFW2AHC3IJ02IN CNMDW	G134707201	NUMBER	[M134221249] G134707201
TGGOPAWLFW2AHC3IJ02I NCNMDW	G134707202	NUMBER	[M134221249] G134707202
TGGOPAYLFW2AHC3IJ02IN CNMDW	G134707203	NUMBER	[M134221249] G134707203
TGGOPB1LFW2AHC3IJ02IN CNMDW	G134707204	NUMBER	[M134221249] G134707204
TGGOPB3LFW2AHC3IJ02IN CNMDW	G134707205	NUMBER	[M134221249] G134707205
TGGOPB5LFW2AHC3IJ02IN CNMDW	G134707206	NUMBER	[M134221249] G134707206
TGGOPBALFW2AHC3IJ02IN CNMDW	G134707207	NUMBER	[M134221249] G134707207
TGGOPBCLFW2AHC3IJ02IN CNMDW	G134707208	NUMBER	[M134221249] G134707208
TGGOPBELFW2AHC3IJ02IN CNMDW	G134707209	NUMBER	[M134221249] G134707209
TGGOPBGLFW2AHC3IJ02IN CNMDW	G134707210	NUMBER	[M134221249] G134707210
TGGOPBILFW2AHC3IJ02IN CNMDW	G134707211	NUMBER	[M134221249] G134707211
TGGOPBKLFW2AHC3IJ02IN CNMDW	G134707212	NUMBER	[M134221249] G134707212
TGGOPBMLFW2AHC3IJ02I NCNMDW	G134707213	NUMBER	[M134221249] G134707213
TGGOPBOLFW2AHC3IJ02IN	G134707214	NUMBER	[M134221249] G134707214

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CNMDW			
TGGOPBQLFW2AHC3IJ02IN CNMDW	G134707215	NUMBER	[M134221249] G134707215
TGGOPBSLFW2AHC3IJ02IN CNMDW	G134707216	NUMBER	[M134221249] G134707216
TGGOPBULFW2AHC3IJ02IN CNMDW	G134707217	NUMBER	[M134221249] G134707217
TGGOPBWLFW2AHC3IJ02I NCNMDW	G134707218	NUMBER	[M134221249] G134707218
TGGOPBYLFW2AHC3IJ02IN CNMDW	G134707219	NUMBER	[M134221249] G134707219
TGGOPC1LFW2AHC3IJ02IN CNMDW	G134707220	NUMBER	[M134221249] G134707220
TGGOPC3LFW2AHC3IJ02IN CNMDW	G134707221	NUMBER	[M134221249] G134707221
TGGOPC5LFW2AHC3IJ02IN CNMDW	G134707222	NUMBER	[M134221249] G134707222
TGGOPCALFW2AHC3IJ02IN CNMDW	G134707223	NUMBER	[M134221249] G134707223
TGGOPCCLFW2AHC3IJ02IN CNMDW	G134707224	NUMBER	[M134221249] G134707224

#### 7.5.14 HUA\_M134221250\_DATA\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_ID		VARCHAR2(50)	[M134221250] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TGGOPE3LFW2AHC3IJ02IN CNMDW	G134707517	NUMBER	[M134221250] G134707517
TGGOPE5LFW2AHC3IJ02IN CNMDW	G134707518	NUMBER	[M134221250] G134707518
TGGOPEALFW2AHC3IJ02IN CNMDW	G134707519	NUMBER	[M134221250] G134707519

TGGOPECLFW2AHC3IJ02IN CNMDW	G134707520	NUMBER	[M134221250] G134707520
TGGOPEELFW2AHC3IJ02IN CNMDW	G134707521	NUMBER	[M134221250] G134707521
TGGOPEGLFW2AHC3IJ02IN CNMDW	G134707522	NUMBER	[M134221250] G134707522
TGGOPEILFW2AHC3IJ02IN CNMDW	G134707523	NUMBER	[M134221250] G134707523
TGGOPEKLFW2AHC3IJ02IN CNMDW	G134707524	NUMBER	[M134221250] G134707524
TGGOPEMLFW2AHC3IJ02I NCNMDW	G134707525	NUMBER	[M134221250] G134707525
TGGOPEOLF2AHC3IJ02IN CNMDW	G134707526	NUMBER	[M134221250] G134707526
TGGOPEQLFW2AHC3IJ02IN CNMDW	G134707527	NUMBER	[M134221250] G134707527
TGGOPESLFW2AHC3IJ02IN CNMDW	G134707528	NUMBER	[M134221250] G134707528
TGGOPEULFW2AHC3IJ02IN CNMDW	G134707529	NUMBER	[M134221250] G134707529
TGGOPEWLF2AHC3IJ02I NCNMDW	G134707530	NUMBER	[M134221250] G134707530
TGGOPEYLF2AHC3IJ02IN CNMDW	G134707531	NUMBER	[M134221250] G134707531
TGGOPF1LFW2AHC3IJ02IN CNMDW	G134707532	NUMBER	[M134221250] G134707532

### 7.5.15 HUA\_M134221250\_IP\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_ID		VARCHA R2(50)	[M134221250] GGSN_ID

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TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TGGOPF3LFW2AHC3IJ02IN CNMDW	G134707533	NUMBER	[M134221250] G134707533
TGGOPF5LFW2AHC3IJ02IN CNMDW	G134707534	NUMBER	[M134221250] G134707534
TGGOPFALFW2AHC3IJ02IN CNMDW	G134707535	NUMBER	[M134221250] G134707535
TGGOPFCLFW2AHC3IJ02IN CNMDW	G134707536	NUMBER	[M134221250] G134707536
TGGOPFELFW2AHC3IJ02IN CNMDW	G134707537	NUMBER	[M134221250] G134707537
TGGOPFGLFW2AHC3IJ02IN CNMDW	G134707538	NUMBER	[M134221250] G134707538
TGGOPFILFW2AHC3IJ02IN CNMDW	G134707539	NUMBER	[M134221250] G134707539
TGGOPFKLFW2AHC3IJ02IN CNMDW	G134707540	NUMBER	[M134221250] G134707540
TGGOPFMLFW2AHC3IJ02I NCNMDW	G134707541	NUMBER	[M134221250] G134707541
TGGOPFOLFW2AHC3IJ02IN CNMDW	G134707542	NUMBER	[M134221250] G134707542
TGGOPFQLFW2AHC3IJ02IN CNMDW	G134707543	NUMBER	[M134221250] G134707543
TGGOPFSLFW2AHC3IJ02IN CNMDW	G134707544	NUMBER	[M134221250] G134707544
TGGOPFULFW2AHC3IJ02IN CNMDW	G134707545	NUMBER	[M134221250] G134707545
TGGOPFWLFW2AHC3IJ02I NCNMDW	G134707546	NUMBER	[M134221250] G134707546
TGGOPFYLFW2AHC3IJ02IN CNMDW	G134707547	NUMBER	[M134221250] G134707547
TGGOPG1LFW2AHC3IJ02IN CNMDW	G134707548	NUMBER	[M134221250] G134707548

**7.5.16 HUA\_M134221250\_SIGNAL\_TAB**

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_ID		VARCHAR2(50)	[M134221250] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TGGOPD3LFW2AHC3IJ02IN CNMDW	G134707501	NUMBER	[M134221250] G134707501
TGGOPD5LFW2AHC3IJ02IN CNMDW	G134707502	NUMBER	[M134221250] G134707502
TGGOPDALFW2AHC3IJ02IN CNMDW	G134707503	NUMBER	[M134221250] G134707503
TGGOPDCLFW2AHC3IJ02IN CNMDW	G134707504	NUMBER	[M134221250] G134707504
TGGOPDELFW2AHC3IJ02IN CNMDW	G134707505	NUMBER	[M134221250] G134707505
TGGOPDGLFW2AHC3IJ02IN CNMDW	G134707506	NUMBER	[M134221250] G134707506
TGGOPDILFW2AHC3IJ02IN CNMDW	G134707507	NUMBER	[M134221250] G134707507
TGGOPDKLFW2AHC3IJ02IN CNMDW	G134707508	NUMBER	[M134221250] G134707508
TGGOPDMLFW2AHC3IJ02I NCNMDW	G134707509	NUMBER	[M134221250] G134707509
TGGOPDOLFW2AHC3IJ02IN CNMDW	G134707510	NUMBER	[M134221250] G134707510
TGGOPDQLFW2AHC3IJ02IN CNMDW	G134707511	NUMBER	[M134221250] G134707511
TGGOPDSLFW2AHC3IJ02IN CNMDW	G134707512	NUMBER	[M134221250] G134707512
TGGOPDULFW2AHC3IJ02IN	G134707513	NUMBER	[M134221250] G134707513

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CNMDW			
TGGOPDWLFW2AHC3IJ02I CNMDW	G134707514	NUMBER	[M134221250] G134707514
TGGOPDYLFW2AHC3IJ02IN CNMDW	G134707515	NUMBER	[M134221250] G134707515
TGGOPE1LFW2AHC3IJ02IN CNMDW	G134707516	NUMBER	[M134221250] G134707516

#### 7.5.17 HUA\_M134221251\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_ID		VARCHAR R2(50)	[M134221251] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TGGOPG3LFW2AHC3IJ02IN CNMDW	G134707701	NUMBER	[M134221251] G134707701
TGGOPG5LFW2AHC3IJ02IN CNMDW	G134707702	FLOAT	[M134221251] G134707702
TGGOPGALFW2AHC3IJ02I CNMDW	G134707703	NUMBER	[M134221251] G134707703

#### 7.5.18 HUA\_M134221253\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_ID		VARCHAR R2(50)	[M134221253] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TGGOPGCLFW2AHC3IJ02IN CNMDW	G134708001	NUMBER	[M134221253] G134708001
TGGOPGELFW2AHC3IJ02IN CNMDW	G134708002	NUMBER	[M134221253] G134708002
TGGOPGGLFW2AHC3IJ02IN CNMDW	G134708003	NUMBER	[M134221253] G134708003

TGGOPGILFW2AHC3IJ02IN CNMDW	G134708004	NUMBER	[M134221253] G134708004
TGGOPGKLFW2AHC3IJ02IN CNMDW	G134708005	NUMBER	[M134221253] G134708005
TGGOPGMLFW2AHC3IJ02I NCNMDW	G134708006	NUMBER	[M134221253] G134708006
TGGOPGOLF2AHC3IJ02IN CNMDW	G134708007	NUMBER	[M134221253] G134708007
TGGOPGQLFW2AHC3IJ02IN CNMDW	G134708008	NUMBER	[M134221253] G134708008
TGGOPGSLFW2AHC3IJ02IN CNMDW	G134708009	NUMBER	[M134221253] G134708009
TGGOPGULFW2AHC3IJ02IN CNMDW	G134708010	NUMBER	[M134221253] G134708010
TGGOPGWLF2AHC3IJ02I NCNMDW	G134708011	NUMBER	[M134221253] G134708011
TGGOPGYLFW2AHC3IJ02IN CNMDW	G134708012	NUMBER	[M134221253] G134708012
TGGOPH1LFW2AHC3IJ02IN CNMDW	G134708013	NUMBER	[M134221253] G134708013

### 7.5.19 HUA\_M134221254\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_ID		VARCHAR R2(50)	[M134221254] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TGGOPH3LFW2AHC3IJ02IN CNMDW	G134708101	FLOAT	[M134221254] G134708101

