DeLorme
Explore Portal Call Data Record Specification
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V 1.0.4

Contents

Revision History

Date	Version	Description	Author
2012-04-02	0.0.1	Draft Version Ready	MLL
2012-04-03	0.0.2	Updated xml schema, small fixes	MLL
2012-04-03	0.0.3	Minor updates	MLL
2013-05-02	1.0.1	Updated with message codes for inReach SE and byte counts	SBK
2013-08-05	1.0.2	Updated with message codes for Quick Text (Canned) messages	SBK
2016-03-24	1.0.3	Add weather message types as well as other missing message types.	ADH
2016-06-30	1.0.4	Added WPT, Device Command and other missing message types	KAG

Introduction

DeLorme will provide call data records (CDRs) to enterprise customers. These call data records include all data activity for all devices registered with the customer. This document will be in XML format and can be downloaded from the user's account page: https://explore.delorme.com/Admin/MyInfo. Click on the **view invoices** link. The CDR records are updated daily at 2:00AM UTC for the previous day, records ending midnight UTC. The XML document will contain five unique elements:

- DeviceUsageSummary
- Devices
- Device
- MessageDetails
- MessageInstance

Example

```xml
<?xml version="1.0"?>
<DeviceUsageSummary   TotalUnits="414" TotalMessages="14">
  <Devices>
    <Device IMEI="5000000000000001" Units="414" Messages="14">
      <MessageDetails>
        <MessageInstance  Direction="MO" MessageTime="2016-03-18T08:46:39" Type="Am I Alive" Status="Success" Units="10" MessageCode="27">
          <GatewayTime>2016-03-18T08:46:39</GatewayTime>
        </MessageInstance>
        <MessageInstance  Direction="MT" MessageTime="2016-03-18T08:46:45" Type="Am I Alive" Status="Success" Units="10" MessageCode="26">
          <GatewayTime>2016-03-18T08:46:45</GatewayTime>
        </MessageInstance>
      </MessageDetails>
    </Device>
    <Device IMEI="5000000000000002" Units="414" Messages="14">
      <MessageDetails>
        <MessageInstance  Direction="MO" MessageTime="2016-03-17T08:46:39" Type="Tracking" Status="Success" Units="15" MessageCode="0">
          <GatewayTime>2016-03-18T08:46:39</GatewayTime>
        </MessageInstance>
        <MessageInstance  Direction="MO" MessageTime="2016-03-17T08:46:45" Type="Tracking" Status="Success" Units="15" MessageCode="0">
          <GatewayTime>2016-03-18T08:46:45</GatewayTime>
        </MessageInstance>
      </MessageDetails>
    </Device>
  </Devices>
</DeviceUsageSummary>
```

DeviceUsageSummary

The device usage summary is the root element. Its purpose is to summarize details for the report.

Attributes

Attribute Name	Attribute Description	Example
TotalUnits	The sum of units, or bytes, for all devices registered with customer. The example to the right would be equal to 27,101 bytes.	TotalUnits="27101"

TotalMessages	The total number of message instances for all devices registered with customer	TotalMessages="1774"

Devices

The devices element holds the collection of devices.

Device

This element represents a single device.

Attributes

Attribute Name	Attribute Description	Example
IMEI	The 15-digit IMEI, or unique identifier, for an inReach device	IMEI="5000000000000001"
Units	The number of units, or bytes, used by a single device. The example to the right would be equal to 1,635 bytes.	Units="1635"
MessagesUsed	The number of messages used by a single device	Messages="109"

MessageDetails

The element holds the collection of MessageInstances.

MessageInstance

This element contains information about an instance of device usage

Attributes

Attribute Name	Attribute Description	Example
Direction	The direction of the message. Can be either MO (Mobile Originated, data from device to portal), or MT (Mobile Terminated, data from portal to device)	Direction="MO"
MessageTime	The date and time the message was sent, from the device in MO messages, and from the app server/IPC outbound in MT messages	MessageTime ="2012-03-23T18:35:11"
GatewayTime	The date and time the message was received at the DeLorme gateway	GatewayTime="2012-03-23T18:35:12"
Type	The type of message. See MO/MT Message Types tables for all possible message types	Type="Tracking"
Status	The status of the message. Can be either "Pending"*, "Success", or "Failed"	Status="Success"
Units	The number of units, or bytes, that were used in this instance	Units="15"
MessageCode	The number that represents the type of message	Example MessageCode="0"

*Status: If the status is pending, compare to the next report to determine the final result.

