

# What are we going to do about STIR/SHAKEN Display

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- Work in progress
- Disclaimer: The following opinions are those of a deranged, raving lunatic and do not necessarily reflect the opinions of the SIP Forum or its member companies..

# What are the Minimum elements to be imparted to the User Agent aka the Phone ?

- Start with Green Yellow Red?



- First separate what is objective validation data vs subjective data.
- Perhaps Green is the only thing we should send.

## The problem(s) ...

- IMHO everything we are doing will be for naught ..if we don't signal the consumer in some way the nature of trust in the call.
- The national regulators definitely want us to "do something". They are not all that helpful on what that actually is. They are prepared to help the industry educate the consumer if there is a industry consensus on what a STIR/SHAKEN Display Framework is.
- At the very least consensus on a common set of symbols ( much like traffic signs)
- The problem is we are network engineers and not really experts on User Interface User Experience design. [UX/UE]

## So what about Rich Call Data...

- What other kinds of value added information can be given to the user by the service provider.
  - Logos?
  - Pictures?
  - Theme songs?

We have looked at things like Enhanced CNAM but maybe use RFC7095 jCard imbedded in the PASSporT as a URI

<https://datatracker.ietf.org/doc/draft-ietf-stir-passport-rcd/>

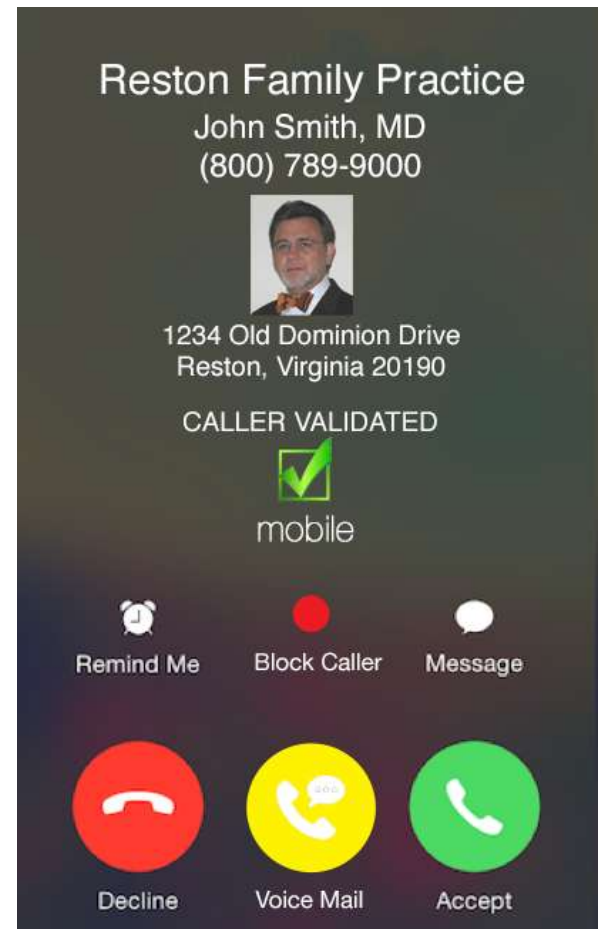
## Is this what we want?

How is it displayed to the consumer? Carriers may want to “add value”

We have about 2 seconds.

Data for enterprises will be different than for consumers.

Considerable debate on in band SIP INVITE vs out of band restful HTTP secure signaling.



# Enhanced Call Validation Display [REALLY BAD Call]

Network has no confidence in the signaling path whatsoever; data analytics indicates possible malicious call.

Signaling to consumer indicates very high level of distrust in the call.

Network can alternatively block the call based on clear consumer preference per new FCC regulations.





# Other examples...



# More Examples

**Bank of America**  
(800) 123-XXXX




THERE IS AN UNUSUAL CHARGE  
ON YOUR ACCOUNT

Remind Me Block Caller Message

CALLER VALIDATED

Decline Accept

**CVS PHARMACY**  
(800) 456-XXXX



YOUR PRESCRIPTION IS READY

Remind Me Block Caller Message

CALLER VALIDATED

Decline Accept



**Department of Defense**  
(710) 100-XXXX



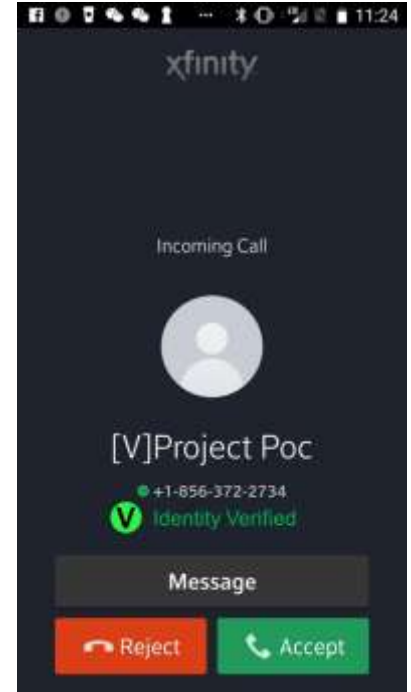
JIM MATTIS  
Secretary of Defense

CALLER VALIDATED

Decline Accept










# Even more Examples



Carriers want to add value but we don't  
want to confuse consumers either  
Thanks Comcast