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TGGOPH5LFW2AHC3IJ02IN CNMDW	G134708102	FLOAT	[M134221254] G134708102
TGGOPHALFW2AHC3IJ02IN CNMDW	G134708103	FLOAT	[M134221254] G134708103
TGGOPHCLFW2AHC3IJ02IN CNMDW	G134708104	NUMBER	[M134221254] G134708104
TGGOPHELPFW2AHC3IJ02IN CNMDW	G134708105	NUMBER	[M134221254] G134708105
TGGOPHGLFW2AHC3IJ02IN CNMDW	G134708106	NUMBER	[M134221254] G134708106
TGGOPHILFW2AHC3IJ02IN CNMDW	G134708107	NUMBER	[M134221254] G134708107
TGGOPHKLFW2AHC3IJ02IN CNMDW	G134708108	NUMBER	[M134221254] G134708108
TGGOPHMLFW2AHC3IJ02IN CNMDW	G134708109	FLOAT	[M134221254] G134708109
TGGOPHOLFW2AHC3IJ02IN CNMDW	G134708110	NUMBER	[M134221254] G134708110
TGGOPHQLFW2AHC3IJ02IN CNMDW	G134708111	NUMBER	[M134221254] G134708111
TGGOPHSLFW2AHC3IJ02IN CNMDW	G134708112	NUMBER	[M134221254] G134708112
TGGOPHULFW2AHC3IJ02IN CNMDW	G134708113	NUMBER	[M134221254] G134708113
TGGOPHWLFW2AHC3IJ02IN CNMDW	G134708114	NUMBER	[M134221254] G134708114
TGGOPHYLFW2AHC3IJ02IN CNMDW	G134708115	NUMBER	[M134221254] G134708115
TGGOPI1LFW2AHC3IJ02INC NMDW	G134708116	NUMBER	[M134221254] G134708116
TGGOPI3LFW2AHC3IJ02INC NMDW	G134708117	NUMBER	[M134221254] G134708117
TGGOPI5LFW2AHC3IJ02INC NMDW	G134708118	NUMBER	[M134221254] G134708118
TGGOPIALFW2AHC3IJ02IN	G134708119	NUMBER	[M134221254] G134708119

CNMDW			
TGGOPICLFW2AHC3IJ02INC NMDW	G134708120	NUMBER	[M134221254] G134708120
TGGOPIELFW2AHC3IJ02INC NMDW	G134708121	NUMBER	[M134221254] G134708121
TGGOPIGLFW2AHC3IJ02IN CNMDW	G134708122	NUMBER	[M134221254] G134708122
TGGOPIILFW2AHC3IJ02INC NMDW	G134708123	NUMBER	[M134221254] G134708123
TGGOPIKLFW2AHC3IJ02IN CNMDW	G134708124	NUMBER	[M134221254] G134708124
TGGOPIMLFW2AHC3IJ02IN CNMDW	G134708125	NUMBER	[M134221254] G134708125
TGGOPIOLF2AHC3IJ02IN CNMDW	G134708126	NUMBER	[M134221254] G134708126
TGGOPIQLFW2AHC3IJ02IN CNMDW	G134708127	NUMBER	[M134221254] G134708127
TGGOPISLFW2AHC3IJ02INC NMDW	G134708128	NUMBER	[M134221254] G134708128
TGGOPIULFW2AHC3IJ02IN CNMDW	G134708129	NUMBER	[M134221254] G134708129
TGGOPIWLF2AHC3IJ02IN CNMDW	G134708130	NUMBER	[M134221254] G134708160
TGGOPIYLF2AHC3IJ02IN CNMDW	G134708131	NUMBER	[M134221254] G134708161
TGGOPJ1LFW2AHC3IJ02INC NMDW	G134708132	NUMBER	[M134221254] G134708164
TGGOPJ3LFW2AHC3IJ02INC NMDW	G134708133	NUMBER	[M134221254] G134708165
TXIGOSSO152AIDM0R02UA Y2NVM	G134708134	NUMBER	[M134221254] G134708134

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TXIGOSUO152AIDM0R02UA Y2NVM	G134708135	NUMBER	[M134221254] G134708135
TXIGOSWO152AIDM0R02U AY2NVM	G134708136	NUMBER	[M134221254] G134708136
TXIGOSYO152AIDM0R02UA Y2NVM	G134708137	NUMBER	[M134221254] G134708137
TXIGOT1O152AIDM0R02UA Y2NVM	G134708138	NUMBER	[M134221254] G134708138
TXIGOT3O152AIDM0R02UA Y2NVM	G134708139	NUMBER	[M134221254] G134708139
TXIGOT5O152AIDM0R02UA Y2NVM	G134708140	NUMBER	[M134221254] G134708140
TXIGOTAO152AIDM0R02UA Y2NVM	G134708141	NUMBER	[M134221254] G134708141
TXIGOTCO152AIDM0R02UA Y2NVM	G134708142	NUMBER	[M134221254] G134708142
TXIGOTE0152AIDM0R02UA Y2NVM	G134708143	NUMBER	[M134221254] G134708143
TXIGOTGO152AIDM0R02UA Y2NVM	G134708144	NUMBER	[M134221254] G134708144
TXIGOTIO152AIDM0R02UA Y2NVM	G134708145	NUMBER	[M134221254] G134708145
TXIGOTKO152AIDM0R02UA Y2NVM	G134708146	NUMBER	[M134221254] G134708146
TXIGOTMO152AIDM0R02U AY2NVM	G134708147	NUMBER	[M134221254] G134708147
TXIGOTOO152AIDM0R02UA Y2NVM	G134708148	NUMBER	[M134221254] G134708148
TXIGOTQO152AIDM0R02UA Y2NVM	G134708149	NUMBER	[M134221254] G134708149
TXIGOTSO152AIDM0R02UA Y2NVM	G134708150	NUMBER	[M134221254] G134708150
TXIGOTUO152AIDM0R02UA Y2NVM	G134708151	NUMBER	[M134221254] G134708151
TXIGOTWO152AIDM0R02U	G134708152	NUMBER	[M134221254] G134708152

AY2NVM			
TXIGOTYO152AIDM0R02UA Y2NVM	G134708153	NUMBER	[M134221254] G134708153
TXIGOU1O152AIDM0R02UA Y2NVM	G134708154	NUMBER	[M134221254] G134708154
TXIGOU3O152AIDM0R02UA Y2NVM	G134708155	NUMBER	[M134221254] G134708155
TXIGOU5O152AIDM0R02UA Y2NVM	G134708156	NUMBER	[M134221254] G134708156
TXIGOUAO152AIDM0R02U AY2NVM	G134708157	NUMBER	[M134221254] G134708157
TXIGOUCO152AIDM0R02UA Y2NVM	G134708158	NUMBER	[M134221254] G134708158
TXIGOUEO152AIDM0R02UA Y2NVM	G134708159	NUMBER	[M134221254] G134708159
TXIGOUUGO152AIDM0R02U AY2NVM	G134708162	NUMBER	[M134221254] G134708162
TXIGOUUIO152AIDM0R02UA Y2NVM	G134708163	NUMBER	[M134221254] G134708163
TXIGOUUKO152AIDM0R02U AY2NVM	G134708166	NUMBER	[M134221254] G134708166
TXIGOUUMO152AIDM0R02U AY2NVM	G134708167	NUMBER	[M134221254] G134708167
TXIGOUOO152AIDM0R02U AY2NVM	G134708168	NUMBER	[M134221254] G134708168
TXIGOUQO152AIDM0R02U AY2NVM	G134708169	NUMBER	[M134221254] G134708169
TXIGOUSO152AIDM0R02UA Y2NVM	G134708170	NUMBER	[M134221254] G134708170
TXIGOUUUO152AIDM0R02U AY2NVM	G134708171	NUMBER	[M134221254] G134708171

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SAFE2A1R452AIDM2J02UA Y2NVM	G134708130_R007	NUMBER	[M134221254] G134708130
TKRXDF1R452AIDM2J02UA Y2NVM	G134708131_R007	NUMBER	[M134221254] G134708131
RVXYDLSUHY2AIDM5R02U AY2NVM	G134708132_R007	NUMBER	[M134221254] G134708132
T6SFU0OUHY2AIDM5R02U AY2NVM	G134708133_R007	NUMBER	[M134221254] G134708133

#### 7.5.20 HUA\_M134221255\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_ID		VARCHAR R2(50)	[M134221255] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TXIGOUWO152AIDM0R02U AY2NVM	G134708208	NUMBER	[M134221255] G134708208
TGGOPJ5LFW2AHC3IJ02IN CNMDW	G134708201	FLOAT	[M134221255] G134708201
TGGOPJALFW2AHC3IJ02IN CNMDW	G134708202	FLOAT	[M134221255] G134708202
TGGOPJCLFW2AHC3IJ02IN CNMDW	G134708203	FLOAT	[M134221255] G134708203
TGGOPJELFW2AHC3IJ02IN CNMDW	G134708204	NUMBER	[M134221255] G134708204
TGGOPJGLFW2AHC3IJ02IN CNMDW	G134708205	NUMBER	[M134221255] G134708205
TGGOPJILFW2AHC3IJ02INC NMDW	G134708206	NUMBER	[M134221255] G134708206
TGGOPJKLFW2AHC3IJ02IN CNMDW	G134708207	NUMBER	[M134221255] G134708207

#### 7.5.21 HUA\_M134221256\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping

GGSN_ID		VARCHA R2(50)	[M134221256] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TGGOPJMLFW2AHC3IJ02IN CNMDW	G134708301	NUMBER	[M134221256] G134708301
TGGOPJOLFW2AHC3IJ02IN CNMDW	G134708302	NUMBER	[M134221256] G134708302
TGGOPJQLFW2AHC3IJ02IN CNMDW	G134708303	NUMBER	[M134221256] G134708303
TGGOPJSLFW2AHC3IJ02INC NMDW	G134708304	NUMBER	[M134221256] G134708304
TGGOPJULFW2AHC3IJ02IN CNMDW	G134708305	NUMBER	[M134221256] G134708305
TGGOPJWLFW2AHC3IJ02IN CNMDW	G134708306	NUMBER	[M134221256] G134708306
TGGOPJYLFW2AHC3IJ02IN CNMDW	G134708307	NUMBER	[M134221256] G134708307
TGGOPK1LFW2AHC3IJ02IN CNMDW	G134708308	NUMBER	[M134221256] G134708308
TGGOPK3LFW2AHC3IJ02IN CNMDW	G134708309	NUMBER	[M134221256] G134708309
TGGOPK5LFW2AHC3IJ02IN CNMDW	G134708310	NUMBER	[M134221256] G134708310
TGGOPKALFW2AHC3IJ02IN CNMDW	G134708311	NUMBER	[M134221256] G134708311
TGGOPKCLFW2AHC3IJ02IN CNMDW	G134708312	NUMBER	[M134221256] G134708312
TGGOPKELFW2AHC3IJ02IN CNMDW	G134708313	NUMBER	[M134221256] G134708313
TGGOPKGFW2AHC3IJ02IN	G134708314	NUMBER	[M134221256] G134708314

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CNMDW			
TGGOPKILFW2AHC3IJ02IN CNMDW	G134708315	NUMBER	[M134221256] G134708315
TGGOPKKLFW2AHC3IJ02IN CNMDW	G134708316	NUMBER	[M134221256] G134708315
TGGOPKMLFW2AHC3IJ02IN CNMDW	G134708317	NUMBER	[M134221256] G134708317
TGGOPKOLF2AHC3IJ02IN CNMDW	G134708318	NUMBER	[M134221256] G134708317
TGGOPKQLFW2AHC3IJ02IN CNMDW	G134708319	NUMBER	[M134221256] G134708319
TGGOPKSLFW2AHC3IJ02IN CNMDW	G134708320	NUMBER	[M134221256] G134708319
TGGOPKULFW2AHC3IJ02IN CNMDW	G134708321	NUMBER	[M134221256] G134708321
TGGOPKWLFW2AHC3IJ02IN CNMDW	G134708322	NUMBER	[M134221256] G134708322
TGGOPKYLFW2AHC3IJ02IN CNMDW	G134708323	NUMBER	[M134221256] G134708323
TGGOPL1LFW2AHC3IJ02IN CNMDW	G134708324	NUMBER	[M134221256] G134708324
UQGXP6WQQA2AIDM2002U AY2NVM	G134708320_R7	NUMBER	[M134221256] G134708320
UQGXP6YQQA2AIDM2002U AY2NVM	G134708321_R7	NUMBER	[M134221256] G134708321

