WLAN CDR Field Reference

This chapter provides a reference for WLAN-CDR fields supported by PDG and TTG.

The PDG/TTG provides CDRs that are compliant with the definitions in 3GPP TS32.298. When modifications are required, changes to the standard behavior can be implemented in different dictionaries which can be selected in the configuration file. This provides the flexibility to adapt to a customer's needs, and therefore, to a legacy post-processing billing interface, while retaining the standard behavior.

A complete list and descriptions of supported CDR fields is provided in the *WLAN CDR Field Descriptions* chapter of this reference.

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Important   This reference document contains information only on standard GTPP dictionaries. For information on custom dictionaries, contact your Cisco account representative.

The Category column in all tables use key described in the following table.

Table 1: Dictionary Table Key 20

Abbreviation	Meaning	Description
M	Mandatory	A field that must be present in the CDR.
C	Conditional	A field that must be in a CDR if certain conditions are met.
OM	Operator Provisonable: Mandatory	A field that an operator has provisioned and must be included in the C all conditions.
OC	Operator Provisionable: Conditional	A field that an operator has provisioned and must be included in the certain conditions are met.

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CDR Fields Supported in WLAN-CDRs

The table in this section lists the WLAN fields present in GTPP dictionaries.

standard, custom1 – custom6 Dictionaries

WLAN-CDR fields for TS 32.252

Field	Category	Description
Record Type	M	This field identifies the type of record. The 3GPP 32298 does not de[...] any values for record type.
Network Initiated PDP Context	O	This field indicates that the PDP context was network-initiated. Th[...] field is missing in case of UE-activated PDP context.
Served IMSI	M	This field contains the International Mobile Subscriber Identity (IM[...] of the served party. The IMSI is formatted in accordance with 3GPI[...] 23.003.
PDG Address	M	This field provides the current service PDG IP address for the con[...] plane.
PDG IPv4 Binary Address	M	The octet string in this field includes the IPv4 address of the PDG ser[...] in binary coding.
PDG IPv6 Binary Address	M	The octet string in this field includes the IPv6 address of the PDG ser[...] in binary coding.
Charging ID	M	This field contains a charging identifier, which can be used with th[...] PDG address to identify all records produced in the PDG involved[...] single PDP context. The charging ID is generated by the PDG at P[...] context activation.
Access Point Name Network Identifier	M	This field contains the Network Identifier part of the Access Point N[...] (APN). It is provided by WMN during the IPSec or SSL establishm[...] procedure.
PDP Type	O	This field defines the PDG type, IP or PPP.
Served WLAN PDP Address	M	This field contains the PDP address of the served IMSI. The stand[...] 3GPP TS 32.298 allows a choice of either IPAddress or ETSIAddr[...]
WLAN UE Remote Address	M	This field contains the PDP address of the served IMSI, which is [...] supported only in IPAddress by the PDG.
WLAN UE Remote IPv4 Binary Address	M	The octet string in this field contains the IPv4 address assigned to [...] subscriber by the PDG/TTG in binary coding.
WLAN UE Remote IPv6 Binary Address	M	The octet string in this field contains the IPv6 address assigned to [...] subscriber by the PDG/TTG in binary coding.
Dynamic Address Flag	O	This field indicates that the PDP address has been dynamically alloc[...] for that particular PDP context. This field is missing if the address[...] static, that is, part of the PDP context subscription.
List of Traffic Data Volumes	M	This list includes one or more Traffic Data Volume containers. The[...] number of containers is configurable with a maximum of 4 for WLAN-CDRs.

