



OmniRoam ♦ Omnitouch ♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦ CDR♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦ TAP3 ♦♦♦♦♦♦♦♦♦♦



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OmniRoam CDR OmniCharge GSMA TAP3

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[Outgoing TAPs](#)
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Search by TADIG, filename, or direction

Filename	Created Time ↓	Direction	Type	Sender TADIG	Recipient TADIG	Seq #	Charged Units	Total Charge
CT-00255	2025-10-13 06:33:10	Incoming	transferBatch			255	530	
CT-00257	2025-10-13 06:33:10	Incoming	transferBatch			257	549	
CT-00256	2025-10-13 06:33:10	Incoming	transferBatch			256	401	
CT-00253	2025-10-13 06:33:09	Incoming	transferBatch			253	807	
CT-00251	2025-10-13 06:33:09	Incoming	transferBatch			251	1,924	
CT-00234	2025-10-13 06:33:09	Incoming	transferBatch			254	800	
CT-00252	2025-10-13 06:33:09	Incoming	transferBatch			252	2,122	
CT-00249	2025-10-13 06:33:08	Incoming	transferBatch			249	1,314	
CT-00248	2025-10-13 06:33:08	Incoming	transferBatch			248	1,169	
CT-00250	2025-10-13 06:33:08	Incoming	transferBatch			250	2,096	
CT-00247	2025-10-13 06:33:08	Incoming	transferBatch			247	1,245	

CDR **TAP3** ♦♦♦♦

◆◆ TAP3 ◆◆

```
# Export for specific partner
python3 export_TAP3.py VZW_Live
```

```
# Interactive mode (prompts for partner)
python3 export_TAP3.py
```



1.  30  CDR  GSMA 
2.  CDR
3.  1  CDR 
4.  CDR
5.  TAP3 
6.  CDR 
7. 
8.  InfluxDB

OmniRoam InfluxDB 

CDR

- [illegible]

TAP TAP3

- **operator:** ◇◇◇◇◇◇◇◇
- **filename:** ◇◇◇ TAP3 ◇◇◇◇
- **totalcharge:** TAP3 ◇◇◇◇◇◇◇◇
- **totalconsumed:** TAP3 ◇◇◇◇◇◇◇◇◇◇
- **cdr_count:** TAP3 ◇◇◇◇ CDR ◇◇



◆◆◆ InfluxDB ◆◆◆



```
SELECT sum("totalcharge")
FROM "tap_cdr"
WHERE time > now() - 30d
GROUP BY "operator"
```

❖ TAC ❖❖❖❖

```
SELECT sum("chargeableUnits")
FROM "raw_cdr"
WHERE time > now() - 7d
GROUP BY "tac"
```

❖❖❖ CDR ❖

```
SELECT count("chargeableUnits")
FROM "raw_cdr"
WHERE time > now() - 24h
GROUP BY time(1h)
```

❖ APN ❖❖

```
SELECT sum("chargedUnits")
FROM "raw_cdr"
WHERE time > now() - 7d
GROUP BY "apn"
```

Grafana ❖❖

❖❖❖❖❖❖❖ Grafana ❖❖❖❖❖❖❖❖

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GSMA TAP3 Transfer Batch Viewer

Currency (Local → TAP)
USD → XDR (rate)

Batch IDs
00257 v3 / 12

Seq Spec / Release

File Window
2025-10-12 01:05:59 → 2025-10-11 2

Filter by MSISDN or IMSI

#	MSISDN	IMSI
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		

Event #1

```
{
  "type": "gprsCall",
  "value": {
    "equipmentIdentifier": {
      "type": "imei",
      "value": "
    },
    "gprsBasicCallInformation": {
      "callEventStartTimeStamp": {
        "localTimeStamp": "20251010143110",
        "utcTimeOffsetCode": 0
      },
      "chargingId": 410600,
      "gprsChargeableSubscriber": {
        "chargeableSubscriber": {
          "type": "simChargeableSubscriber",
          "value": {
            "imsi": "
            "msisdn": "
          }
        },
        "pdpAddress": "
      },
      "gprsDestination": {
        "accessPointName": "
      },
      "totalCallEventDuration": 22
    },
    "gprsLocationInformation": {
      "geographicalLocation": {
        "servingBid": "43719",
        "servingLocationDescription": "AZ, Phoenix"
      },
      "gprsNetworkLocation": {
        "cellId": 27596,
        "locationArea": 51011,
        "recEntity": [
          0,
          1
        ]
      }
    }
  }
}
```

Outgoing Bytes	Charge
24,671	0
3,106	0
8,513	0
552	0
35,781	1
25,133	0
398,832	10
9,544	0
41,695	1
57,168	1
1,182,682	73
11,670	0
34,914	1
241,729	4

