

Robocall Mitigation Plan

Business Information

Cardinal One Ventures LLC
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Contact Information

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Overview

In the Commission's release, *In the Matter of Call Authentication Trust Anchor, Sixth Report and Order and Further Notice of Proposed Rulemaking*, WC Docket No. 17-97 (adopted March 16, 2023) it is stated that all voice service providers ("VSPs") must file robocall mitigation plans ("RMPs") that, among other things, outline "reasonable steps" taken to avoid originating illegal robocalls.

In addition to the "reasonable steps, the FCC requires that a RMP includes:

- "know your customer" procedures;
- a description of any call analytics system used to identify and block illegal traffic; and
- whether a third-party vendor is used and if so, the name of the vendor.

The FCC previously stated that a RMP is sufficient if the detailed practices in the plan can reasonably be expected to significantly reduce the origination of illegal robocalls and the VSP complies with the practices it describes in its filing.

Purpose

Cardinal One Ventures LLC ("Cardinal One") is a small VSP dedicated to stopping illegal calls from traversing the network and monitoring the calls coming into our network. Cardinal One has fully implemented the STIR/SHAKEN authentication framework for the calls it originates on its network and maintains a robocall mitigation program designed to avoid originating illegal robocall traffic. Cardinal One works closely with its upstream provider to carry out the required mitigation functions.

Know Your Customer

The accurate identification of a subscriber in the STIR/SHAKEN ecosystem is tied to a telephone number-based caller identity associated with that subscriber. A subscriber is an entity that has a business relationship with Cardinal One in which we transmit, originate, and/or terminate calls based on behalf of the subscriber.

Cardinal One's KYC program obtains specific information before allowing a potential subscriber to use our services. This process includes executing a contract with the customer which includes the name, address, phone number, points of contact, associated management companies, billing details, nature of business, and other pertinent information. We verify physical addresses via USPS address verification, or if necessary via other means.

Know Your Upstream Providers

In accordance with the Commission's directive in *Advanced Methods to Target and Eliminate Unlawful Robocalls*, *Call Authentication Trust Anchor*, *Seventh Report and Order* In CG Docket 17-59 and WC Docket 17-97, *Eighth Further Notice of Proposed Rulemaking* In CG Docket 17-59, and *Third Notice of Inquiry* in CG Docket 17-59 (Rel. May 19, 2023) ¶¶ 49-51, Cardinal One provides the following information concerning its upstream voice service carrier:

Bandwidth Inc.
2230 Bandmate Way
Raleigh, NC 27607
Zach Aversano
zaversano@bandwidth.com

Cardinal One has a master service agreement with its upstream provider and has received assurances from their officials that it has, and will continue to, abide by the Commission's STIR/SHAKEN and robocall mitigation rules in all respects when providing voice traffic to Cardinal One. Bandwidth performs applicable STIR/SHAKEN authentication and verification functions for inbound calls before delivering those calls to Cardinal One. Cardinal One signs outbound calls from its own systems using Cardinal One's own SHAKEN certificates. Cardinal One and its upstream provider have agreed to work together diligently to mitigate all illegal robocalls, including cooperating fully when receiving traceback requests.

STIR/SHAKEN Implementation

Cardinal One has fully implemented the STIR/SHAKEN authentication framework across its entire network. Cardinal One signs all calls it originates using Cardinal One's own SHAKEN certificates, makes attestation decisions for its originated calls, and ensures that all calls it originates are compliant with 47 CFR § 64.6301. Cardinal One's STIR/SHAKEN implementation operates in conjunction with the robocall mitigation practices described in this plan.

Telephone Number Analytics

A Telephone Number ("TN")-based caller identity is the originating phone number included in call signaling used to identify the caller for screening purposes that is uniquely associated with the subscriber. A subscriber is permitted to use a TN as a caller identity if a TN is directly managed by Cardinal One and/or obtained by Cardinal One from Cardinal One's underlying carrier for use by the subscriber. In most cases, Cardinal One directly manages the TNs used by its subscribers. Cardinal One tracks these numbers in its inventory system and monitors the assignment of these numbers. In these cases, TN validation is the inherent result of Cardinal One's assignment of the TN to its subscriber.

Cardinal One applies STIR/SHAKEN attestation levels based on the information available to Cardinal One regarding the call source and the telephone number presented as caller ID. Cardinal One assigns full attestation when it has established a verified association between the subscriber and the telephone number used as caller ID, including numbers assigned to or managed for the subscriber through Cardinal One or its underlying carrier. Where Cardinal One can identify the subscriber or call source but has not established a verified association with the telephone number presented as caller ID, Cardinal One assigns partial attestation.

