

State Government Voice Networks: Use Cases & Challenges of Call Authentication



ECG: Engineering because *Your voice matters.*

**On-Site VoIP
Expertise**

Network Design

**VoIP Network
Review**

**Training &
Operations**

The Growing Importance of **Call Authentication** in the **Public Sector**

Key Points:

- Current setup of state government voice networks
- Benefits of implementing call authentication
- Challenges associated with call authentication



Let's Talk **Call Authentication** and **Branded Caller ID** in a **State Government Voice Network**

1

**State Government
Network Overview**

2

**Use Cases and
Potential Benefits**

3

Risks and Challenges

State Government Voice **Networks** Overview

Unique Structure:

- Decentralized networks with independent agencies and departments
- Shared framework but complex environment

Key Challenges:

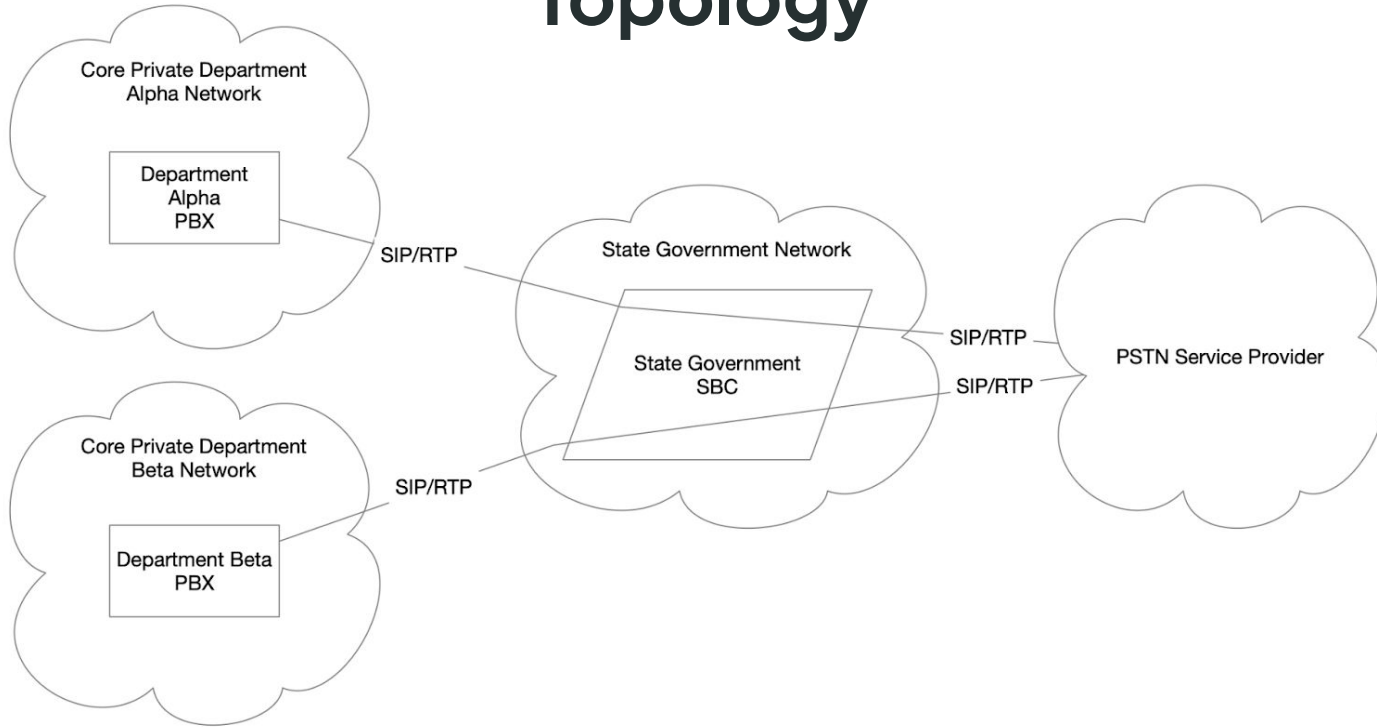
- Maintaining security, reliability, and interoperability