CDR ❖❖❖❖

❖❖❖❖ /tmp/import_CDR_Logger_Marben_*.log

❖❖❖❖❖

- ❖❖❖❖ IMSI ❖❖
- ❖❖❖❖❖❖❖
- ❖❖❖❖❖❖❖
- ❖❖❖❖❖❖ ID

TAP3 ❖❖❖❖

❖❖❖❖ /tmp/tap3_export_*.log

❖❖❖❖❖

- ❖❖❖❖❖❖❖❖ CDR
- ❖❖❖❖❖❖❖❖
- ❖❖❖❖❖❖❖❖
- ❖❖❖❖❖❖❖❖

OmniCharge ❖❖❖❖

❖❖❖❖ OmniCharge ❖❖❖❖❖❖❖❖

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InfluxDB ❖❖❖❖

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- InfluxDB URL ❖❖❖❖
- ❖❖❖❖❖❖❖❖❖❖❖❖
- ❖❖❖❖❖❖❖❖
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- CDR ◇◇: /tmp/import_CDR_Logger_Marben_*.log
- TAP ◇◇: /tmp/tap3 export *.log

◆◆◆◆◆◆

- config.yaml - InfluxDB
- counters.yaml - TAP3

◆◆◆◆◆◆

1. - 99999
2. TAP -
3.   InfluxDB     -                                      
4.       -                                      
5.       - config.yaml 

◆ ◆ ◆ ◆

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CDR ☐ ☐ ☐ ☐OmniRoam CDR CDR

◆◆◆◆ CDR

◆◆◆◆◆S-GW/P-GW◆◆◆◆◆CDR◆◆◆◆◆CDR◆◆◆◆◆

- 15 100 MB
-  15  100 MB 
- 15 100 MB

OmniRoam

1.  
2. 
3. 
4.  CDR

◆◆◆◆◆ CDR ◆◆◆

CDR

- [illegible]

◆ ◆ ◆ ◆ ◆ ◆ ◆

1 CSV CDR

◆◆◆◆◆ S-GW ◆◆◆◆◆ CSV ◆◆◆◆◆ CDR ◆

◆◆◆◆◆◆◆◆◆◆ CDR

OmniRoam

- **ID**                              
- **IMSI**                              
-                              
- **P-GW IP**                              
- **TAC**

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

◆◆◆◆◆ CDR

◆ CSV ◆◆◆◆◆◆◆◆◆◆ CDR ◆◆

-
1. $\diamond$ CDR $\diamond$ ID $\diamond$
2. $\diamond$ CDR $\diamond$ ID $\diamond$
3. $\diamond$ CDR $\diamond$ ID $\diamond$
4. $\diamond$ CDR $\diamond$ ID $\diamond$

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 CDR

-  CSV 
- 
-  OmniRoam 
- /
- 
- 

◆◆◆◆◆ OmniRoam ◆◆◆◆◆

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- 
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-  =  - 

24

◆◆ 2◆CDR ◆◆◆◆◆

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◆◆◆◆◆◆◆◆◆◆ CDR

CDR

1.                               CDR  
2.                               **1,000**     
3.                                    ID                                            

- **CDR** < 24
- **CDR**

24

OmniRoam CDR 24

- CSV
- 11:50 PM ID
-
-
-

24 OmniRoam CDR

CDR

CDR

1.

-
- 24

2. **CDR**

-

3.

-
- 1 KB

4.

- TAC
-
-

5. **OmniCharge**

- CDR
-

6.

- CDR
- InfluxDB
- CDR

CDR

CDR

- IMSI@MSISDN@IMEI
- S-GW@PDN @P-GW@ ID@TAC
- /@APN
-
- BID@ ID
- **QoS** QCI

CDR [config.yaml](#)

```
partners:
  Example_Live:
    round_up_to: 1024 # Round usage to nearest 1KB
```

1. dataVolumeIncoming + dataVolumeOutgoing
2. 1024
- 3.

TAC

TAC

```
config:
  tac_config:
    Global:
      tac_list: ['101', '1000', '10100']
      servingBid: 72473
      servingLocationDescription: 'Smallville USA'
      timezone: 'America/Smallville'
```

-
-
-

OmniCharge

OmniRoam CDR **OmniCharge**

GSMA TAP3 Transfer Batch Viewer

Currency (Local → TAP)	Batch IDs	Seq	Spec / Release
USD → XDR (rate 1.37392)	Sender: [redacted] / Recipient: [redacted]	00257	v3 / 12

File Window	Call Window	Events / Total Charge
2025-10-12 01:05:59 → 2025-10-11 22:22:23	2025-10-10 01:45:41 → 2025-10-11 22:22:23	549 events
		178,055 (TAP)
		USD: \$2.45

Filter by MSISDN or IMSI

#	MSISDN	IMSI	PDP Addr	Start	Duration (ms)	Incoming Bytes	Outgoing Bytes	Charge
1			100.86.1.122	2025-10-10 14:31:10	22	14,583	24,671	0
2			100.85.29.146	2025-10-10 17:32:36	84847	394	3,106	0
3			100.85.31.70	2025-10-10 17:34:46	59	10,231	8,513	0
4			100.86.1.14	2025-10-10 14:45:22	16260	0	552	0
5			100.85.31.73	2025-10-10 14:45:23	16259	44,403	35,781	1

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[illegible]

```
partners:
  Example_Live:
    imsi_prefixes:
      09091
    rates:
      unit_price: 0.000476800 # Price per unit
      unit_bytes: 1024 # Unit size in bytes
    batch_info:
      sender: AUSIE
      recipient: AAA00
    accountingInfo:
      localCurrency: 'USD'
      tapCurrency: 'USD'
      roundingAction: 'Simple'
      tapDecimalPlaces: 5
```

IMSI

OmniRoam **IMSI**

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◆◆ CDR ◆◆◆◆◆◆◆ OmniRoam ◆

1. **CDR** **IMSI** 310410123456789
- 2.
- 3.
- 4.