#### 7.5.22 HUA\_M134221257\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_ID		VARCHAR2(50)	[M134221257] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TXIGOUYO152AIDM0R02U AY2NVM	G134708409	NUMBER	[M134221257] G134708409

TXIGOV1O152AIDM0R02U AY2NVM	G134708410	NUMBER	[M134221257] G134708410
TXIGOV3O152AIDM0R02U AY2NVM	G134708411	NUMBER	[M134221257] G134708411
TXIGOV5O152AIDM0R02U AY2NVM	G134708412	NUMBER	[M134221257] G134708412
TGGOPL3LFW2AHC3IJ02IN CNMDW	G134708401	NUMBER	[M134221257] G134708401
TGGOPL5LFW2AHC3IJ02IN CNMDW	G134708402	NUMBER	[M134221257] G134708402
TGGOPLALFW2AHC3IJ02I NCNMDW	G134708403	NUMBER	[M134221257] G134708403
TGGOPLCLFW2AHC3IJ02I NCNMDW	G134708404	NUMBER	[M134221257] G134708404
TGGOPLELFW2AHC3IJ02IN CNMDW	G134708405	NUMBER	[M134221257] G134708405
TGGOPLGLFW2AHC3IJ02I NCNMDW	G134708406	NUMBER	[M134221257] G134708406
TGGOPLILFW2AHC3IJ02IN CNMDW	G134708407	NUMBER	[M134221257] G134708407
TGGOPLKLFW2AHC3IJ02I NCNMDW	G134708408	NUMBER	[M134221257] G134708408

### 7.5.23 HUA\_M134221258\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_ID		VARCHAR R2(50)	[M134221258] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TGGOPLMLFW2AHC3IJ02IN	G134708501	NUMBER	[M134221258] G134708501

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CNMDW			
TGGOPLOLF2AHC3IJ02IN CNMDW	G134708502	NUMBER	[M134221258] G134708502
TGGOPLQLFW2AHC3IJ02IN CNMDW	G134708503	NUMBER	[M134221258] G134708503
TGGOPLSLFW2AHC3IJ02IN CNMDW	G134708504	NUMBER	[M134221258] G134708504
TGGOPLULFW2AHC3IJ02IN CNMDW	G134708505	NUMBER	[M134221258] G134708505
TGGOPLWLF2AHC3IJ02IN CNMDW	G134708506	NUMBER	[M134221258] G134708506
TGGOPLYLF2AHC3IJ02IN CNMDW	G134708507	NUMBER	[M134221258] G134708507
TGGOPM1LFW2AHC3IJ02IN CNMDW	G134708508	NUMBER	[M134221258] G134708508
TGGOPM3LFW2AHC3IJ02IN CNMDW	G134708509	NUMBER	[M134221258] G134708509
TGGOPM5LFW2AHC3IJ02IN CNMDW	G134708510	NUMBER	[M134221258] G134708510
TGGOPMALFW2AHC3IJ02I NCNMDW	G134708511	NUMBER	[M134221258] G134708511
TGGOPMCLFW2AHC3IJ02IN CNMDW	G134708512	NUMBER	[M134221258] G134708512
TGGOPMELFW2AHC3IJ02IN CNMDW	G134708513	NUMBER	[M134221258] G134708513
TGGOPMGLFW2AHC3IJ02I NCNMDW	G134708514	NUMBER	[M134221258] G134708514
TGGOPMILFW2AHC3IJ02IN CNMDW	G134708515	NUMBER	[M134221258] G134708515
TGGOPMKLFW2AHC3IJ02I NCNMDW	G134708516	NUMBER	[M134221258] G134708516
TGGOPMMLFW2AHC3IJ02I NCNMDW	G134708517	NUMBER	[M134221258] G134708517
TGGOPMOLFW2AHC3IJ02I NCNMDW	G134708518	NUMBER	[M134221258] G134708518

TGGOPMQLFW2AHC3IJ02I NCNMDW	G134708519	NUMBER	[M134221258] G134708519
TGGOPMSLFW2AHC3IJ02IN CNMDW	G134708520	NUMBER	[M134221258] G134708520
TGGOPMULFW2AHC3IJ02I NCNMDW	G134708521	NUMBER	[M134221258] G134708521

**7.5.24 HUA\_M134221260\_TAB**

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_ID		VARCHA R2(50)	[M134221260] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TGGOPNELFW2AHC3IJ02IN CNMDW	G134708701	NUMBER	[M134221260] G134708701
TGGOPNGLFW2AHC3IJ02IN CNMDW	G134708702	NUMBER	[M134221260] G134708702
TGGOPNILFW2AHC3IJ02IN CNMDW	G134708703	NUMBER	[M134221260] G134708703
TGGOPNKLFW2AHC3IJ02IN CNMDW	G134708704	NUMBER	[M134221260] G134708704
TGGOPNMLFW2AHC3IJ02I NCNMDW	G134708705	NUMBER	[M134221260] G134708705
TGGOPNOLF2AHC3IJ02IN CNMDW	G134708706	NUMBER	[M134221260] G134708706
TGGOPNQLFW2AHC3IJ02IN CNMDW	G134708707	NUMBER	[M134221260] G134708707
TGGOPNSLFW2AHC3IJ02IN CNMDW	G134708708	NUMBER	[M134221260] G134708708
TGGOPNULFW2AHC3IJ02IN	G134708709	NUMBER	[M134221260] G134708709

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CNMDW			
TGGOPNWLFW2AHC3IJ02I CNMDW	G134708710	NUMBER	[M134221260] G134708710
TGGOPNYLFW2AHC3IJ02IN CNMDW	G134708711	NUMBER	[M134221260] G134708711
TGGOPO1LFW2AHC3IJ02IN CNMDW	G134708712	NUMBER	[M134221260] G134708712
TGGOPO3LFW2AHC3IJ02IN CNMDW	G134708713	NUMBER	[M134221260] G134708713
TGGOPO5LFW2AHC3IJ02IN CNMDW	G134708715	NUMBER	[M134221260] G134708715
TGGOPOALFW2AHC3IJ02IN CNMDW	G134708716	NUMBER	[M134221260] G134708716
TGGOPOCLFW2AHC3IJ02IN CNMDW	G134708717	NUMBER	[M134221260] G134708717
TGGOPOELFW2AHC3IJ02IN CNMDW	G134708718	NUMBER	[M134221260] G134708718
TGGOPOGLFW2AHC3IJ02IN CNMDW	G134708719	NUMBER	[M134221260] G134708719
TGGOPOILFW2AHC3IJ02IN CNMDW	G134708720	NUMBER	[M134221260] G134708720
TGGOPOKLFW2AHC3IJ02IN CNMDW	G134708721	NUMBER	[M134221260] G134708721
TGGOPOMLFW2AHC3IJ02I CNMDW	G134708722	NUMBER	[M134221260] G134708722
TGGOPOOLFW2AHC3IJ02IN CNMDW	G134708723	NUMBER	[M134221260] G134708723
TGGOPOQLFW2AHC3IJ02IN CNMDW	G134708724	NUMBER	[M134221260] G134708724
TGGOPOSLSFW2AHC3IJ02IN CNMDW	G134708725	NUMBER	[M134221260] G134708725
TGGOPOULFW2AHC3IJ02IN CNMDW	G134708726	NUMBER	[M134221260] G134708726
TGGOPOWLFW2AHC3IJ02I CNMDW	G134708727	NUMBER	[M134221260] G134708727

TGGOPOYLFW2AHC3IJ02IN CNMDW	G134708728	NUMBER	[M134221260] G134708728
TGGOPP1LFW2AHC3IJ02IN CNMDW	G134708729	NUMBER	[M134221260] G134708729
TGGOPP3LFW2AHC3IJ02IN CNMDW	G134708730	NUMBER	[M134221260] G134708730
TGGOPP5LFW2AHC3IJ02IN CNMDW	G134708731	NUMBER	[M134221260] G134708731
TGGOPPALFW2AHC3IJ02IN CNMDW	G134708732	NUMBER	[M134221260] G134708732
TGGOPPCLFW2AHC3IJ02IN CNMDW	G134708733	NUMBER	[M134221260] G134708733
TGGOPPELFW2AHC3IJ02IN CNMDW	G134708734	NUMBER	[M134221260] G134708734

**7.5.25 HUA\_M134221700\_TAB**

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_ID		VARCHA R2(50)	[M134221700] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
UQGXPA1QQA2AIDM2002U AY2NVM	G134840000	NUMBER	[M134221700] G134840000
UQGXPA3QQA2AIDM2002U AY2NVM	G134840001	NUMBER	[M134221700] G134840001
UQGXPA5QQA2AIDM2002U AY2NVM	G134840002	NUMBER	[M134221700] G134840002
UQGXPAAQQA2AIDM2002U AY2NVM	G134840003	NUMBER	[M134221700] G134840003

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### 7.5.26 HUA\_MIP\_FA\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_ID		VARCHAR R2(50)	[M134221245] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
XUK5JXDLQGC2MDYMQQP XWSMO1L	G134706898	NUMBER	[M134221245] G134706898
WEEHTY2225BW2B5AF6RFS ERCIK	G134706899	NUMBER	[M134221245] G134706899
VSNR023IVJB6JCOWH5UI4B0 NQX	G134706900	NUMBER	[M134221245] G134706900
WIQOODHOX2BL0CYTVOUJ YOGRKY	G134706901	NUMBER	[M134221245] G134706901
ULREP0O6YACTCU2QDBKC QDQPC6	G134706902	NUMBER	[M134221245] G134706902
YMYTW5EKPECRFDY1QHM OCLAOEC	G134706903	NUMBER	[M134221245] G134706903
RBLBM00XNSBHXSDWNGPE OC5Y6G	G134706904	NUMBER	[M134221245] G134706904
RXGXBO0U22CT2CYGC2OW LP2ANN	G134706905	NUMBER	[M134221245] G134706905
UKUPPOK2SLB4KR35KHAD4 4RY2S	G134706906	NUMBER	[M134221245] G134706906
SUCJ4J0PR5CKXDIQ6K3NWD EFS5	G134706907	NUMBER	[M134221245] G134706907
XRFCHNBFW4CSRTRARWPD XG5GMO	G134706908	NUMBER	[M134221245] G134706908
TEBUUYEDVCCXHU4ISRBN G6CCQI	G134706909	NUMBER	[M134221245] G134706909
S2GS6YFRXKBHGTIKKGN0J RWPW0	G134706910	NUMBER	[M134221245] G134706910
RIR50GUIATC3YUIJACWQ3D TNAK	G134706911	NUMBER	[M134221245] G134706911

TGWUW5K3GECTUSC1M4HR 1A5RBA	G134706912	NUMBER	[M134221245] G134706912
--------------------------------	------------	--------	-------------------------

