enterprise white paper ::
Voice Biometrics Industry Solutions

Overview
Nuance’s voice biometrics products are designed to meet the dynamic security needs of the world’s leading financial institutions, telecom service providers, healthcare insurance companies, large enterprises, and law enforcement and government agencies. Organizations are empowered to improve security and comply with industry regulations that require higher levels of security for authenticating identity, while reducing costs and delivering increased convenience to those they serve. Nuance voice biometrics technology provides an accurate, non-invasive, cost-effective identity verification solution that seamlessly integrates with existing contact center and VoiceXML platforms.
Financial Services

**Nuance Voice Biometrics Financial Services Solutions Deliver Cost-Effective Risk Management, Customer Convenience and Regulatory Compliance**

Nuance’s biometric speaker verification technology provides financial services organizations worldwide with the solid groundwork for effective risk management, compliance with critical industry regulations, and the ability to successfully combat increasing fraud and identity theft. A more aggressive, global approach to security is required today, and it’s one that must take into consideration the need for cost efficiency without compromising customer convenience. Voice biometrics enables simple and secure remote authentication for a variety of applications including:

- Phone Banking Authentication
- Password Reset
- e-Banking Transaction Security
- Transparent Conversational Authentication
- Private Banking

**Phone Banking Authentication**

Despite constantly evolving and improving technology, many consumers remain reluctant to access their bank accounts by phone or online, fearful of identity theft. Nuance adds a crucial layer of security to remote transactions over the phone. Its powerful and accurate voice biometrics technology verifies caller identity with a simple spoken pass phrase. Free of complex PINs and cumbersome authentication questions, this is a totally convenient and non-intrusive way to offer your customers peace of mind.

**Password Reset**

Current e-Banking password and contact center PIN resets are routine but tedious, time-consuming processes that cost banks millions of dollars each year. Nuance’s Vocal Password enables an automated password reset process with biometric speaker verification. Phone and e-Banking customers can conveniently and securely reset their own passwords anytime from anywhere. VocalPassword seamlessly integrates with existing IVRs and VoiceXML platforms, significantly increasing efficiency and reducing costs, as well as enhancing the customer experience. There’s no trade-off between security and convenience; you get both with Nuance Voice Biometrics Password Reset.

**e-Banking Transaction Security**

Per the Federal Financial Institutions Examination Council (FFIEC) and based on the Basel Committee on Banking Supervision: Risk Management Principles for Electronic Banking Guidelines, single-factor authentication methods are inadequate for remote high-risk financial transactions involving the transfer of funds between accounts, wiring money, etc. Also, passwords and PINs can be difficult to remember, or stolen, and authentication questions are cumbersome and prone to fraud. Nuance offers increased security, and customers enjoy an improved experience, without annoying verification procedures. Banks today can
secure high-risk Internet transactions by implementing out-of-band call back to the customers’ registered and unregistered phone number and use vocal passwords as a second or third authentication factor. Nuance has successfully implemented in-band, browser-based, audio acquisition module enabling multi-factor security for e-Banking applications using PC microphones.

**Transparent Conversational Authentication**

Financial contact centers must reliably verify account holders in order to ensure accuracy in processing financial transactions for clients. Nuance’s unique FreeSpeech™ product transparently verifies the identity of a speaker during the course of a natural conversation with a contact center agent and can check in real time whether an incoming call contains a voice of a known fraudster. Contact centers reap the benefits of a one-of-a-kind, cost-efficient solution that reduces call duration, enhances the customer experience, and successfully combats fraud and identity theft.

FreeSpeech™ supports traditional (TDM), VoIP and hybrid contact centers and is integrated with leading CTI and CRM systems.

**Private Banking**

High-net-worth customers are among a financial institution's most discriminating users of value-added services. They demand personal attention, privacy, convenience and absolute security. Nuance FreeSpeech™ enables transparent speaker verification during the course of a natural conversation between a customer and bank representative – the highest level of security delivered without personal intrusion. With the release of FreeSpeech™, a VoIP-enabled financial institution can easily deploy the Nuance solution at its branch locations, securing private banking as well as inter-branch communications.
Telecommunications

Nuance Voice Biometrics Telecommunications Solutions Deliver
Enhanced and Secure Value-Added Contact Center Services to
Mobile Customers Anytime and Anywhere