Presentation Focus:

- Overview of state government voice network setup
- Differences from traditional service provider networks
- Importance of these differences for call authentication solutions
- Use cases, benefits, risks, and concerns of:
 - Call authentication (STIR/SHAKEN)
 - Branded caller ID for outbound calls



Example of a State Government Network Topology



State Government Networks: **A Hybrid Enterprise**

Enterprise Classification:

- State networks are enterprises, not service providers (per FCC definition)

Diverse Infrastructure:

- Multiple departments use different PBXs or SBCs
- Examples:
 - Department of Health with one PBX brand
 - Department of Transportation with another PBX brand

Network Management:

- Departments purchase connections to the state network
- State government manages routing to the PSTN service provider

Varied Requirements:

- Departments have different call purposes and user data needs
- Examples:
 - Department of Labor: high capacity for inbound calls
 - Department of Revenue: focused on outbound calls for tax-related purposes



Let's Talk **Call Authentication** and **Branded Caller ID** in a **State Government Voice Network**

1

**State Government
Network Overview**

2

**Use Cases and
Potential Benefits**

3

Risks and Challenges

Value of Call Authentication & Branded Caller ID

Establishing Trust:

- Official name and logo displayed on calls enhance credibility
- Increased likelihood of citizens answering legitimate government calls

Presentation Focus:

- Examples of use cases for state governments
- Benefits of implementing call authentication and branded caller ID



Importance of Branded Caller ID for Emergency Services



Enhanced Recognition:

- Branded calls from emergency services and health departments ensure immediate public recognition
- Crucial for conveying important messages about public safety or emergencies (e.g., weather events)

Public Trust:

- Branded caller ID helps citizens trust the source of emergency information
- Ensures that health-related messages are recognized as coming from a reliable source, like the Department of Health

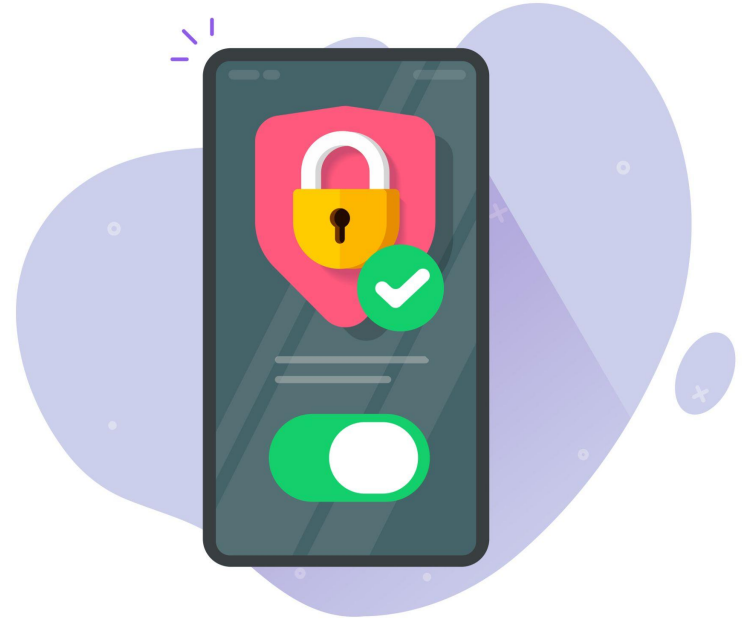
Enhancing **Resident Experience** with Branded Caller ID

Improved Communication:

- Branded Caller ID reassures recipients about the caller's identity
- Increases efficiency in communication

Example:

- State Health Department calls regarding scheduled appointments
- Displaying relevant information enhances trust and overall experience



Branded Calls for Reaching Citizens **Effectively**



Message Recognition:

- Branded calls help citizens identify official and trustworthy communications

Key Use Cases:

