



Robocall Mitigation Program

for

Crystal Computer Consulting

Last Revised: May 1, 2024

Created: June 1, 2021

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Disclaimer

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Background

STIR/SHAKEN is a framework designed to combat illegal robocalls and caller ID spoofing, which have become significant issues globally. The names "STIR" and "SHAKEN" are acronyms that stand for Secure Telephone Identity Revisited (STIR) and Signature-based Handling of Asserted Information Using toKENs (SHAKEN).

Here's a breakdown of the components and how they work together:

Secure Telephone Identity Revisited (STIR): This is a set of standards developed by the Internet Engineering Task Force (IETF) to ensure the integrity of caller ID information. It provides a mechanism for signing and verifying calling party information.

Signature-based Handling of Asserted Information Using toKENs (SHAKEN): SHAKEN is a framework developed by the Alliance for Telecommunications Industry Solutions (ATIS) and the Internet Engineering Task Force (IETF). It builds upon the STIR standards and provides a practical implementation of STIR in the telecommunications network.

The process involves the following steps:

- **Identity Verification:** The originating service provider verifies the authenticity of the calling party's identity.
- **Signing:** Once verified, the service provider signs the call with a digital signature, indicating that the caller ID information has been authenticated.
- **Transit:** The call is then transmitted through the network, with the signature attached.
- **Verification:** Upon receiving the call, the terminating service provider verifies the signature to ensure the caller ID information has not been tampered with during transit.
- **Display:** If the verification is successful, the caller ID information is displayed to the called party with a verified indicator, providing confidence in the authenticity of the call.

STIR/SHAKEN aims to restore trust in the caller ID system by making it more difficult for fraudsters to spoof caller ID information. By implementing this framework, service providers can help consumers identify legitimate calls and reduce the prevalence of illegal robocalls and scams.

While STIR/SHAKEN is a significant step forward in combating illegal robocalls, its effectiveness depends on widespread adoption by service providers and regulatory support. In the United States, the Federal Communications Commission (FCC) has mandated that service providers implement STIR/SHAKEN to help protect consumers from unwanted robocalls and caller ID spoofing.

Overall, STIR/SHAKEN represents a collaborative effort among industry stakeholders to address the growing problem of illegal robocalls and restore trust in the telecommunications ecosystem.

For more detailed information, refer to the official documentation and standards published by the corresponding entity.

Internet Engineering Task Force (IETF) - STIR Working Group <https://datatracker.ietf.org/wg/stir/about>

Alliance for Telecommunications Industry Solutions (ATIS) – SHAKEN <https://www.atis.org/shaken>

Statement

Our comprehensive strategy against unwanted and fraudulent robocalls encompasses technological advancements and training initiatives aimed at combatting the nuisance and potential harm they pose. Through the implementation of caller identification using tokens and partnerships with industry leaders like 3CX and Bandwidth.com, we ensure legitimacy and filter auto-dialing systems effectively. Leveraging STIR/SHAKEN technology and ongoing training, we stay ahead of evolving robo dialer strategies. Our commitment extends to proactive client engagement, state-of-the-art phone systems for tracking anomalies, and automated updating systems to address threats promptly. Collaborating with authorities, when necessary, we swiftly respond to threats, prioritizing a safer telecommunications environment for all.

Vendor Partners

[Bandwidth.com](#)

Our partner bandwidth.com provides SIP service to our connected customers and helps support our questions and concerns. Our account manager and portal access to Bandwidth.com can be found in our company documentation.

[3CX](#)

Our partner 3CX provides phone systems that allow for tracking and logging of phone calls in and out bound. This providers information is stored in our company documentation and can support any questions or concerns of system software.

Plan Follow Up

Each year bandwidth.com representatives and Crystal Computer Consulting discuss any modifications required to phone services or systems and any new or upcoming required modifications to phone systems or networks.

Additionally, each month the entire senior networking and senior system engineers technicians hold a meeting to discuss any relevant information to systems or networks. During this time discussion and training about new advancements in technology are provided. This time allows for the free and open sharing of information to better our networks and systems.

Our support services team monitors daily for systems anomalies that could cause disruption to customer networks and phone systems. These issues are addressed immediately and logged in a task management system. All tasks generated contain notes about the work completed and are shared with other staff when resolution is required to other networks. These tasks are stored in our main business system for reference.