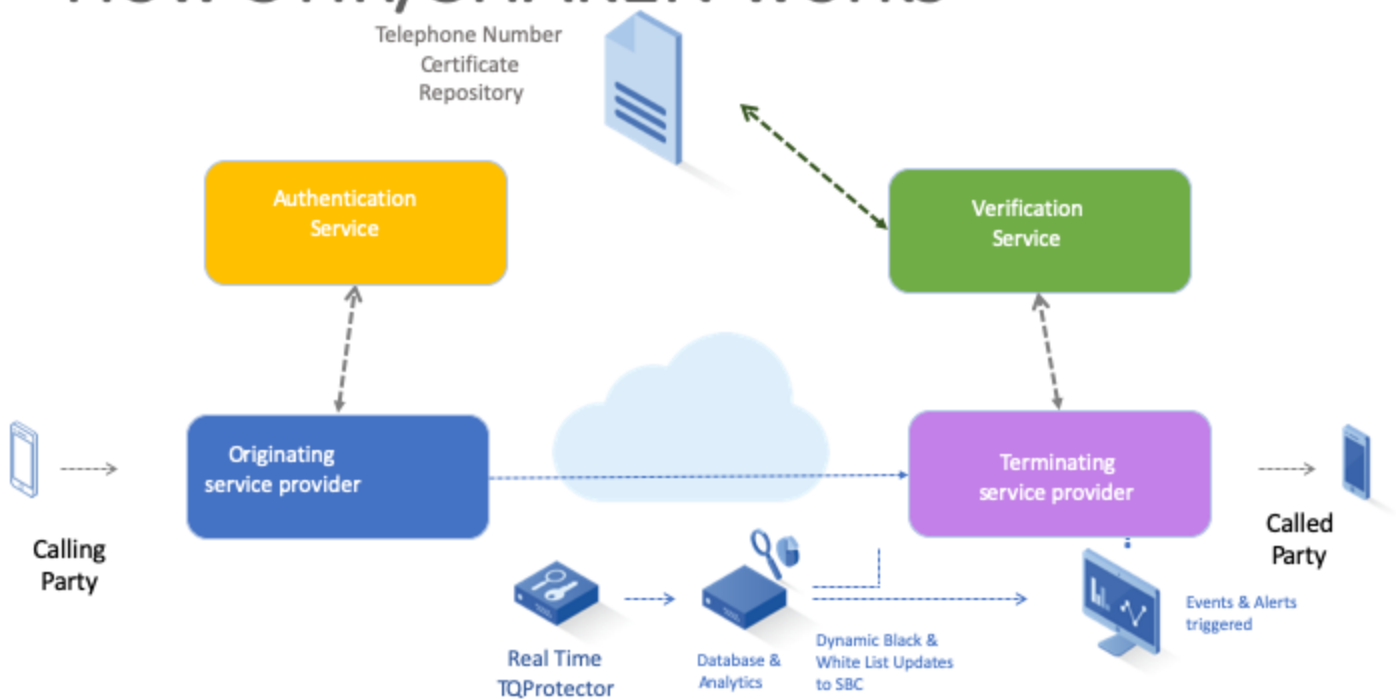


# STIR/SHAKEN, & Anti- Robocall

## How STIR/SHAKEN works



**Teraquant**  
Answers, not Data

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## Anti-Robocall & STIR/SHAKEN Solutions

- STIR/SHAKEN – call authentication & verification
  - Fully Authorized against the
  - **Standards compliant**
    - Approved by Policy Administrator (STI-PA) as an STI - Certificate Authority (CA)
  - Participation in industry associations, contributing to standards.
  - Ensuring software is up to date.
  - Out-of-Band STIR for TDM legacy networks
  - Modified caller ID & CNAM
    - ‘v’ or ‘s’
  - Rich Call Data
  - Comprehensive Reporting