- **Department of Labor:** Calls for unemployment benefits
 - Branded caller ID with call reason increases trust and ensures calls are answered
- **Department of Revenue:** Calls for debt collection
 - Displaying call reason can improve response rates

Benefits for Internal State Government Communications

Enhanced Recognition:

- Branded Caller ID improves identification of calls between departments

Increased Efficiency:

- Ensures internal communications are recognized and prioritized
- Helps departments take calls seriously



Let's Talk **Call Authentication** and **Branded Caller ID** in a **State Government Voice Network**

1

**State Government
Network Overview**

2

**Use Cases and
Potential Benefits**

3

Risks and Challenges

Challenges and Risks of Implementing Branded Caller ID

Cost Justification:

- Difficulty in justifying the investment without assured end-to-end security

Security Concerns:

- Risk that branded logos and calling names could be spoofed or copied
- Current CNAM database and current proprietary branded calling solutions are not secure enough to prevent spoofing



Limitations of Branded Caller ID Technology

Network Compatibility Issues:

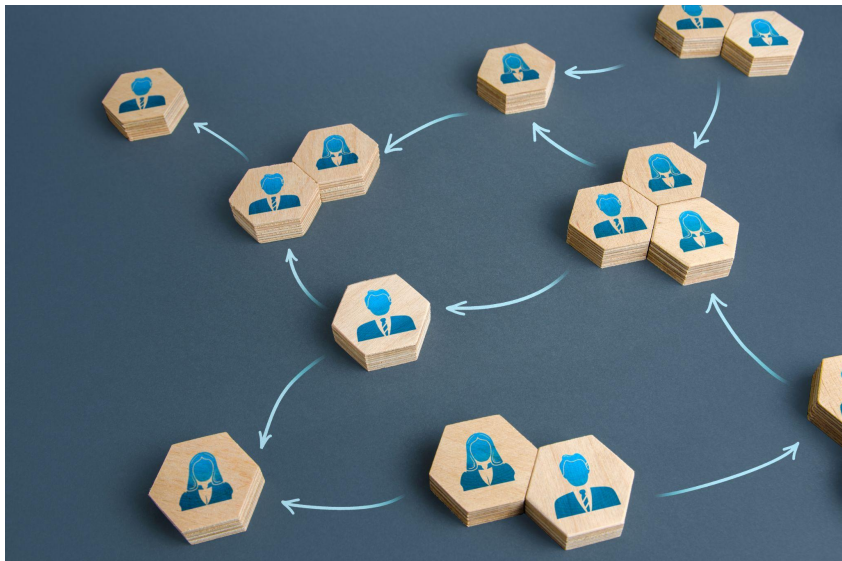
- Smaller service providers may not support access to branded caller ID databases
- Technology may not be fully integrated into all networks

State Concerns:

- Ensuring information is deliverable to as many citizens as possible
- Current technologies are not mature enough to guarantee widespread availability of branded caller ID



Challenges in **Distributed Call Authentication** for State Governments



Distributed Implementation Issues:

- Different departments manage their own equipment, complicating call authentication

STIR/SHAKEN Challenges:

- Intended for end-users, like departments, to sign their calls
- Departments have SIP-capable devices (PBXs, SBCs) capable of signing calls and sending branded caller ID data

Key Challenges:

- Departments are not classified as service providers
- They cannot obtain the necessary certificates to sign calls and add branded caller ID data under today's policies

Limitations of Current Standards



Current Focus:

- Standards are primarily designed for large service providers
- Lack of consideration for state government scenarios with decentralized departments

Implementation Gap:

- Existing standards do not adequately address the unique challenges faced by state government networks

Key Takeaway

State Government networks could serve the public far better if the standards allowed them to participate in STIR/SHAKEN and branded calling with end-to-end integrity with signing and branding done by the government departments

Questions?





Thank You!

Ready for engineering support in your network?

ECG's experts are here to help.



<https://www.ecg.co/contact>



sales@e-c-group.com



Presenter:

Chelsey Sizemore

Associate Member of
Technical Staff, ECG



csizemore@ecg.co