



Highlights

- » Block robocalls from traversing your network in real time
- » Comply with the TRACED Act and FCC deadlines
- » Protect subscribers and improve service quality
- » Eliminate costs to handle robocall complaints
- » Mitigate risks to peering revenue

Overview

For communications service providers, unwanted robocalls cause serious operational problems that include customer dissatisfaction, increased CRM costs, commercial friction with peer networks, and the threat of regulatory sanctions. *The YouMail Robocall Mitigation Solution* is an industry-proven response for the need to identify unwanted robocalls and enable appropriate call treatment, which may include call labeling or alternative routing to voicemail or IVR.

This solution combines a North American sensor network that leverages proprietary AI algorithms to definitively identify and stop unwanted robocalls. YouMail provides zero-hour detection in real-time and autonomously prevents undesirable robocalls from reaching customers or traversing networks. The YouMail Robocall Mitigation Solution also enables network operators to comply with the TRACED Act, while simultaneously improving customer experience and reducing operating costs.

FCC Order Compliance and Support

The FCC has mandated that all service providers implement an ongoing robocall mitigation program to prevent the origination of unwanted robocalls. As service providers implement STIR/SHAKEN authentication technology to comply with the TRACED Act, they must support call attestation with a “know your customer” (KYC) process that validates customer legitimacy. These requirements can add operational costs and friction among networking peers.

Built on the same threat database used by the Industry Traceback Group to identify and shutdown fraudulent robocallers and complicit service providers, the YouMail Robocall Mitigation Solution satisfies FCC requirements with an in-network solution that is low-cost and doesn't introduce operational friction or delays. Communication service providers may stop unwanted robocalls from reaching customers, transiting networks, or originating in the first place. YouMail provides all of this while simultaneously supporting a more robust KYC process through real-time identification and resolution of unwanted robocalls.

For terminating service providers, it provides the ground-truth in terms of identifying and stopping fraudulent robocalls. For call originators, traffic aggregators and transit network providers, it also reduces the risk of peer networks refusing traffic.

YouMail Capabilities

The YouMail Robocall Mitigation Solution provides a highly efficient and effective answer to the need for identifying and stopping unwanted robocalls. Unlike other industry solutions that rely upon heuristic methods, YouMail technologies definitively identify fraudulent calls.

YouMail Analytics Engine Definitively Identifies Fraud

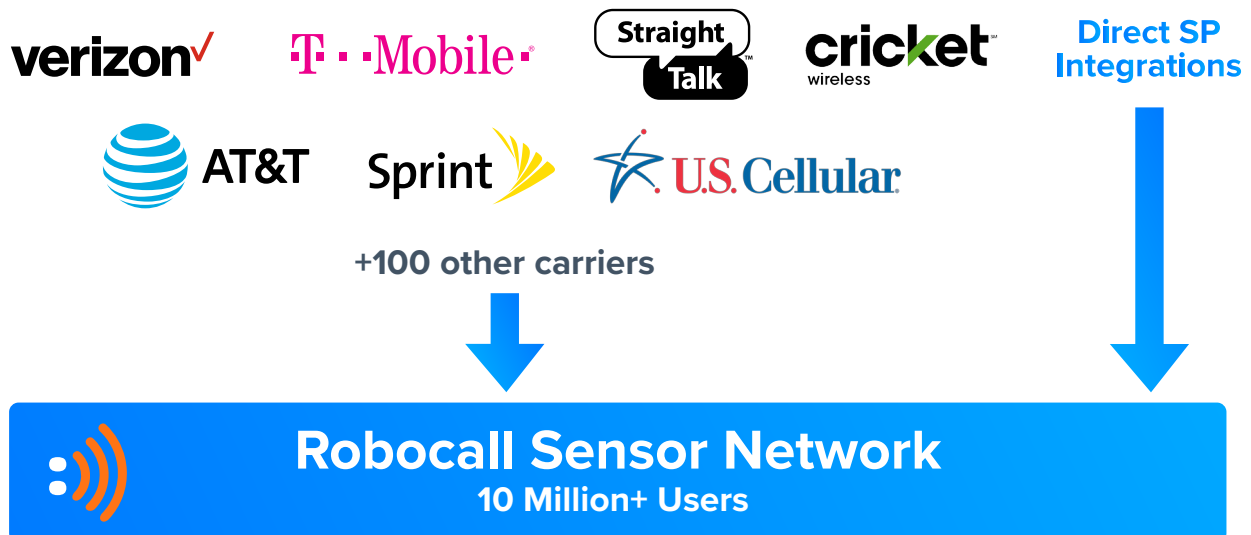
YouMail leverages proprietary AI-based algorithms to analyze communications content. First, these programs accurately identify unwanted calls. Second, a unique digital fingerprint is created for each campaign and matched with an associated telephone number used by bad actors. Unlike conventional honeypots that rely upon audio to text transcription, YouMail uses these fingerprints to efficiently and effectively identify subsequent attacks that are part of the same fraudulent campaign and bad actors.

