

Reduce Robocalls and Restore Trust in Caller ID

Phone scams, increasingly through illegal robocalls, target consumers who were duped out of an estimated [\\$3.3 billion last year](#). Fraudsters are cunning in the ways they deceive by spoofing, or changing, the caller ID to look like a neighbor, a local business, a trusted brand, or even a government entity. Subscribers have lost trust in this key communication channel and don't answer if they're not certain who is calling.

Authenticate Callers to Stop Spoofing

Certified Caller, a complete STIR/SHAKEN solution by Neustar, a TransUnion company, enables service providers to authenticate and verify the caller telephone identity. This added layer of trust gives subscribers confidence in knowing who is calling so they can make a better decision about answering.

Certified Caller can be deployed in multiple environments and leverages the STIR/SHAKEN framework to automate the end-to-end process of:

- Generating a private/public key pair for signing,
- Requesting a STI token from a policy administrator,
- Requesting a STI certificate from a certification authority,
- Receiving and storing the signed public key certificate,
- Signing originating phone calls, and
- Verifying signed phone calls at termination by using the retrieved signed public key certificate.

If the signature and telephone identity are validated, a visual notification can be displayed to the called party – such as a modified Caller ID prefix of 'V' for Verified or an image of a check mark on mobile displays. If a call fails verification, the service provider receiving the call may display a warning such as an 'S' for spoofed.



CALLER ID AUTHENTICATION

Verify Calls as Trusted Communication

- Comply with the latest STIR/SHAKEN specifications
- Validate caller telephone identity
- Automate the end-to-end process to digitally sign calls
- Detect and warn of call spoofing
- Protect subscribers from phone scams
- Support enterprise to consumer communication



COMPLIANCE

IETF STIR Standards:

- RFC 8224
- RFC 8225
- RFC 8226
- RFC 8443

ATIS SHAKEN Standards:

- ATIS-0300116
- ATIS-1000074-E
- ATIS-1000080-E
- ATIS-1000082 (Technical Report)
- ATIS-1000084-E
- ATIS-1000085

3GPP standards:

- 3GPP TS 24.229 (ISC and verstat)

Key Features

- **Future-proof Compliance:** Remain compliant with the latest STIR/SHAKEN standards, even before they are published, with continuous implementation of new software capabilities.
- **Robust All-in-One Solution:** Inclusive of all required and emerging STIR/SHAKEN components including:
 - Secure Key Store (SKS)
 - Secure Telephone Identity – Authentication Service (STI-AS)
 - Verification Service (STI-VS)
 - Service Provider – Key Management Server (SP-KMS)
 - Secure Telephone Identity – Certificate Repository (STI-CR)
- **Flexible Interfaces:** Support for published REST API and SIP proxy interfaces to VoIP and IMS network elements. Pre-integrated with published Caller ID REST API for integration with all Neustar Caller Intelligence solutions, including Call Validation Treatment as defined in the SHAKEN framework
- **Multiple Deployment Methods:** Offered both as an on-premise, locally deployed solution as well as a hosted, fully managed solution in its elastic cloud environment.
- **Proven Support:** Technical support is available 7x24 from our experienced Caller ID Client Support team online, or by phone or e-mail.

Regulatory Mandates

UNITED STATES

Dec 30, 2019

Congress passes **Pallone–Thune TRACED Act**

IMPACT

- Ordered FCC to require all carriers to implement STIR/SHAKEN or Robocall Mitigation by June 2021
- Enforcement authority of FCC and DOJ

Jul 17, 2020

Granted safe harbor to block calls

- FCC provides safe harbor for carriers that block suspected robocalls

IMPACT

- Carriers can block calls suspected fraud or robocalls using “reasonable analytics”, without customer opt-in

Oct 2020

FCC 2nd Report and Order

IMPACT

- Carriers that can demonstrate hardship are granted an extension until June 2023 to implement STIR/SHAKEN. Carriers that receive an extension must implement a Robocall Mitigation program by June 2021.

Sept 2021

Carriers must register their STIR/SHAKEN progress in the FCC’s Robocall Mitigation Database (RMD).

Dec 2021

FCC mandates non-facilities based carriers to implement STIR/SHAKEN by June 2022 (was June 2023).

CANADA

Dec 2019

CRTC establish CST-GA

IMPACT

- CRTC established the CST-GA to rally industry-wide adoption of STIR/SHAKEN policies, protocols, and operating procedures to mitigate spoofing and illegal nuisance calls

May 2021

CRTC extends STIR/SHAKEN deadline until November 30, 20212.