# STI Display Proposal – A Character-based Approach

STIR/SHAKEN  
Mature  
Phase

Call ID Status	Legacy Phone 15-char LED Display	Smartphone/OTT Client
STI present; Verification failed (Not scam per analytics)	[X]John Doe (or phone #)	[X]John Doe (or phone #)  <b>Identity Invalid</b>
STI not present; No verification	[Q]John Doe	[Q]John Doe  <b>Identity Unverified</b>
STI present; Verification succeeded	[V]John Doe	[V]John Doe  <b>Identity Verified</b>
Scam/Spam per analytics	<SPAM>John Doe	<SPAM>John Doe  <b>Spam Likely</b>
Anonymous; STI failed (Not scam per analytics)	[X]Anonymous	[X]Anonymous  <b>Identity Invalid</b>
Anonymous; no STI	[Q]Anonymous	[Q]Anonymous  <b>Identity Unverified</b>
Anonymous; STI passed	[V]Anonymous	[V]Anonymous  <b>Identity Verified</b>

<SPAM>: A spam warning text string per SP's choice

# Applicable to all SIP/IMS platforms

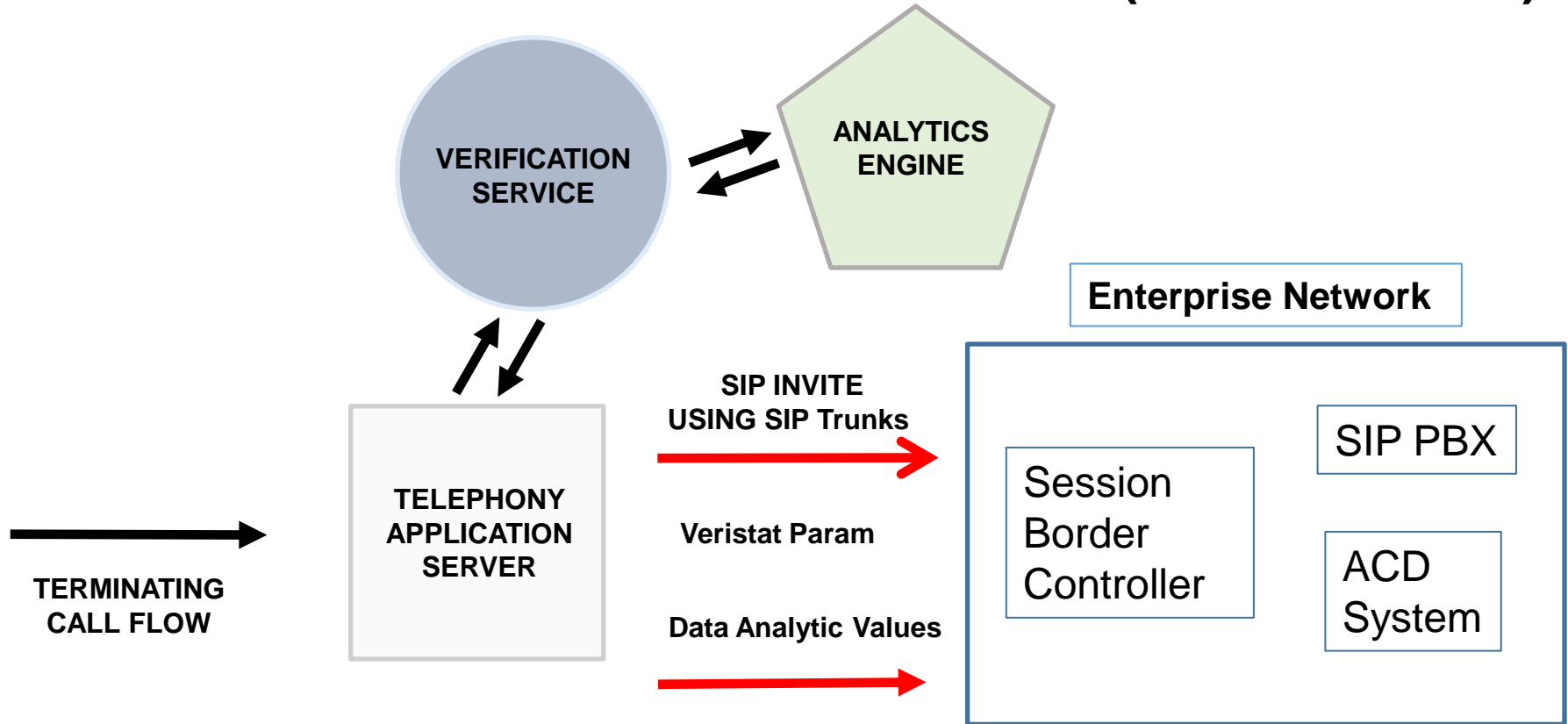
A solution can work with any SIP-based Enterprise PBX system either On Premise or Cloud based Hosted aka Cisco/Broadsoft.

SIP Forum could take the lead here based on our SIPconnect Technical Recommendation.



What is the mechanism we use to get the data across the AS to the terminating platform

# Service Provider - Enterprise Interaction STIR SHAKEN at Termination (In-band model)



- **What about Grandma's phone & TDM/SS7 ?**

- POTS ?? There is not much we can do, nor should we. The IP Transition is in an advanced stage. The vendors couldn't alter their legacy switches even if they wanted to.
- Voice announcements for vulnerable populations  
ADA compliance?



- What do we want to do?