Fingerprints often follow bad actors wherever they go – across spoofed TNs and multiple originating service providers. YouMail’s adaptive algorithms are effective regardless of attack duration, frequency, and other tactics. When fraud is initially detected, YouMail autonomously identifies bad actor campaigns and all associated source TNs, enabling immediate and decisive action.

YouMail also captures the ground-truth with respect to fraudulent calls, campaigns and bad actors. In fact, the USTelecom Industry Traceback Group relies upon YouMail content for objective evidence for legal action against call originators, service providers and/or gateways.

YouMail Zero Hour Detection

The YouMail Robocall Sensor Network actively listens for fraud among billions of calls received by real users across North America. The network spans mobile carriers and integrations with VoIP providers, enabling it to detect attacks within minutes. Unlike conventional honeypots that do not reliably and consistently identify unwanted robocalls, the YouMail Robocall Sensor Network is composed of millions of real consumer and business phone lines that capture audio messages associated with bad actor campaigns.



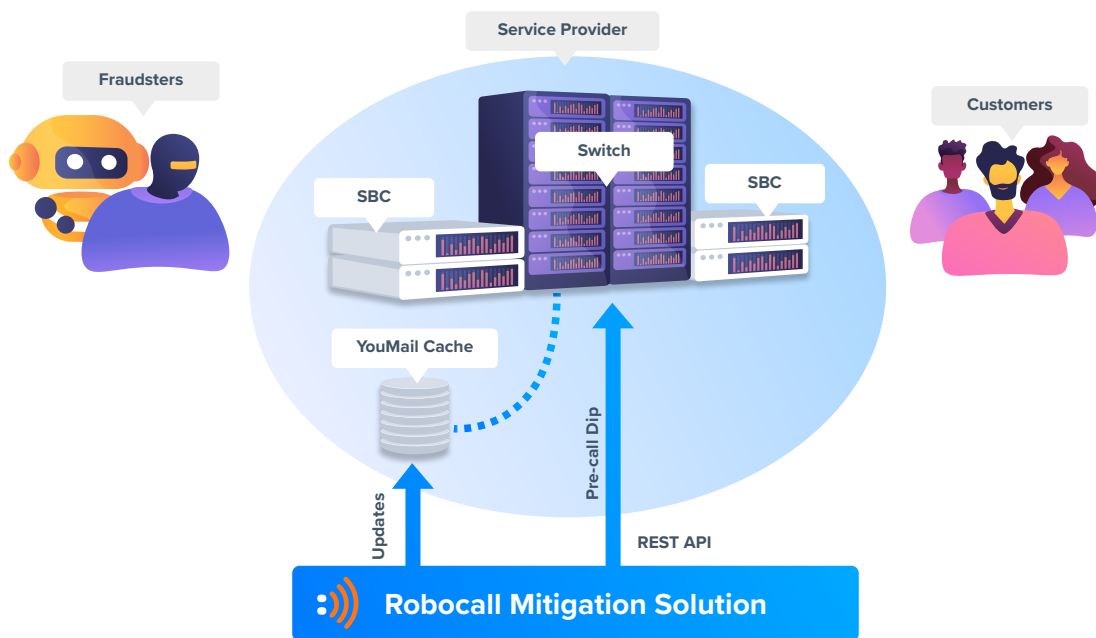
YouMail Solution Architecture

The YouMail solution combines a live call sensor network with powerful AI algorithms to identify telephone numbers (TN) that are originating fraudulent calls. The YouMail threat database maintains a continuously updated list of TN fraud sources and their associated campaigns. It features a REST API designed for integration into a network SBC or switch for real time robocall blocking.

YouMail’s Real-time Mitigation Options

YouMail’s REST-based API provides frictionless access to unwanted robocaller identification data. API users may query the database using originating TNs. YouMail will respond with a fraud risk score and a fraud campaign descriptor, if applicable. The risk score is continuously updated to reflect current threat activity; the data for any TN data is never stale.

As an alternative, robocall data cache licensing enables API users to seamlessly embed the YouMail robocall threat database on an in-network basis, eliminating the potential for compromises in call processing rates that may result due to latency. In this deployment model, the database is updated at regular intervals to ensure risk scores remain current.



Use Cases

TRACED Act compliance - Implement “know your customer” and ongoing robocall prevention programs that meet regulation requirements.

Mitigate peering revenue risks - Block robocall origination that could put peering revenues at risk.

