Web Service for Voice Authentication
Voice Authentication
- Beyond Biometrics

- Identity and Authentication
- Great Customer Experience
- Consistent Across All Touchpoints
- Focus on Process Change
- Risk Decision Support
- Balance Security & Convenience
- Privacy Protection
Identity & Authentication
Gartner Predicts 2010: Customer Service Meets Social CRM

“the single most logical way to differentiate the business is through great customer experiences...”

“...measure the consistency and effectiveness of customer interactions across all touchpoints from the customer’s point of view”
Anywhere, Anytime, on Any platform, using Any device
“From CAPEX to OPEX”

• Achieve enterprise-wide solution availability
• Shorten deployment times
• Reduce/eliminate up-front expense
• Accelerate ROI achievement
Increase Customer Convenience & Reduce Operator Costs

IVR or Operator involved knowledge-based authentication takes from 30 seconds to 2 minutes.

Voice Authentication using the Voice Signature Service SM takes less than 9 seconds.
Focus on Process Change
Components of Effective VSS Solutions

1. Determine when Authentication is required
2. Sets criteria for acceptance:
   a. cost of accepting some level of fraud
   b. cost of accepting some level of user inconvenience – possibly losing a customer as a result
3. Determine the next step in the process (course of action) if threshold is met OR not met
VSS VoiceXML & XML API

VSS VoiceXML subdialog

create_vss_session

VSS XML Interface

create_vss_session

get_next_prompt

Prompt?

Present Prompt

Record Speech

get_session_results

complete_vss_session

VSS SERVERS
VSS Platforms

Voice Signature Service℠
Certified Platforms

- Nuance
- Bevocal
- Voxeo
- Convergys
- Intervoice
- USAN
- Tellme

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“Beyond SaaS”

- Superior economic model for the customer
- Best way to leverage new technology
- Eases the pain of integration
- Reduces the maintenance burden
- Facilitates cross-platform capability
- Enables enterprise-wide availability
Voice Authentication as Risk Decision Support
Convenience / Security Balance

MORE SECURITY = LESS CONVENIENCE

enabling trusted interactions
VSS - NDS® Confidence Score

• A higher \textit{Threshold} requires higher scores, which provides higher security, and can potentially inconvenience more legitimate users.

• A lower \textit{Threshold} allows lower scores, which provides lower security, but will inconvenience fewer legitimate users.
The NDS scale has four regions:

A. Highly likely to be authentic – 91 to 100,
B. Relatively likely to be authentic – 51 to 90,
C. Relatively unlikely to be authentic – 11 to 50,
D. Highly unlikely to be authentic – 0 to 10
Privacy Protection
The VSS Process

Step 1
User Claims Identity
(Phone or Internet)

Step 2
Requester Makes Voice Signature Service Request
(Opaque Identity Claim)

Step 3
VSS Interacts with User to Collect Voice Signature over the Telephone or Internet
(Directly, or through the Requester’s system)

Step 4
VSS Returns an NDS Score to Requester

Step 5
Requester Makes a Decision (based on their business rules)
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