Transparency and Usability of Web Authentication

Personalized Web Experience

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The views expressed in this position paper are those of the author, and do not necessarily reflect those of the author’s employer, World Saving Bank, FSB or its parent company, Golden West financial.
Overview

- FFIEC Requirements
- Consumer Trusted Channel
- Personalized Experience
- Customer Education
“Where risk assessments indicate that the use of single-factor authentication is inadequate, financial institutions should implement multifactor authentication, layered security, or other controls”
Authentication Techniques, Processes, & Methodologies

- Shared Secrets
- Tokens
- Smart Card
- Biometrics
- Non-Hardware-Based One-Time-Password Scratch Card
- Out-of-Band Authentication
- Internet Protocol Address (IPA) Location and Geo-Location
- Mutual Authentication
Mutual Authentication:

Mutual authentication is a process whereby customer identity is authenticated and the target Web site is authenticated to the customer.

Mutual Authentication technology aid in the protection against

- phishing / fraudulent email?
- pharming / fraudulent websites?
Mimicking a Trusted Channel

Recognized Branch Banking Experience ~

- Known Location
- Welcome Greeting
- Personalized experience with a teller
- Account history summary
Personalized Web Experience

- Background Color
- Font Color
- Text Message
- Graphic Image
- Phrase Displayed
- Voice Greeting
- Session Timer
- Transactional History
- Security Checklist

“Reverse Biometric Authenticator”
Site validating itself to the customer by providing the end-user with unique visual trait or behavioral characteristic that the site operates.
Personalized visual indicators such as:

- Background Color
- Font Color
- Text Message
Low Level Authentication

Welcome back, John Doe!

We have pre-filled the order form with the information you used on your last order. You can overwrite anything that you wish to change. For security reasons, you must re-enter credit card payment information.

* Required fields

**Billing Information**

- **Name:** John Doe
- **Company:**
- **Title:**
- **Address 1:** 1233 Main St
- **Address 2:**
- **City:** Scottsdale
- **State:** ID
- **Zip Code:** 12345
- **Country:** United States

- **Daytime Phone:** (123) 456-7890
- **Evening Phone:**
- **Fax:**
- **Email Address:**

**Have a gift code? Please enter it here:**

Apply Gift
Mid Level Authentication

Personalized visual indicators such as:

• Background Color
• Font Color
• Text Message
• Graphic Image
• Phrases Greeting
• Voice Greeting
Mid Level Mutual Authentication
Personalized visual indicators such as:

- Background Color
- Font Color
- Text Message
- Graphic Image
- Phrases Greeting
- Voice Greeting

- Session Timer
- Transactional History
- Security Checklist
High Level Mutual Authentication
Conclusion:

- Personalize experience for the end-user
- Consistent authenticator across the web
- Better placement of fraud tips and info

If widely accepted this method of personalized visual and behavioral indicators can heighten an end-user consciousness of safe data sharing procedures over internet channels.
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