**7.5.27 HUA\_PPPC\_TAB**

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_ID		VARCHAR R2(50)	[M134221240] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
SJQR01BLTUCIYSYILY6FCY V0P3	G134687083	NUMBER	[M134221240] G134687083
YKN6OYYWKDB1NCJ4EVM MCHV2RQ	G134687084	NUMBER	[M134221240] G134687084
UCYLGBCKLWBJRCSRSE4CX CJKNGL	G134687085	NUMBER	[M134221240] G134687085
URQEJ5DG51CF3SOYEH4TFL J13N	G134687086	NUMBER	[M134221240] G134687086
RCC4QFNEBTCMSUQRGBT2 U6NDSC	G134687087	NUMBER	[M134221240] G134687087
XKNNYRQYKDCJKSBKD2LB 33UCCP	G134687088	NUMBER	[M134221240] G134687088
SLHYLHODCTCE1UKMMLX 5R3YDXO	G134687089	NUMBER	[M134221240] G134687089

**7.5.28 HUA\_SIGNAL\_MESS\_ERR\_TAB**

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_ID		VARCHAR R2(50)	[M134221248] GGSN_ID
TSTAMP		DATE	

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INSTANCE_ID		NUMBER	
WAEAKAJLMDcdbriaJP2XB53X1B	G134706942	NUMBER	[M134221248] G134706942
RNCE10FNMNCBICNWDXE10FC30T	G134706943	NUMBER	[M134221248] G134706943
RFULQPE5JKC2ICAOT6TBOTICDW	G134706944	NUMBER	[M134221248] G134706944
TDUVBSSXXXCHERD565JGE0UMNQ	G134706945	NUMBER	[M134221248] G134706945
WWLTQJJBQQBOCC6JQR3RYRGSSR	G134706946	NUMBER	[M134221248] G134706946
YOGOEXGIU0CXDUBAKM42VAPERL	G134706947	NUMBER	[M134221248] G134706947
XTTIRNP2EWBOTD6UDH1C3PYKI5	G134706948	NUMBER	[M134221248] G134706948
WAXRUB1OSBC5JBRYBVRFIPKAQ5	G134706949	NUMBER	[M134221248] G134706949
TIGRHYP034CJCS2FWFAO6ML1KH	G134706950	NUMBER	[M134221248] G134706950
TXLFICXVDPCDCRUKB3SIQSHPGO	G134706951	NUMBER	[M134221248] G134706951
YQWKJTWWRSCF3DUCWY4S6RAMLV	G134706952	NUMBER	[M134221248] G134706952
UYSRHFCR13CHWSQHAJXF DREYK5	G134706953	NUMBER	[M134221248] G134706953
STSN0B011NCABBIMIY2IVU2Q5C	G134706954	NUMBER	[M134221248] G134706954
RNEEDTCRUGC5VBMSBRQ5BUW22N	G134706955	NUMBER	[M134221248] G134706955
TT5U0IYBJUBSTR4HNMC30OR5U4	G134706956	NUMBER	[M134221248] G134706956
YRREHQUDUVCOQUUMCPCVE12K43	G134706957	NUMBER	[M134221248] G134706957

**7.5.29 HUA\_TRANSPORT\_TAB**

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_ID		VARCHAR R2(50)	[M134221229] GGSN_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
SBVATEMLJUCGTDAE300TS 3L4O3	G134686681	NUMBER	[M134221229] G134686681
VU3MXNTDEDBHTT1IJ1SJYP 2M5M	G134686682	NUMBER	[M134221229] G134686682
RT33RYL51JBMPRNH2T0R3N Y0FN	G134686683	NUMBER	[M134221229] G134686683
SBVNA0X4L1C6UDFMQSMT PBBHWR	G134686684	NUMBER	[M134221229] G134686684
V2I0TIC3CNBPMDQOEX6SO5 XMPT	G134686685	NUMBER	[M134221229] G134686685
WI6VU62WKGCKCBDPMUJH FHHQRL	G134686686	NUMBER	[M134221229] G134686686
V3WGWM0IQDCM0C3K1FQE TY5KJQ	G134686687	NUMBER	[M134221229] G134686687
V1NNNTFI6JCOUTPBGQKV QOSLK	G134686688	NUMBER	[M134221229] G134686688
UCHPYICA1FB0IR6YQ22361A ATC	G134686689	NUMBER	[M134221229] G134686689
WNCSBPSH6SCC2BIX0L6BT UHWRP	G134686690	NUMBER	[M134221229] G134686690
TQXRLEN2P2BNVRRPMY6TI IIGT2	G134686691	NUMBER	[M134221229] G134686691
TJ6L1DRL6BCY1D4WLVM TV6JPVC	G134686692	NUMBER	[M134221229] G134686692
USNXXBDRQBBFJD PYSGW4	G134686693	FLOAT	[M134221229] G134686693

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W1DQVE			
RCVTQCJ1RLC3LC0MDMJY MF6D0N	G134686694	NUMBER	[M134221229] G134686694
XFX2LF4X4BBPXT6C4E2GTS M0RX	G134686695	NUMBER	[M134221229] G134686695
W1M4VXWRCTBI4SYDYB1Q IYFDDA	G134686697	NUMBER	[M134221229] G134686697
TF1JG6XMO5COCEPCNHUAF SJUFX	G134686696	NUMBER	[M134221229] G134686696
TY6L1FGUE6CDCBU0DSB6P2 HBDG	G134686699	NUMBER	[M134221229] G134686699
SEA0NNFY22BPTEUI0BEXWI KLO5	G134686698	NUMBER	[M134221229] G134686698
T6OI2LD11CBSJRSK6DAURJ QQJP	G134686701	NUMBER	[M134221229] G134686701
YHXF5T0JPHB14TFTAO4QSI OVRH	G134686700	NUMBER	[M134221229] G134686700
VDHHQ4OJFNB55UWGBNM D0I3N04	G134686703	NUMBER	[M134221229] G134686703
RTBKBMIJKQCWYEPO5CW5 WCWQ0J	G134686702	NUMBER	[M134221229] G134686702
SELXKQBCHFCSXTEXODU 1C6I1A	G134686704	NUMBER	[M134221229] G134686704
UKWXVH1YWPC2IEX5TYVG FWCMHY	G134686705	NUMBER	[M134221229] G134686705
V2DA203OOUB6MUFCWQ6K G0SL25	G134686706	FLOAT	[M134221229] G134686706
T44XMPFACVC53DG1ICK026 2KW5	G134686707	FLOAT	[M134221229] G134686707
WOBN4U3AOBEKCVEFVL DF3UCM3	G134686708	NUMBER	[M134221229] G134686708
SB04L4YCA2CK6BCNOSML5 3WCTU	G134686709	NUMBER	[M134221229] G134686709
T1V033JBVXCF1E231P4KBRL 3O4	G134686710	NUMBER	[M134221229] G134686710

XV2WSXECFQCOUEWYBEJN HUSXLO	G134686711	NUMBER	[M134221229] G134686711
TKQOTQUUHABJGRYRP0N0 0JIHS0	G134686712	NUMBER	[M134221229] G134686712
W2PPB2RUJDC5MBTVXQAF ETYMTG	G134686713	FLOAT	[M134221229] G134686713
RBET6T6TL1CSYBLQ2DF0EE 5WNO	G134686714	FLOAT	[M134221229] G134686714
YML1CPF0XOBNEB4QNAYH RK4WMH	G134686715	FLOAT	[M134221229] G134686715
RMJKLUDUG3BCADQPF6CK OHWAIR	G134686716	FLOAT	[M134221229] G134686716
WJO1CYSKEICGWBM204X2E QJS2L	G134686717	FLOAT	[M134221229] G134686717
YCONIT0MP4CFTUKIT5PYX3 PQHJ	G134686718	FLOAT	[M134221229] G134686718
YGS1Q1BKYSCLINBVHXGTB BDV6XX	G134686719	FLOAT	[M134221229] G134686719
U531B5K51KCOVDS5NCRS4 UIJQ0	G134686720	FLOAT	[M134221229] G134686720
T21JGQKOXYCPVEQUMQJK T6XSJP	G134686721	FLOAT	[M134221229] G134686721
SVHWRJB0SMCSAT1LMNEP TKKFX1	G134686722	FLOAT	[M134221229] G134686722
XLVXRUIOWMC2FDVBD2JC KIA0RW	G134686723	FLOAT	[M134221229] G134686723
RAE3K35TW1CXFUUG0VSC5 QVK1S	G134686724	FLOAT	[M134221229] G134686724
YUHRERQPOVB0DT4MYLY WPA0OFT	G134686725	FLOAT	[M134221229] G134686725
SWMVDINY2HCQRS36PSYTE	G134686726	FLOAT	[M134221229] G134686726

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0JLIU			
RX4OGB4MP4CYLT13Q0NM ANEMXR	G134686727	FLOAT	[M134221229] G134686727
SG4M2K16JHC2ASXRSGJ3TS BITK	G134686728	FLOAT	[M134221229] G134686728
YIGRH6BRDYCBDCKKIXAIO UD2FJ	GN_GI_PACKETS	NUMBER	[M134221229] G134686686 + G134686688 + G134686690 + G134686692
TGGOP5YLFW2AHC3IJ02INC NMDW	G134686729	NUMBER	[M134221229] G134686729
TGGOP61LFW2AHC3IJ02INC NMDW	G134686730	FLOAT	[M134221229] G134686730
TGGOP63LFW2AHC3IJ02INC NMDW	G134686731	FLOAT	[M134221229] G134686731
TGGOP65LFW2AHC3IJ02INC NMDW	G134686732	NUMBER	[M134221229] G134686732
TGGOP6ALFW2AHC3IJ02INC NMDW	G134686733	NUMBER	[M134221229] G134686733
TGGOP6CLFW2AHC3IJ02INC NMDW	G134686734	NUMBER	[M134221229] G134686734
TGGOP6ELFW2AHC3IJ02INC NMDW	G134686735	NUMBER	[M134221229] G134686735
TGGOP6GLFW2AHC3IJ02INC NMDW	G134686736	FLOAT	[M134221229] G134686736
TGGOP6ILFW2AHC3IJ02INC NMDW	G134686737	FLOAT	[M134221229] G134686737
TGGOP6KLFW2AHC3IJ02INC NMDW	G134686738	FLOAT	[M134221229] G134686738
TGGOP6MLFW2AHC3IJ02INC NMDW	G134686739	FLOAT	[M134221229] G134686739
TGGOP6OLFW2AHC3IJ02INC NMDW	G134686740	NUMBER	[M134221229] G134686740
TGGOP6QLFW2AHC3IJ02INC NMDW	G134686741	FLOAT	[M134221229] G134686741

## 7.6 Raw GGSN\_Board Tables

### 7.6.1 HUA\_M134221261\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_BOARD_ID		VARCHAR R2(50)	[M134221261] GGSN_ID & "/" & FN_ID & "-" & GGSN_BOARD_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TGGOPPGLFW2AHC3IJ02IN CNMDW	G134708901	NUMBER	[M134221261] G134708901
TGGOPPILFW2AHC3IJ02IN CNMDW	G134708902	NUMBER	[M134221261] G134708902
TGGOPPKLFW2AHC3IJ02IN CNMDW	G134708903	NUMBER	[M134221261] G134708903
TGGOPPMLFW2AHC3IJ02I NCNMDW	G134708904	NUMBER	[M134221261] G134708904
TGGOPPOLFW2AHC3IJ02IN CNMDW	G134708905	NUMBER	[M134221261] G134708905
TGGOPPQLFW2AHC3IJ02IN CNMDW	G134708906	FLOAT	[M134221261] G134708906
TGGOPPSLFW2AHC3IJ02IN CNMDW	G134708907	NUMBER	[M134221261] G134708907

### 7.6.2 HUA\_SYSTEM\_RESOURCE\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
GGSN_BOARD_ID		VARCHAR R2(50)	[M134221233] GGSN_ID & "/" & FN_ID & "-" & GGSN_BOARD_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	