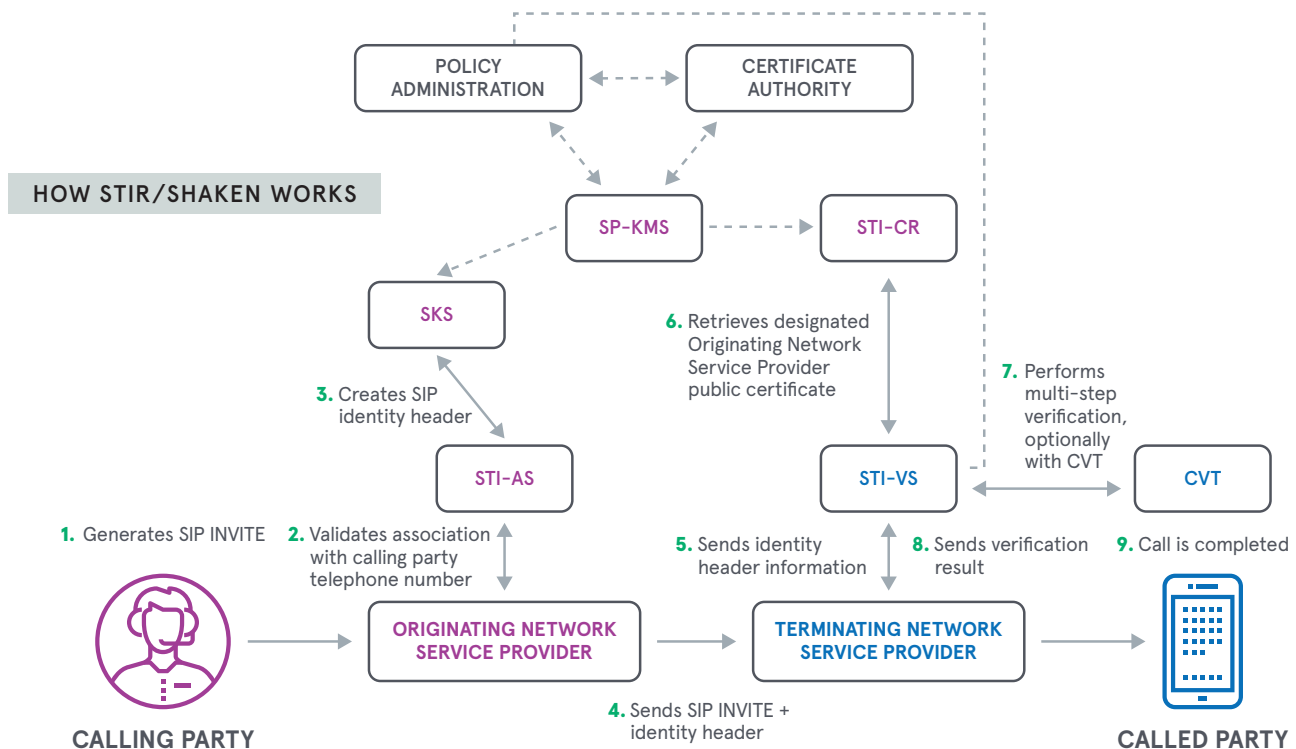
Based on Industry Standards

Meeting the STIR/SHAKEN industry standards, Certified Caller leverages the latest developments in caller authentication.

Caller ID Authentication is a means to authenticate the calling number, securely transport this information “on the wire” and verify it at the receiving end, along with a framework to implement this Caller ID network verification.

STIR: Secure Telephony Identity Revisited is a set of technical standards developed by the Internet Engineering Task Force (IETF) to provide a means to certify the identity of originating calls.

SHAKEN: Signature-based Handling of Asserted information using toKENs is a framework developed by the Alliance of Telecommunications Industry Solutions (ATIS) that is focused on the implementation of STIR within IP-based service provider networks.



ATIS Robocalling Testbed

The ATIS Robocalling Testbed is the industry interoperability test platform, exclusively hosted by Neustar, to verify implementations of the SHAKEN call authentication framework and help advance efforts to mitigate unwanted robocalls and caller ID spoofing. The virtual test environment removes obstacles and accelerates the validation of caller authentication standards in real world STIR/SHAKEN implementations.

[Click Here](#)

STIR/SHAKEN Resource Hub

Get the latest insights on regulations, solutions and resources on STIR/SHAKEN. Access white papers, FAQs, infographics, videos, on-demand webinars, and more.

[Visit the Hub](#)

About Neustar

Neustar, a TransUnion company, is an information services and technology company and a leader in identity resolution providing the data and technology that enables trusted connections between companies and people at the moments that matter most. Learn how your company can benefit from the power of trusted connections.

LEARN MORE

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