### Example of the SHAKEN Certificate in a SIP INVITE

For example, a full form of PASSporT in an Identity header might look as follows (backslashes shown for line folding only):

```
Identity: eyJhbGciOiJFUzI1NiIsInR5cCI6InBhc3Nwb3J0IiwieDV1IiBkaHR0cHM6Ly9jZXJ0LmV4YW1wbGUub3JnL3Bhc3Nwb3J0LmNlciJ9.eyJkZXN0Ijp7InVyaSI6WyJzaXA6YWxpY2VAZXhhbXBsZS5jb20iXX0sImhhdCI6I6IjE0NDMyMDgzNDUiLCJvcmlnIjp7InRuijoiMTIxNTU1NTEyMTIifX0.rq3pjT1hoRwakEGjHCnWSwUnshd0-zJ6F1VOgFWSjHBr8Qjpk-cpFYpFYs\ojnCPtz03QfP0lckGaS6hEck7w;info=<https://biloxi.example.org/biloxi.cert>
```

Teraquant is proud to partner with Nemeracle to offer the ClearIP service, helping you to implement Anti-Robocall & STIR/SHAKEN Solutions. Teraquant’s enhanced **Out-of-Band** STIR solution is seamless & scales better. We ensure STIR/SHAKEN is reliably integrated in your network, on your hardware or virtual infrastructure, in private cloud or public cloud, interworking with your network devices and your partner’s networks.

## Realizing the added value of anti-Robo Calling with Rich Call Data

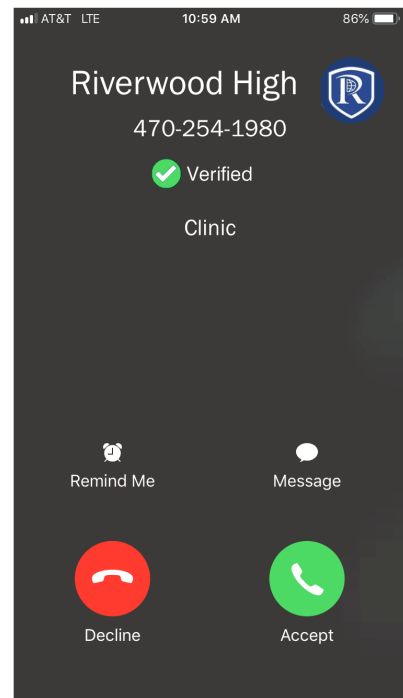
Rich Call Data is additional information about the caller sent in the SHAKEN token. The information is presented to the called parties, hopefully encouraging them to answer the calls.

This has very attractive added value to be delivered by service providers to your enterprise customers. Imagine how helpful Rich Call Data would be in these situations:

1. A doctor's office calls their patient to confirm an appointment.
2. A school clinic calls a parent to let them know their child is sick.
3. A delivery driver calls to confirm that someone is home to sign for the delivery.
4. A service contractor (e.g., plumber, electrician) calls to make sure someone is home to let the contractor in to do the work.