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TXIGOXCO152AIDM0R02UA Y2NVM	G134709201	FLOAT	[M134221233] G134709201
XWUU12YS3ECLDCI5HKVF YNU2JS	G134687081	FLOAT	[M134221233] G134687081
R2QOOFJ4G5C50SLLSGDVQ WUOOK	G134687082	FLOAT	[M134221233] G134687082
WTEOUC62PJBUWUEF1VW NQPMLLC	G134687101	FLOAT	[M134221233] G134687101
WJ50I0GD0WCF0T34IARL3R HTW6	G134687102	FLOAT	[M134221233] G134687102

## 7.7 Raw GPRS\_Tunnel Tables

### 7.7.1 HUA\_M134221701\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
GTP_ID		VARCHAR R2(50)	[M134221701] GGSN_ID & "/" & Object_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
YKFQOCUQQR2AIDM2002U AY2NVM	G134840020	NUMBER	[M134221701] G134840020
YKFQOCWQQR2AIDM2002U AY2NVM	G134840021	NUMBER	[M134221701] G134840021
YKFQOCYQQR2AIDM2002U AY2NVM	G134840022	NUMBER	[M134221701] G134840022
YKFQOD1QQR2AIDM2002U AY2NVM	G134840023	NUMBER	[M134221701] G134840023

## 7.8 Raw HPLMN Tables

### 7.8.1 HUA\_HPLMN\_SESSION\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
HPLMN_ID		VARCHAR R2(50)	[M134221246] GGSN_ID & "/" & MCC_ID & "/" & MNC_ID

TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TGGOPRGLFW2AHC3IJ02INC NMDW	G134706989	NUMBER	[M134221246] G134706989
TGGOPRILFW2AHC3IJ02INC NMDW	G134706990	NUMBER	[M134221246] G134706990
Y1YN1VDSQXBE4TOBTSY6N OQK4T	G134706981	NUMBER	[M134221246] G134706981
YQPLQTKQJVBWLTKKD5IX SXUJ4W	G134706982	NUMBER	[M134221246] G134706982
T2MSSQKWQOB1XT6D5GA1 4DO5SC	G134706983	NUMBER	[M134221246] G134706983
VQRCFOUCHMCWDCUH5TM HQ2D6N1	G134706984	NUMBER	[M134221246] G134706984
SPYE406OGLCUTDERJN143Q SJXT	G134706985	NUMBER	[M134221246] G134706985
TD4A03L030CFNDD3GUMBM ULHOC	G134706986	NUMBER	[M134221246] G134706986
XD6GBAAQ36CQYSNO4JJ2T M2I1K	G134706987	NUMBER	[M134221246] G134706987
XGKVQAOMWVB2HUY0KPV LA4K3LN	G134706988	NUMBER	[M134221246] G134706988

## 7.9 Raw IMSI Tables

### 7.9.1 HUA\_USER\_BILL\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
IMSI_ID		VARCHA R2(50)	[M134221238] GGSN_ID & "/" & IMSI_ID
TSTAMP		DATE	

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INSTANCE_ID		NUMBER	
V02VDXUKF5BKVB5MCPK EH0VGLK	G134706681	NUMBER	[M134221238] G134706681
TL26DWTPCCBXSDHLYHO HSDPMGE	G134706682	NUMBER	[M134221238] G134706682

## 7.10 Raw PCRF Tables

### 7.10.1 HUA\_PCRF\_GX\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
PCRF_ID		VARCHAR2(50)	[M134221266] GGSN_ID & "/" & Object_ID [M134221267] GGSN_ID & "/" & Object_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
UQGXP3EQQA2AIDM2002U AY2NVM	G134709501	NUMBER	[M134221266] G134709501 [M134221267] G134709501
UQGXP3GQQA2AIDM2002U AY2NVM	G134709502	NUMBER	[M134221266] G134709502 [M134221267] G134709502
UQGXP3IQQA2AIDM2002U AY2NVM	G134709503	NUMBER	[M134221266] G134709503 [M134221267] G134709503
UQGXP3KQQA2AIDM2002U AY2NVM	G134709504	NUMBER	[M134221266] G134709504 [M134221267] G134709504
UQGXP3MQQA2AIDM2002U AY2NVM	G134709505	NUMBER	[M134221266] G134709505 [M134221267] G134709505
UQGXP3OQQA2AIDM2002U AY2NVM	G134709506	NUMBER	[M134221266] G134709506 [M134221267] G134709506
UQGXP3QQQA2AIDM2002U AY2NVM	G134709507	NUMBER	[M134221266] G134709507 [M134221267] G134709507
UQGXP3SQQA2AIDM2002U AY2NVM	G134709508	NUMBER	[M134221266] G134709508 [M134221267] G134709508
UQGXP3UQQA2AIDM2002U AY2NVM	G134709509	NUMBER	[M134221266] G134709509 [M134221267] G134709509
UQGXP3WQQA2AIDM2002U	G134709510	NUMBER	[M134221266] G134709510

AY2NVM			[M134221267] G134709510
UQGXP3YQQA2AIDM2002U AY2NVM	G134709511	NUMBER	[M134221266] G134709511 [M134221267] G134709511
UQGXP41QQA2AIDM2002U AY2NVM	G134709512	NUMBER	[M134221266] G134709512 [M134221267] G134709512

### 7.10.2 HUA\_PCRF\_PCC\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
PCRF_ID		VARCHAR R2(50)	[M134221269] GGSN_ID & "/" & Object_ID [M134221270] GGSN_ID & "/" & Object_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
UQGXP4AQQA2AIDM2002U AY2NVM	G134709801	NUMBER	[M134221269] G134709801 [M134221270] G134709801
UQGXP4CQQA2AIDM2002U AY2NVM	G134709802	NUMBER	[M134221269] G134709802 [M134221270] G134709802
UQGXP4EQQA2AIDM2002U AY2NVM	G134709803	NUMBER	[M134221269] G134709803 [M134221270] G134709803
UQGXP4GQQA2AIDM2002U AY2NVM	G134709804	NUMBER	[M134221269] G134709804 [M134221270] G134709804

## 7.11 Raw Physical\_Port Tables

### 7.11.1 HUA\_PHYSICAL\_PORT\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
PHYSICAL_PORT_ID		VARCHAR R2(50)	[M134221264_PORT] GGSN_ID & "/" & Object_ID
TSTAMP		DATE	

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INSTANCE_ID		NUMBER	
UQGXP43QQA2AIDM2002U AY2NVM	G134707313	NUMBER	[M134221264_PORT] G134707313
UQGXP45QQA2AIDM2002U AY2NVM	G134707314	NUMBER	[M134221264_PORT] G134707314

## 7.12 Raw Processor Tables

### 7.12.1 HUA\_PROC\_SRVC\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
PROCESSOR_ID		VARCHAR R2(50)	[M134221262] GGSN_ID & "/" & PROC_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TXIGOVAO152AIDM0R02U AY2NVM	G134708901	NUMBER	[M134221262] G134708901
TXIGOVCO152AIDM0R02U AY2NVM	G134708902	NUMBER	[M134221262] G134708902
TXIGOVEO152AIDM0R02U AY2NVM	G134708903	FLOAT	[M134221262] G134708903
TXIGOVGO152AIDM0R02U AY2NVM	G134708904	FLOAT	[M134221262] G134708904
TXIGOVIO152AIDM0R02UA Y2NVM	G134708905	FLOAT	[M134221262] G134708905
TXIGOVKO152AIDM0R02U AY2NVM	G134708906	FLOAT	[M134221262] G134708906
TXIGOVMO152AIDM0R02U AY2NVM	G134708907	FLOAT	[M134221262] G134708907
TXIGOVOO152AIDM0R02U AY2NVM	G134708908	NUMBER	[M134221262] G134708908
TXIGOVQO152AIDM0R02U AY2NVM	G134708909	NUMBER	[M134221262] G134708909
TXIGOVSO152AIDM0R02UA Y2NVM	G134708910	NUMBER	[M134221262] G134708910

TXIGOVUO152AIDM0R02U AY2NVM	G134708911	NUMBER	[M134221262] G134708911
TXIGOVWO152AIDM0R02U AY2NVM	G134708912	NUMBER	[M134221262] G134708912
TXIGOVYO152AIDM0R02U AY2NVM	G134708913	NUMBER	[M134221262] G134708913
TXIGOW1O152AIDM0R02U AY2NVM	G134708914	NUMBER	[M134221262] G134708914
TXIGOW3O152AIDM0R02U AY2NVM	G134708915	FLOAT	[M134221262] G134708915
TXIGOW5O152AIDM0R02U AY2NVM	G134708916	FLOAT	[M134221262] G134708916
TXIGOWAO152AIDM0R02U AY2NVM	G134708917	FLOAT	[M134221262] G134708917
TXIGOWCO152AIDM0R02U AY2NVM	G134708918	FLOAT	[M134221262] G134708918
TXIGOWEO152AIDM0R02U AY2NVM	G134708919	FLOAT	[M134221262] G134708919
TXIGOWGO152AIDM0R02U AY2NVM	G134708920	NUMBER	[M134221262] G134708920
TXIGOWIO152AIDM0R02UA Y2NVM	G134708921	NUMBER	[M134221262] G134708921
TXIGOWKO152AIDM0R02U AY2NVM	G134708922	NUMBER	[M134221262] G134708922
TXIGOWMO152AIDM0R02U AY2NVM	G134708923	NUMBER	[M134221262] G134708923
TXIGOWOO152AIDM0R02U AY2NVM	G134708924	NUMBER	[M134221262] G134708924
TXIGOWQO152AIDM0R02U AY2NVM	G134708925	NUMBER	[M134221262] G134708925
TXIGOWSO152AIDM0R02U	G134708926	NUMBER	[M134221262] G134708926

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AY2NVM			
TXIGOWUO152AIDM0R02U AY2NVM	G134708927	NUMBER	[M134221262] G134708927
TXIGOWWO152AIDM0R02U AY2NVM	G134708928	NUMBER	[M134221262] G134708928

### 7.12.2 HUA\_PROC\_SYST\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
PROCESSOR_ID		VARCHA R2(50)	[M134221263] GGSN_ID & "/" & PROC_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TXIGOWYO152AIDM0R02U AY2NVM	G134709101	FLOAT	[M134221263] G134709101
TXIGOX1O152AIDM0R02U AY2NVM	G134709102	FLOAT	[M134221263] G134709102
TXIGOX3O152AIDM0R02U AY2NVM	G134709103	FLOAT	[M134221263] G134709103
TXIGOX5O152AIDM0R02U AY2NVM	G134709104	FLOAT	[M134221263] G134709104
TXIGOXAO152AIDM0R02U AY2NVM	G134709105	FLOAT	[M134221263] G134709105

### 7.13 Raw SGSN\_IP Tables

#### 7.13.1 HUA\_SGSN\_SESSION\_TAB

Column Name	Column Alias	Data Type	Loader Block/Mapping
SGSN_IP_ID		VARCHA R2(50)	[M134221247] GGSN_ID & "/" & SGSN_IP_ID
TSTAMP		DATE	
INSTANCE_ID		NUMBER	
TWKWCS2KBECG1E2RIGND TBVPEQ	G134707081	NUMBER	[M134221247] G134707081

