Carrier "SCAM LIKELY" Phone Call Flagging

Presented by

Matt Florell
President - Vicidial Group

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What Exactly Is "SCAM LIKELY"?

- First rolled-out widely for free by T-mobile in the United States in 2017
- T-mobile uses the "SCAM LIKELY" label
- Other carriers use "POTENTIAL FRAUD", "SPAM CALL" and other screen warnings
- Stated purpose is to warn customers of nefarious callers or robo-calls
- Some carriers charge customers for this as a separate service

How Does "Scam Likely" Work?

- Proprietary for each carrier
- Based on CallerID phone number
 - Some carriers are starting to include STIR/SHAKEN information
- Most carriers use a combination of outside services and internal call log activity to determine the likelyhood of being a robo-call
- Decentralized, not always consistent across different regions

Factors for "Scam Likely" Flagging

- Number of calls placed to non-existing phone number prefixes
- Number of calls placed to non-provisioned phone numbers
- Number of calls placed total over last 5/30/60 minutes to the carrier and/or region/exchange
- Average length of Answered phone calls

"SCAM LIKELY" Flagging Limits

- Minimum of 5 minutes and 200 phone calls can get you flagged
- One client saw it took over 20,000 calls in 12 hours before one of their CID numbers got flagged
- Once you stop using a CID number, it can take from 2 to 21 days for the SCAM LIKELY flag to be removed
- The flagging time appears to be based on length of time CID number was used

Scale of a "Scam Likely" System

- Just looking at T-mobile:
 - 104.8 million subscribers in the United States
 - ~700 million average calls per day last year
 - Over 14 billion calls in a 21-day period
 - Every phone call received needs to do a lookup in this system within a couple seconds
 - System updates new "Scam Likely" flags in as little as 5 minutes

Problems with "SCAM LIKELY"

- Based only on CID number, not where the call actually came from
- Has lead to increase in spoofed CallerID use
- Inconsistent flagging methods
- Some carriers will not route these calls or they will send them immediately to voicemail
- Flagging for most carriers works based on proprietary built-in cellphone applications(No API, doesn't work with GSM gateways)

"SCAM LIKELY" Collateral Damage

- Appointment reminder systems
- Pharmacy automated phone systems
- Healthcare providers
- Family members
- Victims of CallerID spoofing

"SCAM LIKELY" Case Study

- Large insurance industry client
- Manual dial only, calling health care providers
- Used same "1-800" toll-free number as CallerID number on all outbound calls for decades
- Another company used their 800 toll-free number as CallerID for their robo-call campaign
- Our client's calls started getting flagged

Case Study: Effects

- Instant 20% drop in contacts
- Providers were wary of the flagged phone calls
- Agents had to waste time assuring providers that they were in fact calling from the insurance company

Case Study: Mitigation

- They reported the issue to their carrier
- They registered with Verizon's CallerID validation program(only affects Verizon customer calls)
- They temporarily switched to a new outbound CallerID phone number
- They wanted a solution that would not allow their calls to be flagged

Case Study: No-Flag Solution

- VICIdial Auto-Rotate CID feature
- Calling 8 hours a day, rotate CID every 5
 minutes, flagging reset time to allow 3 days
 = 288 new CallerID phone numbers
- Exploits "Scam Likely" minimum detection time of 5 minutes. With 5 minute flagging trigger the flag only lasts 2-3 days.
- They can switch to this Auto-Rotate solution at any time and guarantee no "SCAM LIKELY" outbound calls

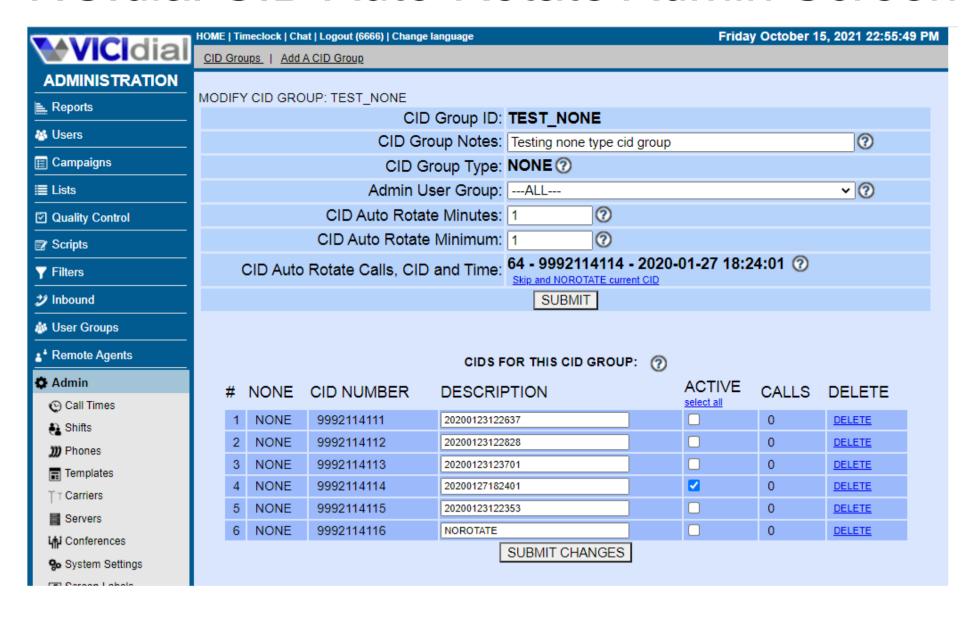
What About STIR/SHAKEN?

- STIR/SHAKEN is a certification protocol that sends along an attestation of a call's origin
 - "A" = same originator carrier as CID/DID carrier
 - "B" = different(but verified) originator/CID carriers
 - "C" = originator is verified, but not CID carrier
 - " " = no STIR/SHAKEN data on call
- Not fully implemented yet, several exemptions still exist for years, some carriers are having problems implementing it

STIR/SHAKEN and SCAM LIKELY at the same time?

- Most carriers still plan to keep using "SCAM LIKELY" CallerID number flagging systems alongside STIR/SHAKEN
- Some carriers are already blocking "C" and " " attestation calls right now
- STIR/SHAKEN should remove the need for "SCAM LIKELY" flagging systems, eventually

VICIdial CID Auto-Rotate Admin Screen



The Future

Full integration with STIR/SHAKEN and full STIR/SHAKEN used by all United States carriers within the next few years should eventually make "Scam Likely" a thing of the past.

The FCC has proposed shortening the implementation period for smaller carriers using STIR/SHAKEN to 1 year, with a June 30, 2022 deadline.

Thank you!

For a PDF copy of this portion of the presentation, go to:

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