Block gateway threats - Stop robocalls entering your network from upstream providers.

Protect customers - Stop robocalls from reaching your subscribers.

TN hygiene - Ensure TNs are clean and have no fraud history *before* assigning them to customers.

Features

Complete KYC and ongoing robocall prevention solution.

AI-powered audio analytics and fingerprinting based on billions of calls in the YouMail Robocall Sensor Network.

Live call sensor network, composed of over 10M users across US carriers.

Actor and campaign-centric analytics using audio fingerprinting and intention.

Content-based analytics applied to billions of records identifies and understands robocaller tactics.

Robocall threat database with REST API.

Embeddable threat database available with continuous updating.

Access media recordings and metadata from identified fraud and robocalls.

Supplier to USTelecom Industry Traceback Group, FCC and media.

Benefits

Comply with the TRACED Act.

Accurate, zero-hour detection of unwanted calls, and mapped to the caller's intent (fraud, telemarketing) based on content.

New attack vectors are identified within the first 1-100 calls for zero-hour detection.

Actors and campaigns enumerated independently of originating numbers, providing accurate basis for threat scores.

Ensures TNs co-opted by a robocaller do not join threat database when part of a tactic that only uses numbers once or briefly.

Verify originating TNs in real time and block threatening calls from originating or traversing your network.

Deploy solution in network call path without impacting call setup latency or CPS rates.

Justify blocking calls to originators and 3rd parties; meet safe harbor requirements.

Leverage the same data provided to authorities to stay ahead of investigations.

YouMail, Inc. protects consumers, enterprises, and carriers from harmful phone calls. YouMail protects consumers with app-based call protection services. YouMail protects carriers with robocall mitigation services that detect when they are originating, carrying, or terminating bad traffic on their networks. YouMail protects consumer-facing enterprises by helping detect and shut down imposter traffic that can lead to financial or brand damage.

YouMail's communications platform handles over a billion calls per year for over 10 million users, and the YouMail Robocall Index™, since its launch in September 2015, has emerged as the nation's definitive source on robocalling data for telecom carriers, smartphone and app companies, and public policymakers.

YouMail, Inc. is privately funded and based in Irvine, California. For more information, visit <https://www.youmail.com>