WIBO0H2QOOCQ1CNMX2F64W6BXB	G134707082	NUMBER	[M134221247] G134707082
WFSLKDHI60C4FTNIY3MOXPJXD5	G134707083	NUMBER	[M134221247] G134707083
WQDFQJSNVKBVBE320B5FWLPW1J	G134707084	NUMBER	[M134221247] G134707084
VJXEG2B2SVC5TBUWMTFH14GKWB	G134707085	NUMBER	[M134221247] G134707085
UEWV44NSX1BTWS2FUPI6SN6LCI	G134707086	NUMBER	[M134221247] G134707086
XAI X0IJFCABVOTUVQAV1WQEWS	G134707087	NUMBER	[M134221247] G134707087
XBJNIAIFNTCHPD06562XQPIUP2	G134707088	NUMBER	[M134221247] G134707088
YLIWHH4UK4B40SBKR1HGEJ5NHO	G134707089	NUMBER	[M134221247] G134707089
VFX405VGBABA5R16BRITEK10ME	G134707090	NUMBER	[M134221247] G134707090
UFIJ20FFWLBTCD4RL3DEVTHG11	G134707091	NUMBER	[M134221247] G134707091
VT4AVJWYPPCT3CTSBX5MHJ2IUC	G134707092	NUMBER	[M134221247] G134707092
SNMEEL6T1C4QE1X1TGBYAJJ0A	G134707093	NUMBER	[M134221247] G134707093
TJLNCDXNHCC1DTR4FK3LI13U6F	G134707094	NUMBER	[M134221247] G134707094
YIQK5PY32ABHFE0RJEGVFQTIFM	G134707095	NUMBER	[M134221247] G134707095
XI16YQ4HLABN6BWT5WC10GJSFU	G134707096	NUMBER	[M134221247] G134707096
SGKDSIR4D5CDJTQTIF1K03J	G134707097	NUMBER	[M134221247] G134707097

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L5T			
RIPW4TGPECB14TOX5HSR3 FLWFU	G134707098	NUMBER	[M134221247] G134707098
WULJVI6WL6B5SEQRSW4O RKY5BL	G134707099	NUMBER	[M134221247] G134707099
TV4SNXD2IGB2BR2PTEWBJ CFQHE	G134707100	NUMBER	[M134221247] G134707100
REJPSQUALJBXAUP4PH2SM XXPA5	G134707101	NUMBER	[M134221247] G134707101
TSAYBJMCQTB1LCLYDWM MEJKHNY	G134707102	NUMBER	[M134221247] G134707102
VKIOBWR4B1BUNCLXCEDC 1KE5VY	G134707103	NUMBER	[M134221247] G134707103
X5VY5WHUQFC52BQSU4LK JDWOXH	G134707104	NUMBER	[M134221247] G134707104
XH3FVXNQKIBGYDW2PTGQ JJWMHC	G134707105	NUMBER	[M134221247] G134707105
SU3JSY5C5VB5QCSCWUSNR 3GI5I	G134707106	NUMBER	[M134221247] G134707106
RUEHNIU0JRCCQDDVT2444 5JSFY	G134707107	NUMBER	[M134221247] G134707107
T5W2FAWAV2CG5UIYLCQF 3A4RKP	G134707108	NUMBER	[M134221247] G134707108
U01KCW6221BM2B3RV4O5N BESD1	G134707109	NUMBER	[M134221247] G134707109
TJ3PMPEJAGBLQEJLWVQJM Y62R4	G134707110	NUMBER	[M134221247] G134707110
VK1PFITEHTBLKETQUC1CE VSAVY	G134707111	NUMBER	[M134221247] G134707111
SC4GXMWG2RBA5R51HJG5 OQ240Y	G134707112	NUMBER	[M134221247] G134707112
TXIGOSQO152AIDM0R02UA Y2NVM	G134707113	NUMBER	[M134221247] G134707113

## 8 Performance Alarms

This section shows details of the performance alarms that are defined in this technology pack module:  
None.

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# 9 Reports

This section shows details of the reports that are defined in this technology pack module.

All reports can be run as raw, daily, weekly or monthly reports.

Where a KPI is marked (DA), it means Data Availability is to be reported upon it.

## 9.1 G APN sessions report

This report shows the APN 2G session performance.

Report Feature	Details
Report Tree Branch	System.GPRS.Engineering.CN.Huawei.APN
Primary Object	APN
APN 2G session	APN.APN_Id, APN.GGSN_Id, APN.Huawei.GTPV1_APN_session.GTPv1_MS_activate_session_request (DA), APN.Huawei.GTPV1_APN_session.GTPv1_MS_activate_session_succeed, APN.Huawei.GTPV1_APN_session.GTPv1_MS_act_PDP_context_success_ratio, APN.Huawei.GTPV1_APN_session.GTPv1_MS_launch_second_active_request, APN.Huawei.GTPV1_APN_session.GTPv1_MS_launch_second_active_succeed, APN.Huawei.GTPV1_APN_session._%_MS_launch_second_active_succeed, APN.Huawei.GTPV1_APN_session.GTPv1_Dynamic_address_activate_session_request, APN.Huawei.GTPV1_APN_session.GTPv1_Dynamic_address_activate_session_succeed, APN.Huawei.GTPV1_APN_session._%_Dynamic_address_act_session_succeed, APN.Huawei.GTPV1_APN_session.GTPv1_MS_deactivate_session_request, APN.Huawei.GTPV1_APN_session.GTPv1_MS_deactivate_session_succeed, APN.Huawei.GTPV1_APN_session._%_MS_deactivate_session_succeed, APN.Huawei.GTPV1_APN_session.GTPv1_GGSN_deactivate_session_request,

```

APN.Huawei.GTPV1_APN_session.GTPv1_GGSN_deactivate_session_succeed,
APN.Huawei.GTPV1_APN_session._%_GGSN_deactivate_session_succeed,
APN.Huawei.GTPV1_APN_session.GTPv1_MS_modify_session_request,
APN.Huawei.GTPV1_APN_session.GTPv1_MS_modify_session_succeed,
APN.Huawei.GTPV1_APN_session._%_MS_modify_session_succeed,
APN.Huawei.GTPV1_APN_session.GTPv1_GGSN_modify_session_request,
APN.Huawei.GTPV1_APN_session.GTPv1_GGSN_modify_session_succeed,
APN.Huawei.GTPV1_APN_session._%_GGSN_modify_session_succeed

```

## 9.2 G APN sessions report

This report shows the APN 3G session performance.

Report Feature	Details
Report Tree Branch	System.GPRS.Engineering.CN.Huawei.APN
Primary Object	APN
APN 3G session	APN.APN_Id, APN.GGSN_Id, APN.Huawei.GTPV0_APN_session.GTPv0_MS_activate_session_request, APN.Huawei.GTPV0_APN_session.GTPv0_MS_activate_session_succeed, APN.Huawei.GTPV0_APN_session.GTPv0_MS_act_PDP_context_success_ratio, APN.Huawei.GTPV0_APN_session.GTPv0_MS_deactivate_session_request, APN.Huawei.GTPV0_APN_session.GTPv0_MS_deactivate_session_succeed, APN.Huawei.GTPV0_APN_session._%_MS_deactivate_session_succeed, APN.Huawei.GTPV1_APN_session.GTPv1_GGSN_deactivate_session_request, APN.Huawei.GTPV1_APN_session.GTPv1_GGSN_deactivate_session_succeed, APN.Huawei.GTPV1_APN_session._%_GGSN_deactivate_session_succeed, APN.Huawei.GTPV1_APN_session.GTPv1_MS_modify_session_req

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	<p>uest,  APN.Huawei.GTPV1_APN_session.GTPv1_MS_modify_session_suc  ceed, APN.Huawei.GTPV1_APN_session._  %_MS_modify_session_succeed,  APN.Huawei.GTPV1_APN_session.GTPv1_GGSN_modify_session_  request,  APN.Huawei.GTPV1_APN_session.GTPv1_GGSN_modify_session_  succeed, APN.Huawei.GTPV1_APN_session._  %_GGSN_modify_session_succeed</p>
--	--

### 9.3 APN session by traffic class

Report for the APN-based PDP context, based on user priority (low, medium and high)

Report Feature	Details
Report Tree Branch	System.GPRS.Engineering.CN.Huawei.APN
Primary Object	APN
PDP context per priority	<p>APN.APN_Id, APN.GGSN_Id,  APN.Huawei.APN_status.Active_PDP_context (DA),  APN.Huawei.APN_session_by_traffic_class.Active_PDP_context_wit  h_low_priority (DA),  APN.Huawei.APN_session_by_traffic_class.Active_PDP_context_wit  h_medium_priority,  APN.Huawei.APN_session_by_traffic_class.Active_PDP_context_wit  h_hign_priority,  APN.Huawei.APN_session_by_traffic_class.Active_conversational_ cl  ass_PDP_context,  APN.Huawei.APN_session_by_traffic_class.Active_streaming_class_  PDP_context,  APN.Huawei.APN_session_by_traffic_class.Active_interactive_class_  _PDP_context,  APN.Huawei.APN_session_by_traffic_class.Active_background_clas  s_PDP_context</p>

### 9.4 APN status report

This report shows the APN status performance.

Report Feature	Details
Report Tree Branch	System.GPRS.Engineering.CN.Huawei.APN
Primary Object	APN

APN status	APN.APN_Id, APN.GGSN_Id, APN.Huawei.GTPV1_APN_session.GTPv1_MS_activate_session_succeed (DA), APN.Huawei.GTPV1_APN_session.GTPv1_MS_launch_second_active_succeed, APN.Huawei.GTPV1_APN_session.GTPv1_Dynamic_address_activate_session_succeed, APN.Huawei.GTPV0_APN_session.GTPv0_MS_activate_session_succeed (DA), APN.Huawei.GTPV0_APN_session.GTPv0_Dynamic_address_activate_session_succeed, APN.Huawei.APN_status.Active_PDP_context (DA), APN.Huawei.APN_status.Max_active_PDP_context, APN.Huawei.APN_status.Average_active_PDP_context, APN.Huawei.APN_status.Gn_Received_Packets, APN.Huawei.APN_status.Gn_Sent_Packets, APN.Huawei.APN_status.IP_addresses_allocated_to_MS, APN.Huawei.APN_status.Total_number_of_DHCP_address_request, APN.Huawei.APN_status.Total_number_of_successful_DHCP_addresses_request, APN.Huawei.APN_status.Total_number_of_DHCP_address_release
------------	---

## 9.5 Basic session by background class report

Basic session by background class report

Report Feature	Details
Report Tree Branch	System.GPRS.Engineering.CN.Huawei.GGSN
Primary Object	GGSN
Basic session by background class report	GGSN.GGSN_Id, GGSN.GGSN_Name, GGSN.Huawei.Basic_session.PDP_context_act, GGSN.Huawei.Basic_session.PDP_context_act_fail, GGSN.Huawei.Basic_session.PDP_context_act_success_ratio (DA), GGSN.Huawei.Basic_session_by_traffic_class.Background_class_PDP_context_act, GGSN.Huawei.Basic_session_by_traffic_class.Background_class_PDP_context_act_succ, GGSN.Huawei.Basic_session_by_traffic_class._%_Background_class_PDP_context_act_succ_with_low_priority, GGSN.Huawei.Basic_session_by_traffic_class._%_Background_class_PDP_context_act_succ_with_mid_priority,