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MO Message Types

MO Message Type	Message Code	Byte Count	MO Message Description
Tracking	0	13	Sent by inReach for an existing tracking event
Location	2	15	Sent by the inReach in response to an MT message requesting the current location.
Text Message	3	10-186	Sent when there is a free text message being transmitted.
Emergency Confirmation	4	15	Confirms an unconfirmed SOS.
WptNav	9	26-186	Start navigation to a waypoint or route
Emergency Cancellation	12	15	Stops an SOS event.
Emergency Declaration	14	15	Declares an emergency state.
Reference Point	15	17-186	Send a non-GPS location
Track Start	16	18	Begins a tracking process on the server.
Track IntervalChange	17	18	Changes the tracking interval.
Track Stop	18	15	Ends a tracking process on the server.
Puck Message1	21	15	Sends the first of three inReach message button events.
Puck Message2	22	15	Sends the second of three inReach message button events.
Puck Message3	23	15	Sends the third of three inReach message button events.
Canned Message	3099	15-186	A Quick Text message (if unedited, 15 bytes, otherwise equivalent to a Text Message)
MapShare	24	10-186	Sends a MapShare message
Unknown Index	25	10-186	Used when the device receives a message from the server addressed to a synced contact identifier that is not on the device.
Encrypted Binary	26	10-186	An encrypted text message sent from the device and to be relayed via IPC.
Am I Alive	27	10	Sent when the device needs to determine if it is active.
Mail Check	28	10	Sent to determine if any messages are queued for the device.
Ack	29	6	Acknowledge a device command update request
Generic	30	18-186	Sends a generic binary message
Encrypted	31	18-186	Sends an inReach encrypted message
Burst Tracking	32	18-186	Sends a burst of track data
Aggregate	34	2-9	Aggregated messages have been sent
Weather Request	35	10-186	Contains one or more forecast requests. Usually in the range of 10-12 bytes but we can't guarantee that will be the size all the time.

MT Message Types

MT Message Type	Message Code	Byte Count	MT Message Description
Unknown	-6201982	10-367	Unknown message
Text Message	21	15-367	Sent by the app as an MT message for the device user and includes GPS data form the MO message. Used for device to device messaging.
Reference Point	24	15-367	Sent by the app and includes GPS data form the MO message.
Location Request	22	10	Sent by the app to request the current location of the unit. The unit should respond with the current location of the device without user intervention.
Response Loc Request	23	15	Sent by the app to the device for a device that has requested the location of another device user. The GPS is from the MO locate message of the located user. Used in a device to device request.
Device Command	28	7-186	Sent by the server to update the configuration of the device.
Generic	30	18-186	Sent a generic binary message. Usually for a 3rd party application.
Encrypted	31	18-186	Sent an encrypted message from the server. The key on the device needs to match the key used on the server and is copied down during the sync process.
Enable Tracking	81	10	Sent by app to instruct the device to enter tracking mode. The device should respond with a tracking start MO message.
Disable Tracking	82	10	Sent by app to instruct the device to exit tracking mode. The device should respond with a tracking end MO message.
Tracking Interval	83	10	Sent by app to instruct the device to alter the tracking interval. The device should respond with a tracking interval MO message.
Initiate Emergency	91	10	Sent by emergency services to set device into in emergency state.
Close Emergency	92	10	Sent by emergency services to cancel emergency.

Confirm Emergency	92	10	Sent by the server in response to the Declare Emergency MO events. Sent continually until Delorme unit sends confirm emergency MO event.
Emergency Cancelled	94	10	Sent by app to acknowledge the device has canceled the Emergency.
EmergencyDeclareECC	95	10	Sent by app to instruct the unit to enter emergency mode. Device should behave like it has initiated the declare event.
EmergencyAcknowledgementECC	96	10	Sent by the ECC* – manually triggered ack in response to a new Declare Emergency event.
EmergencyCancellationECC	97	10	Sent by app to instruct the unit to exit emergency mode. Device should return to normal state. Manually triggered.
Am I Alive	26	10-367	Automatically sent by server when an Am I Alive MO message is received; contains device information of variable length, usually about 17 bytes.
System Text Message	27	10-367	Automatically sent by the server when certain MO messages arrive and the action requested by the device could not be completed.
Encrypted Binary	25	10-367	An encrypted text message received via IPC and relayed to the device.
Team Tracking Status	101	10-367	Deprecated. Should no longer be transmitted. May show up in older records
Team Tracking Status v2	103	10-367	Contains tracking information for a team.
Team Establish	104	10-367	Used for changing composition of teams. E.g. adding or removing members of teams.
Basic Weather Response	105	10-367	Contains a basic weather forecast
Premium Weather Response	106	10-367	Contains a premium weather forecast
Marine Weather Response	107	10-367	Contains a marine weather forecast
Weather Response Error	109	10-367	Notification of a failure to obtain a forecast

*ECC: Emergency Call Center