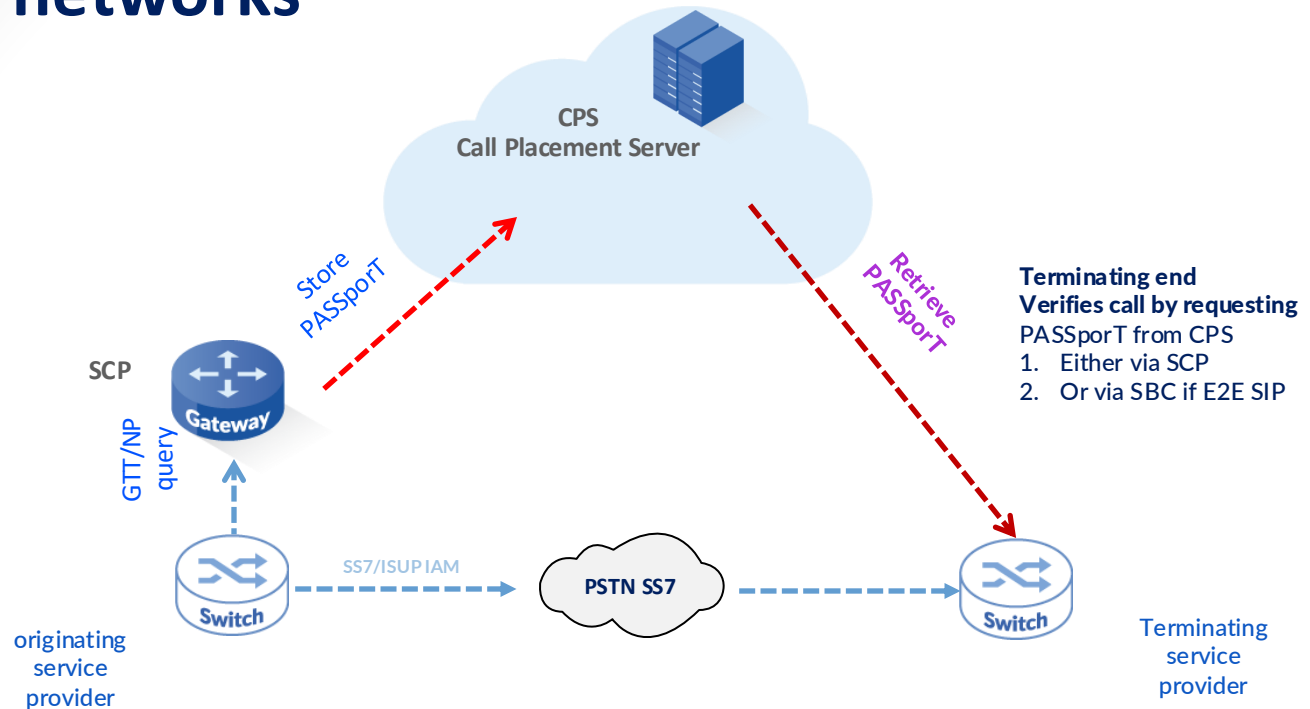
Rich Call Data provides a great opportunity for service providers:

- Service providers can offer Rich Call Data service to enterprise customers as a value-add.
- Because it's built on STIR/SHAKEN, it's secure. No spoofing.
- The enterprise customer provides the Rich Call Data, so it's up-to-date and brand compliant.
- Teraquant has included support for Rich Call Data in our STIR/SHAKEN solutions.



# Out-of-Band STIR/SHAKEN

## The solution for legacy TDM (SS7 & POTS) networks



- TCAP accesses SCP for GTT
- The parses the TCAP message
- Converts cdpn/cgpa to SIP - TO/FROM
- Sends SIP INVITE to STIR/SHAKEN service
- STIR/SHAKEN service places PASSporT on CPS
- Presence of PASSporT is advertised to terminating CO

Teraquant Out-of-Band STIR/SHAKEN is implemented without hardware intervention and with no network changes . Ask your Local Tandem operator to contact Teraquant

# Why Teraquant

Core to our value system is the philosophy of the man who invented modern business management, Peter Drucker **“if you can’t measure it, you can’t improve it.”** Our roots are in test and monitoring which is the foundation of **quality**. We build-in **Service Assurance, benchmarking, KPIs and security monitoring**. This allows you to baseline improvements and when troubleshooting, to readily access settings and scenarios of a working example.

Uniquely, we ensure products are implemented as solutions, on your hardware or virtual infrastructure, interwork with your network and your partner’s networks, in **private cloud or public cloud** and exceed on expectations. We also proactively manage the vendor interface and get the best out of our vendors for you

*We promised never to finger point. Troubleshooting and getting to root cause quickly is what our company has been built on. We pledge we will never blame others. We will just get right to the point and provide proof of the root cause of the problem.*



The Teraquant pledge

No Finger-Pointing

For further information, click here:

<https://www.teraquant.com/product-solutions/tqprotector>

Or please contact us at [Info@teraquant.com](mailto:Info@teraquant.com)

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Network Monitoring and Service Assurance - Speech Quality Experts (PESQ/POLQA) and Active Testing - Reporting – HPBX - Session Border Controllers – Session Vector Routing and SD WAN - Big Data Analytics - VoIP Fraud Management

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