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```

GGSN.Huawei.Basic_session_by_traffic_class._  

%_Background_class_PDP_context_act_succ_with_high_priority,  

GGSN.Huawei.Basic_session_by_traffic_class.Background_class_PD  

P_context_act_with_low_priority,  

GGSN.Huawei.Basic_session_by_traffic_class.Background_class_PD  

P_context_act_with_mid_priority,  

GGSN.Huawei.Basic_session_by_traffic_class.Background_class_PD  

P_context_act_with_high_priority,  

GGSN.Huawei.Basic_session_by_traffic_class.Background_class_PD  

P_context_act_succ_with_low_priority,  

GGSN.Huawei.Basic_session_by_traffic_class.Background_class_PD  

P_context_act_succ_with_mid_priority,  

GGSN.Huawei.Basic_session_by_traffic_class.Background_class_PD  

P_context_act_succ_with_high_priority

```

## 9.6 Basic session by conversational class report

Basic session by conversational class report

Report Feature	Details
Report Tree Branch	System.GPRS.Engineering.CN.Huawei.GGSN
Primary Object	GGSN
Basic session by conversational class report	GGSN.GGSN_Id, GGSN.GGSN_Name, GGSN.Huawei.Basic_session.PDP_context_act, GGSN.Huawei.Basic_session.PDP_context_act_fail, GGSN.Huawei.Basic_session.PDP_context_act_success_ratio, GGSN.Huawei.Basic_session_by_traffic_class.Conversational_class_ PDP_context_act, GGSN.Huawei.Basic_session_by_traffic_class.Conversational_class_ PDP_context_act_succ, GGSN.Huawei.Basic_session_by_traffic_class._ %_Conversational_class_PDP_context_act_succ_with_low_priority, GGSN.Huawei.Basic_session_by_traffic_class._ %_Conversational_class_PDP_context_act_succ_with_mid_priority, GGSN.Huawei.Basic_session_by_traffic_class._ %_Conversational_class_PDP_context_act_succ_with_high_priority, GGSN.Huawei.Basic_session_by_traffic_class.Conversational_class_ PDP_context_act_with_low_priority, GGSN.Huawei.Basic_session_by_traffic_class.Conversational_class_ PDP_context_act_with_mid_priority, GGSN.Huawei.Basic_session_by_traffic_class.Conversational_class_ PDP_context_act_with_high_priority, GGSN.Huawei.Basic_session_by_traffic_class.Conversational_class_ PDP_context_act_succ_with_low_priority,

	GGSN.Huawei.Basic_session_by_traffic_class.Conversational_class_PDP_context_act_succ_with_mid_priority, GGSN.Huawei.Basic_session_by_traffic_class.Conversational_class_PDP_context_act_succ_with_high_priority
--	--

## 9.7 Basic session by interactive class report

Basic session by interactive class report

Report Feature	Details
Report Tree Branch	System.GPRS.Engineering.CN.Huawei.GGSN
Primary Object	GGSN
Basic session by interactive class report	GGSN.GGSN_Id, GGSN.GGSN_Name, GGSN.Huawei.Basic_session.PDP_context_act, GGSN.Huawei.Basic_session.PDP_context_act_fail, GGSN.Huawei.Basic_session.PDP_context_act_success_ratio, GGSN.Huawei.Basic_session_by_traffic_class.Interactive_class_PDP_context_act, GGSN.Huawei.Basic_session_by_traffic_class.Interactive_class_PDP_context_act_succ, GGSN.Huawei.Basic_session_by_traffic_class._%_Interactive_class_PDP_context_act_succ_with_low_priority, GGSN.Huawei.Basic_session_by_traffic_class._%_Interactive_class_PDP_context_act_succ_with_mid_priority, GGSN.Huawei.Basic_session_by_traffic_class._%_Interactive_class_PDP_context_act_succ_with_high_priority, GGSN.Huawei.Basic_session_by_traffic_class.Interactive_class_PDP_context_act_with_low_priority, GGSN.Huawei.Basic_session_by_traffic_class.Interactive_class_PDP_context_act_with_mid_priority, GGSN.Huawei.Basic_session_by_traffic_class.Interactive_class_PDP_context_act_with_high_priority, GGSN.Huawei.Basic_session_by_traffic_class.Interactive_class_PDP_context_act_succ_with_low_priority, GGSN.Huawei.Basic_session_by_traffic_class.Interactive_class_PDP_context_act_succ_with_mid_priority, GGSN.Huawei.Basic_session_by_traffic_class.Interactive_class_PDP_context_act_succ_with_high_priority

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## 9.8 Basic session by streaming class report

Basic session by streaming class report

Report Feature	Details
Report Tree Branch	System.GPRS.Engineering.CN.Huawei.GGSN
Primary Object	GGSN
Basic session by streaming class report	GGSN.GGSN_Id, GGSN.GGSN_Name, GGSN.Huawei.Basic_session.PDP_context_act, GGSN.Huawei.Basic_session.PDP_context_act_fail, GGSN.Huawei.Basic_session.PDP_context_act_success_ratio, GGSN.Huawei.Basic_session_by_traffic_class.Streaming_class_PDP_context_act, GGSN.Huawei.Basic_session_by_traffic_class.Streaming_class_PDP_context_act_succ, GGSN.Huawei.Basic_session_by_traffic_class._%_Streaming_class_PDP_context_act_succ_with_low_priority, GGSN.Huawei.Basic_session_by_traffic_class._%_Streaming_class_PDP_context_act_succ_with_mid_priority, GGSN.Huawei.Basic_session_by_traffic_class._%_Streaming_class_PDP_context_act_succ_with_high_priority, GGSN.Huawei.Basic_session_by_traffic_class.Streaming_class_PDP_context_act_with_low_priority, GGSN.Huawei.Basic_session_by_traffic_class.Streaming_class_PDP_context_act_with_mid_priority, GGSN.Huawei.Basic_session_by_traffic_class.Streaming_class_PDP_context_act_with_high_priority, GGSN.Huawei.Basic_session_by_traffic_class.Streaming_class_PDP_context_act_succ_with_low_priority, GGSN.Huawei.Basic_session_by_traffic_class.Streaming_class_PDP_context_act_succ_with_mid_priority, GGSN.Huawei.Basic_session_by_traffic_class.Streaming_class_PDP_context_act_succ_with_high_priority

## 9.9 Basic session overview by traffic class report

Basic session by traffic class report

Report Feature	Details
Report Tree Branch	System.GPRS.Engineering.CN.Huawei.GGSN
Primary Object	GGSN
PDP context based on traffic class	GGSN.GGSN_Id, GGSN.GGSN_Name, GGSN.Huawei.Basic_session_by_traffic_class.Conversational_class_PDP_context_act,

