

Cellular Records Review and Analysis

Part 2: Verizon

PATCtech

Glenn K Bard, Chief Technology Officer

Scott Lucas, Instructor and Examiner

Steve Dempsey, Instructor

Kathy Enriquez, Instructor

Brian Sprinkle, Case Manager and Software consultant

Jim Alsup, Director – PATC

Keenan Dolan, Webinar Manager

Stefani Lucas, Marketing Director



Glenn K. Bard

Public Agency Training Council tech

Chief Technical Officer

PA State Trooper – Retired

NCMEC – Project ALERT

CISSP, EnCE, CFCE, CHFI, A+, Network+,

Security+, ACE, AME

For Starters

- What can we get from Verizon?

Cell phone technology

- What can Verizon provide with appropriate legal process?
 - Call detail logs
 - Cell Sites accessed
 - Cell site sector Azimuth
 - Type of tower (Lucent / Nortel)
 - Beam Width
 - Direction of call (incoming or outgoing)
 - Calling number
 - Dialed number
 - Call Time and duration (Seizure)
 - Location of cell tower

Cell phone technology

- Subscriber information (Name, address, etc)
- SMS content
- ESN / MEID, MIN, MDN of target phone.
- Phone Model
- Tower dump
- Definitions page (Key Codes)
- Reports of Lost / stolen phone
- If prepaid, where purchased?
- Other phones on the same account
- Cell sites at the time of the incident (Not current)
- Range To Tower (RTT)
- Contents of the Cloud

Some important definitions

- MDN – Mobile Directory Number
- MIN- Mobile Identification Number
- ESN – Electronic Serial Number
- MEID – Mobile Equipment Identifier
- Element – Switch name
- Azimuth – The median of the sector accessed
- RTT – Range To Tower

Some important definitions

- Beam Width – The width of the sector accessed
- Seizure date / time – The day and time of the initiation of the call.
- Seizure duration – Total elapsed time of the call.
- Alpha / Beta / Gamma – side of the tower accessed.

Some important tips

- Dates and times are based upon local time zone.
- You will need both the incoming outgoing calls, and the Element tower locations to do any mapping.
- The records will come in Excel spreadsheets. Except contents of SMS, those will be in PDF.
- SMS locations are in RTT only, not in conventional records.

Some important tips

- Tower Dumps are Voice only.
- Verizon does use the terms Lucent or Nortel when describing the tower sides.
- The whole switch must be Lucent or Nortel.
- For Lucent, you have to subtract one. $4=3$, $3=2$, $2=1$. (Alpha / Beta / Gamma helps with this.)
- For Nortel, $3=3$, $2=2$ and $1=1$

Contact information

Contact Name:	Custodian of Records
Online Service:	Verizon Legal Compliance
Online Service Address:	180 Washington Valley Road Bedminster, NJ 07921
Phone Number:	800-451-5242
Fax Number:	888-667-0028

Preservation Letters Fax: 888-667-0026
Subpoenas Fax: 888-667-0028
Court Orders Fax: 888-667-0026
Electronic Surveillances: 800-267-9129
Exigent requests: 800-345-6720.

Warrant language

- Subscriber information for the number _____ including name, date of birth, mailing address, alternate phone number, and other numbers on the same account.
- All communication for the wireless number _____ for the time period of _____ to include cellular calls, tower locations and azimuth for the sectors accessed during the communication for all Element's accessed. Also indicate if the tower was Lucent, Nortel and provide a three sector layout. As well as possible maximum ranges. Additionally RTT (Range To Tower) for the cellular phone number of _____ for the time period of _____. Also, all content for SMS messages for the wireless account of _____ for the time period of _____. Additionally, identify the existence of any Verizon cloud services associated with the wireless number of _____ and provide any data held within the cloud to include SMS, MMS, and emails communications. Also provide any IP (Internet Protocol Addresses) assigned to the device for the time period of _____. Lastly, provide a detailed definitions page which identifies all information in the records.
- Please provide this information to Detective _____ in digital format on a compact disc in Excel, PDF or TXT format.

Retention periods

Subscriber information: 5 years

Call History: 1 years

Tower Locations: 1 years

SMS Content: 3-5 days officially

Tower Dumps: 90 days

RTT: 7 days

One Note

- TracFone sells phones that use the Verizon network, so the records must come from Verizon.

- Now let's see some examples of what you can get:

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