



COMBATTING SPOOFED ROBOCALLS WITH CALLER ID AUTHENTICATION

“American consumers are sick and tired of unwanted robocalls, this consumer among them. Caller ID authentication will be a significant step towards ending the scourge of spoofed robocalls. It’s time for carriers to implement robust caller ID authentication.”

FCC Chairman Ajit Pai



And not only annoying Americans, as this is a global phenomenon, irritating consumers all over the world. Many other types of abuse cases are also prevalent in Europe, encouraged partly by carriers charging a fee on top of the termination rates for calls originating from outside of Europe.

As one can imagine this practice is just ripe for fraud, and faking European A numbers has become a real challenge to contend with.

Since we, at Cataleya, are heavily invested in analysing fraud call anomalies in our SBC platforms, we find that this type of fraud cannot be so easily verified. For this to take place, number database or HLR lookups would need to be performed, so we could make sure that these numbers are actually assigned to users.

However, these are complex and come with a certain cost per dip and proper correlation of the data needs to be performed to achieve a high degree of certainty.

Another method gaining traction in the industry is using signatures issued by the originating network to ID the caller, which in turn will be verified by the terminating network before reaching the consumer. This framework is called SHAKEN/STIR.

WHAT IS SHAKEN/STIR IF NOT RELATED TO JAMES BOND OR COCKTAILS?

SHAKEN/STIR is a framework of interconnected standards. SHAKEN/STIR

are acronyms for Signature-based Handling of Asserted Information Using toKENs (SHAKEN) and the Secure Telephone Identity Revisited (STIR) standards. This means that calls traveling through interconnected phone networks would have their caller ID “signed” as legitimate by originating carriers and validated by other carriers before reaching consumers.

SHAKEN/STIR digitally validates the handoff of phone calls passing through the complex web of networks, allowing the phone company of the consumer receiving the call to verify that a call is from the person making it.

WHAT IS CATALEYA DOING?

Due to the high accuracy of this method and the support it is gaining in the US, and hopefully elsewhere in the world, we will fully support this function in our SBCs for our current and future US-based customers, as well as any other operators that decide to adopt this framework.

We truly believe that this is the most reliable practice to adopt to protect consumers and stop abuse and fraud around the world.

Our platform is already undergoing certification within the ATIS Robocalling Testbed, which serves as the industry’s interoperability test facility to validate the effectiveness of caller authentication standards.

More specifically, initially ATIS developed



“Signature-based Handling of asserted information using TOKENs” (SHAKEN) as an implementation framework for service providers to better combat robocalls and call spoofing on IP-based networks.

As part of an industry that has been terribly affected by all sorts of fraudulent tactics, we see this as a great initiative. Combining this with our existing Machine Learning based fraud detection capabilities, enables us to provide consumers with a high level of protection against nuisance calls, while also shielding operators from revenue leakage.

The fight against fraud will never be over. However, every little step and solution found is a little was won.

Contact us at: info@cataleya.com if you want to find out how we can help protect your customers from spoofed robocalls.

ABOUT CATALEYA

Cataleya provides the most tailored, reliable and easy to integrate real-time communications switching, service creation and analytics platforms in the industry. Our solutions are aimed at communications service providers, mobile operators and unified communications companies looking to offer cutting edge IP services.

Our portfolio ranges from build-your-own SBC or class 4 switch for interconnect and access solutions to built-in analytics and fraud detection. We also offer a fully-fledged voice wholesale business platform as a service.

Service and application enablement for SIP-trunking, call recording and many other features allow our customers to put their customers in control when it comes to service creation.

For more information, please visit www.cataleya.com