Today, a telecommunications or Internet service provider’s survival depends on the delicate balance of controlling costs while enhancing security and delivering the high-quality services customers demand. Nuance’s voice biometrics products offer global service providers the most accurate technology available to deliver services to mobile device customers and internet users securely and cost effectively. Voice biometrics enables simple and secure remote authentication for a variety of applications including:

- Contact Center Security
- Secure Access to Value-Added Services
- m-Commerce
- Password Reset

Contact Center Security

Telecom and Internet service provider contact centers must reliably verify customers in order to ensure security and accuracy when responding to requests for account changes and services. Nuance’s VocalPassword™ verifies the identity of a caller via a simple spoken pass phrase, which is compared to the customer’s stored voiceprint. Contact centers reap the benefits of a cost-efficient solution that reduces call duration, enhances the customer experience, and successfully combats fraud and identity theft.

Secure Value-Added Services

Your customers require reliable and secure remote access to their value-added offerings, including voicemail, e-mail, conferencing, as well as other network-based services containing private information. Today, telecom service providers and ISPs provide customers with convenient and secure access to value-added services using a simple spoken pass phrase.

Some telecom service providers are using Nuance technology to offer an authentication service for Web users via automated callbacks, generating income from the service and the additional air time. Nuance voice biometrics technology enables providers to offer services efficiently, deliver a satisfying user experience, and maintain the privacy and security of confidential customer information.

m-Commerce

When it comes to electronic transactions using IP-enabled mobile devices, Nuance products ensure secure access and efficient service. During the purchasing process, VocalPassword™ verifies the caller’s identity via a simple spoken pass phrase, ensuring transactional security. Simple, handset-based client software can turn any mobile device into a secure, multi-factor authentication terminal.
Password Reset

Until now, password reset was a routine but tedious, time-consuming process that cost telecommunications service providers millions of dollars a year. Nuance’s VocalPassword™ simplifies, secures and enables the automated password reset process with biometric speaker verification, enabling mobile customers to conveniently reset their own passwords anytime from anywhere. Other sample deployments include PIN or password reset for enterprise customer representatives responsible for controlling multiple devices, as in the case of activating employee mobile phones. Another application involves resetting phone passwords following lockout after several failed attempts.

VocalPassword™ seamlessly integrates with existing contact centers and VoiceXML platforms, significantly increasing efficiency and reducing costs, as well as enhancing the customer experience. There’s no trade-off between security and convenience; you get both with Nuance.
Healthcare

**Nuance Voice Biometrics Healthcare Solutions Deliver Cost-Efficient Authentication that Ensures Patient Privacy and Regulatory Compliance.**

Global privacy regulations including The Health Insurance Portability and Accountability Act (HIPAA), designed to protect the privacy of personal health information, stipulate higher levels of security for authenticating identity. The challenge for healthcare providers is to comply with these regulations while keeping costs under control. Nuance voice biometrics technology provides an accurate, non-invasive, cost-effective identity verification solution that seamlessly integrates with existing contact centers and VoiceXML platforms. Voice biometrics enables simple and secure remote authentication for a variety of applications including:

- Contact Center Security
- Access to Patient Information
- Password Reset

**Contact Center Security**

Healthcare contact centers must reliably verify callers in order to ensure confidentiality and accuracy when responding to requests for patient information and services. Nuance’s VocalPassword™ verifies the identity of a caller via a simple spoken pass phrase, which is compared to a stored voiceprint. Contact centers reap the benefits of a cost-efficient solution that reduces call duration and enhances the caller experience.

**Access to Patient Information**

Confidentiality is critical when it comes to personal medical information. Nuance voice biometrics technology streamlines the identity verification process and provides a critical element of multi-factor authentication for access to health records.

**Password Reset**

Until now, password reset was a routine but tedious, time-consuming process that cost healthcare providers millions of dollars a year. Nuance’s VocalPassword™ simplifies, secures and enables the automated password reset process with biometric speaker verification, enabling patients, doctors and insurance employees to conveniently reset their own passwords anytime from anywhere. VocalPassword™ seamlessly integrates with existing contact IVR’s and VoiceXML platforms, significantly increasing efficiency and reducing costs, as well as enhancing the user experience. There’s no trade-off between security and convenience; you get both with Nuance.
Global Enterprise

Nuance Voice Biometrics Enterprise Solutions Deliver Enhanced Security, Reduced Costs and Increased Convenience

Nuance’s voice biometrics products are designed to meet the dynamic security needs of today’s enterprise, empowering organizations to improve security while reducing costs and delivering increased convenience to legitimate users. Based on robust biometric voice verification technology, Nuance’s products protect private information, improve efficiency, and enhance the delivery of remote services via contact centers and the Internet. Voice biometrics enables secure remote authentication for a variety of applications including:

- Password Reset
- Secured Conferencing
- Time and Attendance
- Voice Portal Access

Password Reset

Until now, password reset was a routine but tedious, time-consuming process that cost enterprises millions of dollars a year. Nuance’s VocalPassword™ simplifies and secures the automated password reset process with biometric speaker verification, enabling users to make a quick call to the helpdesk and conveniently reset their own passwords anytime from anywhere using an automated secure voice application. VocalPassword™ seamlessly integrates with existing IVRs and VoiceXML platforms, significantly increasing efficiency and reducing costs, as well as enhancing the customer experience. There’s no trade-off between security and convenience; you get both with Nuance.

Unlike other password reset solutions, users do not need to change their natural behavior of calling the help desk when they are locked out.

Click on the following links for additional information about password reset:

Secured Conferencing

Why is it that when 20 people are invited to participate in a teleconference, 40 dial in? More importantly, what kinds of confidential enterprise information might these unwanted “guests” gain access to while on the call? Protect conference boundaries with Nuance voice biometrics technology. By integrating VocalPassword™ with your conferencing platform, you can biometrically identify and verify callers, thereby restricting access to invited guests.
Time and Attendance

Nuance’s easily deployed and proven voice biometrics platform is used by large or distributed enterprises as a reliable and efficient remote time and attendance solution. Employees in the field or other remote locations can simply pick up a mobile or landline phone to report attendance anytime, from anywhere. Nuance VocalPassword™ turns any IVR into a secure, multi-factor authentication terminal. An ASP-based solution that automatically downloads all information directly into the enterprise’s HR system is also available from Nuance partners.

Vocal Portal Access

Employees requesting access to enterprise data and self-service applications through a voice portal can be quickly, easily and reliably identified and verified with Nuance VocalPassword™. Free from burdensome PINs and passwords, employees gain fast access that allows them to freely navigate among all portal service offerings, such as directory assistance, e-mail access and conferencing, through a user-friendly interface.
Government and Homeland Security


Nuance’s voice biometrics products offer the optimum combination of accuracy, convenience and cost effectiveness for law enforcement and intelligence agencies constantly tracking the whereabouts of parolees and offenders, suspected criminals and terrorists, and illegal aliens. Voice biometrics enables simple and secure remote authentication for a variety of applications including:

- Offender Monitoring
- Voice Mining
- Immigration Control
- Contact Center Security

**Offender Monitoring**

Nuance VocalPassword™ supports random calls to low-risk offenders under house arrest or parolees in detention programs. Identification and verification are instantaneous, and location is simultaneously checked by the law enforcement agency’s system. Voice biometrics delivers a foolproof, secure and cost-effective remote monitoring solution that verifies a target’s presence in real time.

**Voice Mining Surveillance**

Nuance’s advanced voice mining system, S.P.I.D. (Speaker Identification and Detection), monitors communications and captures suspected targets on phone lines under legal surveillance, enabling prompt and appropriate law enforcement response. The comprehensive audio processing system searches for a specific target’s voice from a large volume of lawfully intercepted calls, including those with multiple speakers, and directs law enforcement to relevant calls, thereby enhancing operational efficiency and privacy protection. The system uses unique biometric analysis to match relevant audio segments to pre-enrolled voiceprints.

**Immigration Control**

International visitors to the U.S. holding temporary visas can now comply with Homeland Security regulations via telephone rather than in person, saving time and money for all involved. Nuance’s voice biometrics technology replaces traveling to an office and standing on long lines with a convenient, accurate and secure method for remote compliance with periodic check-in requirements.

**Contact Center Security**

Citizens and government employees requesting access to government contact centers and self-service applications through a voice portal can be quickly, easily and reliably identified and verified with Nuance VocalPassword™. Free from burdensome PINs and passwords, users gain fast access that allows them to access contact centers and freely navigate among all portal service offerings through a user-friendly interface.
About Nuance Communications, Inc.

Nuance is a leading provider of speech and imaging solutions for businesses and consumers around the world. Its technologies, applications and services make the user experience more compelling by transforming the way people interact with information and how they create, share and use documents. Every day, millions of users and thousands of businesses experience Nuance’s proven applications and professional services. For more information, please visit: www.nuance.com.

For more information about Nuance’s Voice Biometrics Solutions, please visit:

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