

Visibility And Voice Biometrics Prevent Fraud And Streamline Customer Experience

Help Detect 11,000 Identity Thefts

Government agencies around the world are tasked with improving customer experiences, while running leaner, more effective operations. The race to deliver a contemporary digital experience also figures in as they strive to be more responsive to their constituencies.

This national revenue collection agency receives 9 million calls a year, with 75% of those requiring an agent to verify the caller's identity. When a customer called, the identity authentication process involved several steps. The process was difficult for both customers and agency personnel, who collectively spent 75,000 hours each year verifying customers' identities. Call center staff costs average \$16 per hour.

Previously, 76% of 9 million calls annually required an agent to verify identity, at a cost of \$1.2 Million

Further complicating the traffic load, almost half of those calls, or 4.3 million, come in a compressed three-month period each year. These demands over extended call center personnel with a flood of activity, each of which needed to be identified and authenticated.

Another major challenge faced by the agency was identity fraud. The agency has historically been targeted on a mass scale by fraudsters, and in 2014 this had resulted in 18,000 attempts at fraudulently laying claim to refunds belonging to others. Criminals would contact the agency assuming a false identity or used stolen information to impersonate a legitimate taxpayer and commit tax fraud. The agency was seeking an added layer of authentication security to help deter, prevent and detect identify theft.



Company:

Government Agency This federal agency is the principal revenue collecting organization for the country.

Key Issues:

- The agency takes 9 million calls a year, and 75% require an agent to verify customer identity.
- This costs the agency annually 75,000 hours of call center time
- Customer ID theft was big business: in 2014 it hit 18,000 attempts, resulting in fraudulent refunds of \$12 Million
- Almost half of the calls, or 4.3 million, come in a burst of activity 3 months a year. This labor-intensive process needed to be streamlined.
- Recognition of consumer frustration with PINs, passwords and security questions also drove the agency to seek a solution

Solutions:

- Keysight Flex Taps
- Keysight Network Packet Brokers
- Optics, accessories and support
- Voice Biometrics Tools (Third Party)

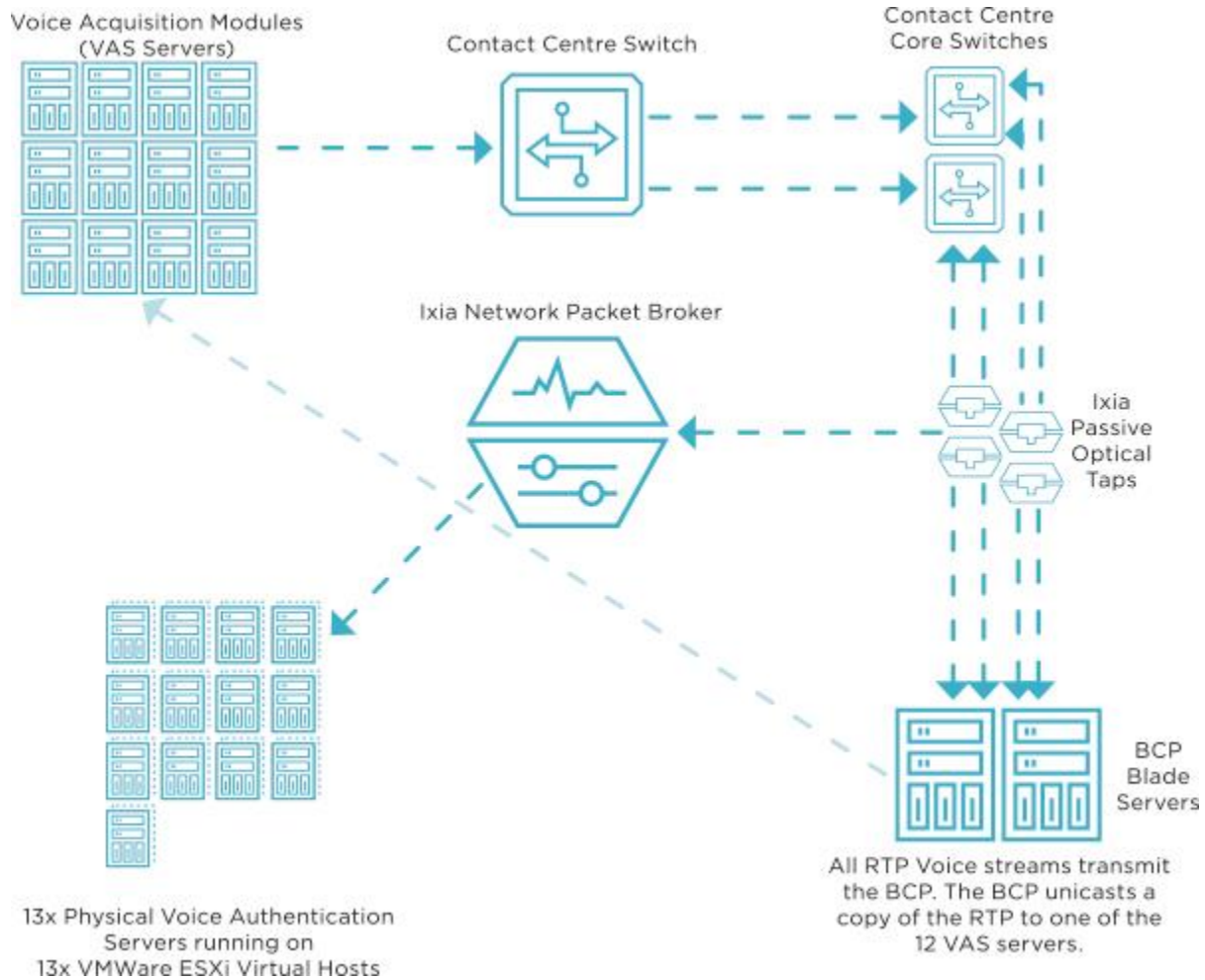
Results:

- Automated biometric authentication improves the agency's ability to prevent and detect identity theft and fraud.
- In 2015 the agency stopped \$6.6 million in fraudulent refunds and the attempts at ID fraud almost halved in part with the help of this solution.
- Full enrollment will equal \$1.2M annually in call center savings
- In the first year of operation, 1.5M people have enrolled a voiceprint
- These callers experience a 40- 45 second reduction in call times, improving customer experience and saving 16,000+ hours of call center time, equaling \$250K



Secure, Fast, Easy Verification Of Customer Identity Results In Fraud Decline

To streamline verification of customer’s identities, the agency’s Managed Network Services provider chose to deploy Keysight visibility solutions feeding the voice biometrics tools. The visibility/voice biometrics solution delivers a secure, fast and easy way to verify a customer’s identity, providing a greatly improved experience for customers and staff, resulting in measurable decline in attempts at ID fraud.



Customers contacting the agency by phone are now given the choice and encouraged to record a short “voiceprint” that is used to verify their identity in future calls. A voiceprint is a digital representation of the sound, rhythm, physical characteristics and pattern of a voice. Streamlined authentication has allowed the agency to quickly boost call completion rates, while improving customer security. The added layer of voice authentication security will help to deter, prevent and detect identity theft.

The solution requires that traffic is captured at line rate in a failsafe and passive manner for delivery to the monitoring layer. Traffic flows from Keysight Flex Taps to the Keysight Network Packet Brokers’ ports. The out-of band monitoring data is then aggregated, filtered, VLAN Tag encapsulated and delivered to the voice biometrics tools.

A “Lossless” Architecture Was Mandatory

Authenticating voice traffic, also known in the industry as Real-Time Transport (RTP) streams, is very sensitive to packet loss and latency, which can impair results and cause system failures or false negatives. In this case, such failures would expose the Managed Services Provider to service level agreement penalties under their contract with the agency. A “lossless” architecture, delivering real-time quality streams of pure voice traffic to biometrics systems, was deemed as mandatory.

The Keysight network packet broker, with a fully non-blocking hardware architecture, delivered the required ultra-low latency while processing vast volumes of voice flow data to the biometrics probes. During the Proof of Concept testing phase, Keysight demonstrated superior performance in processing microbursts of traffic with deep buffering, enabling them to manage traffic bursts on ingress ports contending with egress port flow to probes. Even with advanced feature packet processing and full data manipulation capability enabled, the Keysight Network Packet Broker delivered the high rate voice flow data to the biometrics system with zero packet loss, thereby eliminating the risk of false negatives due to integrity loss or packet drops.

The agency is focused on improving the overall customer experience across the contact center and their mobile app, removing the need to answer security questions or enter lengthy user names, pins and passwords. More than 1.5 million people enrolled a voice print in the first year, according to the agency. The contact center experience has improved since roll-out, with callers experiencing a 40-45 second reduction in the average time that they are on the phone with an agent, gaining access to their personal records faster, and with greater security.

In the 2014-2015 financial year, the agency was targeted more than 11,000 times by identity fraudsters attempting to steal tax refunds. Efforts that are detected and foiled with the help of this new solution are recorded, saving over \$6 Million in attempted fraud.

Learn more at: www.keysight.com

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