Analytics for Monitoring Traffic

All outbound calls are to trusted partners (call centers with which we have a contractual relationship), or to specific phone numbers that our customers direct us to send calls to. End users have NO control over where calls are routed. Cardinal One works with its upstream provider to identify behaviors which indicate illegal call activity. Examples of calling patterns monitored:

- Anomalies in cost generated by calls from a single customer;
- multiple overlapping calls on the same account is a risk of not having a single subscriber using the service;
- velocity on initiate calls (synchron intervals, quick dialing back-to-back calls);
- recent volumes (last 60 min) vs weekly trends;
- number of unique destination numbers in a time frame (total account level);
- number of unique source numbers in a time frame (total and account level); and
- anomalies in call duration distribution (most calls having similar duration are not representative for residential service usage).

Investigate Suspicious Activity

When traffic analysis indicates the presence of likely illegal robocalling, Cardinal One works with its upstream provider to follow defined procedures on investigating such subscribers. These procedures include:

- checking recent and past call detail records and benchmark against expected trends;

- checking recent and past account activity and purchases;
- investigating if any system issue generates the strange behavior;
- verifying that the call originating path is valid; and
- contacting the subscriber to understand his particular use case and validate that the activity belongs to that subscriber.

No third-party vendors assist in deploying Cardinal One's analytics.

Cardinal One follows Industry Traceback Group ("ITG")-recommended best industry practices and cooperates in traceback investigations. To allow for timely and comprehensive responses, Cardinal One devotes sufficient resources to provide prompt and complete resources to traceback requests. Cardinal One certifies that it will respond to all traceback requests within 24 hours of receipt..

Cardinal One works with its upstream provider to investigate suspicious activity found by the carrier's monitoring system or reported to Cardinal One by subscribers or third parties. An investigation could potentially result in opening a traceback request or with Cardinal One contacting a subscriber to correct improper use of the applicable platform, or, if the subscriber does not respond or comply, to notify its upstream provider(s) to block their use of the platform.

Blocking

Cardinal One will implement Do Not Originate requests it receives from the ITG. Cardinal One works with its upstream provider to automatically block suspicious calls using analytics. If those analytics reveal suspected robocalling patterns that are confirmed with further investigation, Cardinal One will take appropriate action which may include suspending or terminating the subscriber's use of Cardinal One's network. Cardinal One will cooperate with Investigative Bodies to address traceback requests from law enforcement (including the state attorney general's office), as well as the FCC, and/or the ITG; as well as documenting requests & actions taken in response thereto.

Plan Updates

This plan and industry best practices must evolve to respond to the dynamic nature of mitigating illegal robocalling. Cardinal One will monitor industry best practices and continuously improve our internal processes to ensure this plan, and our system adapt to this ever-changing issue.

In the event of any material change to this plan, Cardinal One will republish it to employees, consultants and contractors and file such an update to the FCC Robocall Mitigation Database within ten (10) days of such update.

Certification of Chad Phillips

I, Chad Phillips, CTO of Cardinal One Ventures LLC ("Cardinal One"), do hereby certify, under penalty of perjury, the following:

1. Cardinal One has fully implemented the STIR/SHAKEN authentication framework across its entire network, signs all calls it originates using Cardinal One's own SHAKEN certificates, and all calls Cardinal One originates are compliant with 47 CFR § 64.6301.
2. Cardinal One's business name and primary address are as follows:

Cardinal One Ventures LLC
391 E Las Colinas Drive
Suite 130-601
Irving, TX 75039
3. Cardinal One's d/b/a is Apartment Lines.
4. Cardinal One has previously used the d/b/a name Commline.
5. The following person is Cardinal One's sole principal and owns more than 10% of Cardinal One: Chad Phillips, CTO
6. Cardinal One has no subsidiaries or affiliates.
7. Neither Cardinal One nor any of the persons listed herein have been subject to an FCC enforcement proceeding or have been forbidden to file in the Robocall Mitigation Database.
8. The name, title, department, business address, telephone number, and email address of the individual responsible for addressing robocall-related issues are listed in the above robocall mitigation plan.
9. Cardinal One's role in the call chain is that of a voice service provider that directly serves end-user customers and originates calls subject to its STIR/SHAKEN implementation obligation.
10. Cardinal One's OCN is 367L

A handwritten signature in black ink, appearing to read 'Chad Phillips', is written over a solid black horizontal line.

Chad Phillips