```

GGSN.Huawei.Basic_session_by_traffic_class.Interactive_class_PDP
_context_act,
GGSN.Huawei.Basic_session_by_traffic_class.Streaming_class_PDP
_context_act,
GGSN.Huawei.Basic_session_by_traffic_class.Background_class_PD
P_context_act,
GGSN.Huawei.Basic_session_by_traffic_class.Conversational_class_
PDP_context_act_succ,
GGSN.Huawei.Basic_session_by_traffic_class.Interactive_class_PDP
_context_act_succ,
GGSN.Huawei.Basic_session_by_traffic_class.Streaming_class_PDP
_context_act_succ,
GGSN.Huawei.Basic_session_by_traffic_class.Background_class_PD
P_context_act_succ

```

## 9.10 Basic session report

This report shows the GGSN basic session performance.

Report Feature	Details
Report Tree Branch	System.GPRS.Engineering.CN.Huawei.GGSN
Primary Object	GGSN
GGSN basic session	GGSN.GGSN_Id, GGSN.GGSN_Name, GGSN.Huawei.Basic_session.Avg_act_PDP_context (DA), GGSN.Huawei.Basic_session.PDP_context_act, GGSN.Huawei.Basic_session.PDP_context_act_success, GGSN.Huawei.Basic_session.PDP_context_act_fail, GGSN.Huawei.Basic_session.PDP_context_act_success_ratio, GGSN.Huawei.Basic_session.PDP_context_deact, GGSN.Huawei.Basic_session.PDP_context_deact_success, GGSN.Huawei.Basic_session._%Successful_PDP_deactivation, GGSN.Huawei.Basic_session.GGSN_Received_Packets, GGSN.Huawei.Basic_session.GGSN_Sent_Packets, GGSN.Huawei.Basic_session.GGSN_Received_SM_Packets, GGSN.Huawei.Basic_session.GGSN_Sent_SM_Packets, GGSN.Huawei.Basic_session.GGSN_received_Path_Manager_Packet s, GGSN.Huawei.Basic_session.GGSN_Sent_Path_Manager_Packets

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## 9.11 Basic sessions graph

This graph shows the basic sessions for a selected GGSN. The display consists of three graphs for the selected day.

Report Feature	Details
Report Tree Branch	System.GPRS.Engineering.CN.Huawei.GGSN
Primary Object	GGSN
Average PDP activated	GGSN.Huawei.Basic_session.Avg_act_PDP_context, GGSN.Huawei.Basic_session.PDP_context_act_success_ratio
PDP activation	GGSN.Huawei.Basic_session.PDP_context_act_success, GGSN.Huawei.Basic_session.PDP_context_act_fail_by_optional_IE_incorrect
Packets traffic	GGSN.Huawei.Basic_session.GGSN_Received_Packets, GGSN.Huawei.Basic_session.GGSN_Sent_Packets

## 9.12 Board system resource report

This report shows the GGSN board system resource performance.

Report Feature	Details
Report Tree Branch	System.GPRS.Engineering.CN.Huawei.GGSN_Board
Primary Object	GGSN_Board
GGSN board system resource	GGSN_Board.GGSN_Board_Id, GGSN_Board.GGSN_Id, GGSN_Board.Huawei.System_resource.Avg_CPU_occupation_ratio(DA), GGSN_Board.Huawei.System_resource.Peak_CPU_occupation_ratio, GGSN_Board.Huawei.System_resource.Avg_memory_utilization_ratio, GGSN_Board.Huawei.System_resource.Avg_harddisk_utilization_ratio

## 9.13 CDRs report

This report shows the GGSN CDRs performance.

Report Feature	Details
Report Tree Branch	System.GPRS.Engineering.CN.Huawei.GGSN
Primary Object	GGSN

GGSN CDRs	GGSN.GGSN_Id, GGSN.GGSN_Name, GGSN.Huawei.G_CDR.CDRs_create_success (DA), GGSN.Huawei.G_CDR.CDRs_create_fault, GGSN.Huawei.G_CDR._%_CDRs_create_fault, GGSN.Huawei.G_CDR.Access_points_CDRs_being_collected, GGSN.Huawei.G_CDR.Total_number_of_CDRs_opened, GGSN.Huawei.G_CDR.Total_number_of_containers_created, GGSN.Huawei.G_CDR.Currently_opened_charging_containers
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## 9.14 Gn and Gi traffic APN report

This report shows the APNGn and Gi traffic performance.

Report Feature	Details
Report Tree Branch	System.GPRS.Engineering.CN.Huawei.APN
Primary Object	APN
APN Gn and Gi traffic	APN.APN_Id, APN.APN_Name, APN.Huawei.APN_status.Active_PDP_context (DA), APN.Huawei.APN_Transport.APN_Average_packet_throughput (DA), APN.Huawei.APN_Transport.APN_Peak_packet_throughput, APN.Huawei.APN_Transport.APN_UL_transport_success_ratio, APN.Huawei.APN_Transport.APN_DL_transport_success_ratio, APN.Huawei.APN_Transport.APN_Gn_Uplink_packets, APN.Huawei.APN_Transport.APN_Gn_Downlink_packets, APN.Huawei.APN_Transport.APN_Gi_Uplink_packets, APN.Huawei.APN_Transport.APN_Gi_Downlink_packets, APN.Huawei.APN_Transport.APN_redirect_packets, APN.Huawei.APN_Transport.APN_source_address_invalid_packets, APN.Huawei.APN_Transport.APN_destination_address_invalid_packets

## 9.15 Gn and Gi traffic report

This report shows the Gn and Gi traffic performance.

Report Feature	Details
Report Tree Branch	System.GPRS.Engineering.CN.Huawei.GGSN

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Primary Object	GGSN
Gn and Gi traffic	<p>GGSN.GGSN_Id, GGSN.GGSN_Name, GGSN.Huawei.Transport._%_Device_Uplink_transport_success, GGSN.Huawei.Transport._%_Device_Downlink_transport_success,</p> <p>GGSN.Huawei.Transport.Avg_packet_throughput (DA),</p> <p>GGSN.Huawei.Transport.Peak_packet_throughput,</p> <p>GGSN.Huawei.Transport.Gn_Uplink_Average_Packet_Throughput,</p> <p>GGSN.Huawei.Transport.Gn_downlink_Average_Packet_Throughput , GGSN.Huawei.Transport.Gn_Uplink_packets,</p> <p>GGSN.Huawei.Transport.Gn_Downlink_packets,</p> <p>GGSN.Huawei.Transport.Gn_uplink_PPP_packets,</p> <p>GGSN.Huawei.Transport.Gn_downlink_PPP_packets,</p> <p>GGSN.Huawei.Transport.Gi_Uplink_Average_Packet_Throughput,</p> <p>GGSN.Huawei.Transport.Gi_downlink_Average_Packet_Throughput,</p> <p>GGSN.Huawei.Transport.Gi_Uplink_packets,</p> <p>GGSN.Huawei.Transport.Gi_Downlink_packets,</p> <p>GGSN.Huawei.Transport.Gi_downlink_L2TP_packets,</p> <p>GGSN.Huawei.Transport.Gi_uplink_L2TP_packets</p>

## 9.16 GTP by traffic class report

Incoming and Outgoing GTP signal and data by traffic class report

Report Feature	Details
Report Tree Branch	System.GPRS.Engineering.CN.Huawei.GGSN
Primary Object	GGSN
GTP by traffic class report	<p>GGSN.GGSN_Id, GGSN.GGSN_Name,</p> <p>GGSN.Huawei.GTP_signal_by_traffic_class.Conversational_class_incoming_GTP_signalling_packets (DA),</p> <p>GGSN.Huawei.GTP_signal_by_traffic_class.Interactive_class_incoming_GTP_signalling_packets,</p> <p>GGSN.Huawei.GTP_signal_by_traffic_class.Streaming_class_incoming_GTP_signalling_packets,</p> <p>GGSN.Huawei.GTP_signal_by_traffic_class.Background_class_incoming_GTP_signalling_packets,</p> <p>GGSN.Huawei.GTP_data_by_traffic_class.Conversational_class_incoming_GTP_data_packets,</p> <p>GGSN.Huawei.GTP_data_by_traffic_class.Interactive_class_incoming_GTP_data_packets,</p> <p>GGSN.Huawei.GTP_data_by_traffic_class.Streaming_class_incoming_GTP_data_packets,</p> <p>GGSN.Huawei.GTP_data_by_traffic_class.Background_class_incoming_GTP_data_packets,</p>

GGSN.Huawei.GTP\_signal\_by\_traffic\_class.Conversational\_class\_outgoing\_GTP\_signalling\_packets (DA),  
 GGSN.Huawei.GTP\_signal\_by\_traffic\_class.Interactive\_class\_outgoing\_GTP\_signalling\_packets,  
 GGSN.Huawei.GTP\_signal\_by\_traffic\_class.Streaming\_class\_outgoing\_GTP\_signalling\_packets,  
 GGSN.Huawei.GTP\_signal\_by\_traffic\_class.Background\_class\_outgoing\_GTP\_signalling\_packets,  
 GGSN.Huawei.GTP\_data\_by\_traffic\_class.Conversational\_class\_outgoing\_GTP\_data\_packets,  
 GGSN.Huawei.GTP\_data\_by\_traffic\_class.Interactive\_class\_outgoing\_GTP\_data\_packets,  
 GGSN.Huawei.GTP\_data\_by\_traffic\_class.Streaming\_class\_outgoing\_GTP\_data\_packets,  
 GGSN.Huawei.GTP\_data\_by\_traffic\_class.Background\_class\_outgoing\_GTP\_data\_packets

## 9.17 Gy interface report

Gy interface report

Report Feature	Details
Report Tree Branch	System.GPRS.Engineering.CN.Huawei.GGSN
Primary Object	GGSN
Gy interface report	GGSN.GGSN_Id, GGSN.GGSN_Name, GGSN.Huawei.Gy_interface.Gy_average_packets_throughput (DA), GGSN.Huawei.Gy_interface.Gy_peak_packets_throughput, GGSN.Huawei.Gy_interface.Gy_peak_throughput, GGSN.Huawei.Gy_interface.Gy_downlink_packets, GGSN.Huawei.Gy_interface.Gy_uplink_packets, GGSN.Huawei.Gy_interface.Gy_downlink_Kbytes, GGSN.Huawei.Gy_interface.Gy_uplink_Kbytes

## 9.18 Intelligent service graph

This graph shows the Intelligent service for a selected GGSN. The display consists of three graphs for the selected day.

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<b>Report Feature</b>	<b>Details</b>
Report Tree Branch	System.GPRS.Engineering.CN.Huawei.GGSN
Primary Object	GGSN
IN PDP activation	GGSN.Huawei.Intelligent_service.Intelligent_PDP_act_requests, GGSN.Huawei.Intelligent_service.Intelligent_PDP_act_successes
IN PDP deactivation	GGSN.Huawei.Intelligent_service._%_PDP_deact_successes_initiated_GGSN, GGSN.Huawei.Intelligent_service._%_PDP_deact_successes_initiated_SCP
PDP activated	GGSN.Huawei.Basic_session.Avg_act_PDP_context, GGSN.Huawei.Intelligent_service.Avg_act_IN_PDP_contexts

## 9.19 IP data by traffic class report

IP data by traffic class report

<b>Report Feature</b>	<b>Details</b>
Report Tree Branch	System.GPRS.Engineering.CN.Huawei.GGSN
Primary Object	GGSN
IP data report	GGSN.GGSN_Id, GGSN.GGSN_Name, GGSN.Huawei.IP_data_by_traffic_class.Conversational_class_incoming_IP_data_Packets (DA), GGSN.Huawei.IP_data_by_traffic_class.Interactive_class_incoming_IP_data_Packets, GGSN.Huawei.IP_data_by_traffic_class.Streaming_class_incoming_IP_data_Packets, GGSN.Huawei.IP_data_by_traffic_class.Background_class_incoming_IP_data_Packets, GGSN.Huawei.IP_data_by_traffic_class.Conversational_class_outgoing_IP_data_Packets, GGSN.Huawei.IP_data_by_traffic_class.Interactive_class_outgoing_IP_data_Packets, GGSN.Huawei.IP_data_by_traffic_class.Streaming_class_outgoing_IP_data_Packets, GGSN.Huawei.IP_data_by_traffic_class.Background_class_outgoing_IP_data_Packets

## 9.20 Layer 7 parser report

Layer 7 parser report

Report Feature	Details
Report Tree Branch	System.GPRS.Engineering.CN.Huawei.GGSN
Primary Object	GGSN
L7 parser report	GGSN.GGSN_Id, GGSN.GGSN_Name, GGSN.Huawei.Layer7_parser.L7_parser_average_packet_throughput (DA), GGSN.Huawei.Layer7_parser.L7_parser_downlink_packets, GGSN.Huawei.Layer7_parser.L7_parser_uplink_packets, GGSN.Huawei.Layer7_parser.L7_parser_uplink_error_packets, GGSN.Huawei.Layer7_parser.L7_parser_HTTP_Downlink_packets, GGSN.Huawei.Layer7_parser.L7_parser_HTTP_uplink_packets, GGSN.Huawei.Layer7_parser.L7_parser_WAP1_X_downlink_packets, GGSN.Huawei.Layer7_parser.L7_parser_WAP1_X_uplink_packets, GGSN.Huawei.Layer7_parser.L7_parser_WAP2_0_downlink_packets, , GGSN.Huawei.Layer7_parser.L7_parser_WAP2_0_uplink_packets, GGSN.Huawei.Layer7_parser.L7_parser_RTSP_downlink_packets, GGSN.Huawei.Layer7_parser.L7_parser_RTSP_uplink_packets, GGSN.Huawei.Layer7_parser.L7_parser_FTP_downlink_packets, GGSN.Huawei.Layer7_parser.L7_parser_FTP_uplink_packets, GGSN.Huawei.Layer7_parser.L7_parser_P2P_downlink_Kbytes, GGSN.Huawei.Layer7_parser.L7_parser_P2P_uplink_Kbytes, GGSN.Huawei.Layer7_parser.L7_parser_VOIP_downlink_Kbytes, GGSN.Huawei.Layer7_parser.L7_parser_VOIP_uplink_Kbytes

## 9.21 PDP context status graph

This graph shows the System resource for a selected APN. The display consists of three graphs for the selected day.

Report Feature	Details
Report Tree Branch	System.GPRS.Engineering.CN.Huawei.APN
Primary Object	APN
Activated PDP in GGSN	APN.Huawei.APN_status.Active_PDP_context, APN.Huawei.APN_status.Max_active_PDP_context
Active PDP	APN.Huawei.APN_status.Average_active_PDP_context

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Gn Packets	APN.Huawei.APN_status.Gn_Received_Packets, APN.Huawei.APN_status.Gn_Sent_Packets
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## 9.22 Sessions per QoS report

This report shows the GGSN session per QoS performance.

Report Feature	Details
Report Tree Branch	System.GPRS.Engineering.CN.Huawei.GGSN
Primary Object	GGSN
GGSN session per QoS	GGSN.GGSN_Id, GGSN.GGSN_Name, GGSN.Huawei.Basic_session.Avg_act_PDP_context (DA), GGSN.Huawei.Basic_session.PDP_context_act_success (DA), GGSN.Huawei.Basic_session.PDP_context_deact_success, GGSN.Huawei.Basic_session.Current_number_active_GTPV0_PDP_context, GGSN.Huawei.Basic_session.Current_number_active_GTPV1_PDP_context, GGSN.Huawei.Basic_session.Current_PDP_contexts_with_GGSN_as signed_QoS, GGSN.Huawei.Basic_session.Conversational_class_PDP_context, GGSN.Huawei.Basic_session.Streaming_class_context, GGSN.Huawei.Basic_session.Interactive_class_PDP_context, GGSN.Huawei.Basic_session.Background_class_PDP_context

## 9.23 System resource graph

This graph shows the System resource for a selected GGSN Board. The display consists of three graphs for the selected day.

Report Feature	Details
Report Tree Branch	System.GPRS.Engineering.CN.Huawei.GGSN_Board
Primary Object	GGSN_Board
CPU utilisation	GGSN_Board.Huawei.System_resource.Avg_CPU_occupation_ratio, GGSN_Board.Huawei.System_resource.Peak_CPU_occupation_ratio
Harddisk utilisation	GGSN_Board.Huawei.System_resource.Avg_harddisk_utilization_ratio
Memory utilisation	GGSN_Board.Huawei.System_resource.Avg_memory_utilization_ratio

## 9.24 Traffic throughput graph

This graph shows the traffic throughput for a selected GGSN. The display consists of two graphs for the selected day.

Report Feature	Details
Report Tree Branch	System.GPRS.Engineering.CN.Huawei.GGSN
Primary Object	GGSN
Gi link average packet throughput	GGSN.Huawei.Transport.Gi_Uplink_Average_Packet_Throughput, GGSN.Huawei.Transport.Gi_downlink_Average_Packet_Throughput
Gn link average packet throughput	GGSN.Huawei.Transport.Gi_Uplink_Average_Packet_Throughput, GGSN.Huawei.Transport.Gi_downlink_Average_Packet_Throughput

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