Field	Category	Description
Change of Charging Condition	M	One traffic data volume container contains a list of change of c conditions: • Data Volume Uplink • Data Volume Downlink • Change Condition • Change Time • Failurehandling Continue The QoS values may only be included in the first container. In containers, the presence depends on what was changed.
QoS Negotiated	O	This field indicates that the applied QoS is accepted by the net This field is compliant with 3GPP standards.
GPRS Uplink Data Volume	M	This field includes the number of octets transmitted during the the packet data services in the uplink direction. Note that a maximum of 2^{32} bytes can be counted in this fiel volume trigger should be defined for this value to avoid an ove not already done for a smaller amount of traffic.
GPRS Downlink Data Volume	M	This field includes the number of octets transmitted during the the packet data services in the downlink direction. Note that a maximum of 2^{32} bytes can be counted in this fiel volume trigger should be defined for this value to avoid an ove not already done for a smaller amount of traffic.
Change Condition	M	This field defines the reason for closing the container, such as ta change, QoS change, or closing of the CDR. Values according t TS 32.298 are: • qoSChange = 0 • tariffTime = 1 • recordClosure = 2
Change Time	M	A time stamp that defines the moment when the volume contai the CDR is closed.
Record Opening Time	M	This field contains the time stamp of when the PDP context is a in the PDG or when a subsequent record is opened after a partia The timestamp is determined based on the internal timer which accuracy of 10ms. Depending on the configured mechanism (c floor, or round-off) this field is translated to only show full sec

Field	Category	Description
Duration	M	This field contains the duration in seconds of the PDP contexts with range of 0 to 4294967295 (2^32-1). It is the duration from Record Opening Time to record closure. For partial records, this is the duration of the individual partial record and not the cumulative duration.
Cause for Record Closing	M	This field shows the reason for the release of the CDR. The values • normalRelease = 0 • abnormalRelease = 4 • volumeLimit = 16 • timeLimit = 17 • maxChangeCond = 19 • managementIntervention = 20
Diagnostics	O	This field is included in the CDR when the PDP context is released when the option **gtpp-attribute diagnostics** is configured.
gsm0408Cause	M	This cause is used in the Diagnostics field and contains one of the following values: • 36: If the PDP context is terminated gracefully • 40: AAA Server disconnect • 26: If the PDG sends delete PDP context request for any othe reason
Record Sequence Number	O	A running sequence number with range 1 to 4294967295 that link partial records generated by the PDG for a specific PDP context (characterized with the same Charging ID and PDG address pair). field is not present if the first record is also the final record.
Node ID	O	This field contains an identifier string for the node that generated t CDR. The NodeID field is a printable string of the ndddSTRING for • n: the first digit is the sessmgr restart counter having a value between 0 and 7. • ddd: The number of the sessmgr instance generating the CDR • STRING: A configured Node-ID-Suffix string of 1 to 16 charac Defined with the **gtpp attribute node-id** command.
recordExtensions	O	
Local Record Sequence Number	O	For each Node ID, this number with range 1 to 4294967295, is alloc sequentially for each CDR. With the Node ID, it uniquely identifie CDR. For WLAN-CDRs, this field is only included when the option **gtp attribute local-record-sequence number** is configured.

Field	Category	Description
APN Selection Mode	O	An index that shows how the APN is selected: • 0 = MS or network provided APN, subscribed verified • 1 = MS provided APN, subscription not verified • 2 = Network provided APN, subscription not verified
Served MSISDN	O	This field tracks the Mobile Station (MS) ISDN number (MSIS the subscriber, which is sent by the AAA server.
Charging Characteristics	M	Lists the charging characteristics applied to the PDP context. T can accept charging characteristics from the AAA server or use configured value. PDG-configured charging characteristics are s as part of the PDG Service and are applied for WLAN-CDRs t subscriber PDP contexts through APN templates.
Charging Characteristics Selection Mode	O	Lists the charging characteristic type that the PDG applied to th The values for this field are defined in 3GPP TS 32.298: • AAASupplied (0): The PDG is using the charging charact supplied by the AAA Server. • homeDefault (3): PDG configured charging characteristic home subscribers are used. • roamingDefault (4): PDG configured charging characteris roaming subscribers are used. • visitingDefault (5): PDG configured charging characterist visiting subscribers are used.
Rat Type	O	This field shows the Radio Access Technology (RAT) type cur used by the Mobile Station. This field is present in the CDR if p by WLAN. RAT Type values: • 0 = Reserved • 1 = UTRAN • 2 = GERAN • **3 = WLAN** • 4-255 = Spare