◆◆◆◆◆ **SIM** ◆◆

◆◆◆◆ TADIG/IREG ◆◆◆◆◆◆◆◆◆◆◆◆ SIM ◆◆◆◆◆◆◆◆◆◆◆◆

```

partners:
  Demo_Test:
    imsi_prefixes:
      - 0010112345123 # Test SIM range (9-digit prefix)
    rates:
      unit_price: 0.0 # No charge for test traffic
    batch_info:
      sender: AUSIE
      recipient: AAA00TEST

  Demo_Production:
    imsi_prefixes:
      - 001011 # Production range (6-digit prefix)
    rates:
      unit_price: 0.000476800
    batch_info:
      sender: AUSIE
      recipient: AAA00

```

◆◆◆◆◆

- IMSI 00101123451234 → Demo_Test9
- IMSI 00101023456789 → Demo_Production6

◆◆◆◆◆ TAP ◆◆◆◆◆ TADIG ◆◆◆◆◆ TADIG ◆◆◆

◆◆◆◆

◆◆◆◆ CDR◆

- ```

1. 0000000000 IMSI 0000000000
2. 00000000totalBytes / unit_bytes
3. 00000000units x unit_price = charge
4. 00000000roundingAction00/00/000000000000
5. 0000 TAP 000000 1000 0000 TAP3 00

```

◆◆◆

```

52,428,800 50 MB
1024
51,200
1KB $0.000476800
51,200 x $0.000476800 = $24.41
TAP 24,410 24.41 x 1000

```

◆◆ QCI ◆◆◆◆◆◆◆◆◆◆

◆◆◆◆◆QCI◆◆◆◆◆TAP3◆◆◆◆◆

```
call_type_level:
qci_1: 20 #
qci_2: 22 #
qci_3: 23 #
qci_4: 24 #
qci_5: 20 # IMS
qci_6: 26 #
qci_7: 27 #
```

```
qci_8: 28 #
qci_9: 29 #
default: 20
```

### TAP3

CDR OmniCharge OmniRoam GSMA TAP3

#### TAP3

#### TAP3

TAP3 GSMA

<FileType><Sender><Recipient><SequenceNumber>

```
CDAUStEAAA0000001 - AUSIE AAA00
TDAUStEAAA0000001 - AUSIE AAA00
```

- FileType: CD TD
- Sender: 5 TADIG
- Recipient: 5 TADIG
- SequenceNumber: 5 [counters.yaml](#)

[config.yaml](#)

```
partners:
 ONS_Live:
 imsi_prefixes: # IMSI
 - 505057
 accessPointNameOI: mnc057.mcc505.gprs
 rates:
 unit_price: 0.000476800 #
 unit_bytes: 1024 #
 batch_info:
 sender: AUSIE # TADIG
 recipient: AAA00 # TADIG
 specificationVersionNumber: 3
 releaseVersionNumber: 12
 accountingInfo:
 localCurrency: 'USD'
 tapCurrency: 'USD'
 roundingAction: 'Simple' # / /
 tapDecimalPlaces: 5
 round_up_to: 1024 # N
 call_type_level: # OCI
 qci_1: 20
 qci_2: 22
 default: 20
```

[counters.yaml](#)

```
AAA00:
 CD: 1 #
 TD: 1 #
AAA01:
 CD: 1
 TD: 1
```

Tap TAP

TAC

```
config:
 tac_config:
 LocationName:
 tac_list: ['1101', '10000']
 servingBid: 72473
 servingLocationDescription: 'Network Location'
 timezone: 'America/New_York'
```

### InfluxDB

[config.yaml](#) InfluxDB

```
config:
 influx_db:
 influxDbUrl: 'http://10.3.0.135:8086'
 influxDbOrg: 'omnitouch'
 influxDbBucket: 'Omnicharge_TAP3'
 influxDbToken: 'your-token-here'
```

```
config:
 tap_output_path: '/etc/pytap3/OutputFiles'
 tap_human_readable_output_path: '/etc/pytap3/OutputFiles_Human'
 tap_in_path: '/home/user/TAP_In/'
```

### OmniCharge

OmniCharge

- 
- 
- CDR
- 
- API

### InfluxDB

- CDR
- 
- 
- 
- Grafana

OmniRoam - Omnitouch