



TruAge Production Deployment of W3C Verifiable Credentials




Wildfires Map Time Change Play the Challenge Watch: The Rundown I-Team Tips

DMV

DMV in testing stages of mobile driver's licenses Californians

California's DMV Mobile Driver License (MDL) pilot program currently includes more than 2,000 participants who are actively using the service and providing feedback.

By Elizabeth Chavolla • Published July 31, 2023 • Updated on August 1, 2023 at 9:53 pm



The DMV is currently testing a mobile app that will allow Californians to upload their driver's license or ID to their phones.

Target population: 24 million Californians

NACS Advancing Convenience & Fuel Retailing


Advocacy Solutions Research Events Membership New

NACS » NEWS » NACS DAILY NEWS » VERIFONE INTEGRATES WITH TRUAGE AGE-VERIFICATION SOLUTION

Verifone Integrates With TruAge Age-Verification Solution

Industry-leading solution provider greatly expands the ability of retailers to upgrade their age-verification systems.

October 04, 2023



Verifone has integrated its Commander Site Controller software with TruAge, a widely accepted age-verification system, to enable convenience and fuel retailers to seamlessly use TruAge's services to verify an adult customer's age for purchases of age-restricted products. All retailers using Verifone's latest Commander software release are able to implement TruAge at their stores.

Verifone's point-of-sale solutions are used by more than half of the 150,000-plus convenience store and fuel retailing industry partners. The integration to TruAge from Verifone's core software marks a pivotal moment in launching TruAge nationwide, benefiting tens of thousands of convenience stores.

Target population: 124 million Americans,
150,000 retail locations

MISSION



TruAgeTM

TruAge is committed to safely and simply keeping age-restricted products out of the hands of minors

OPEN STANDARDS




TruAge™

TruAge is built by a national retail non-profit (NACS) that relies on open standards.

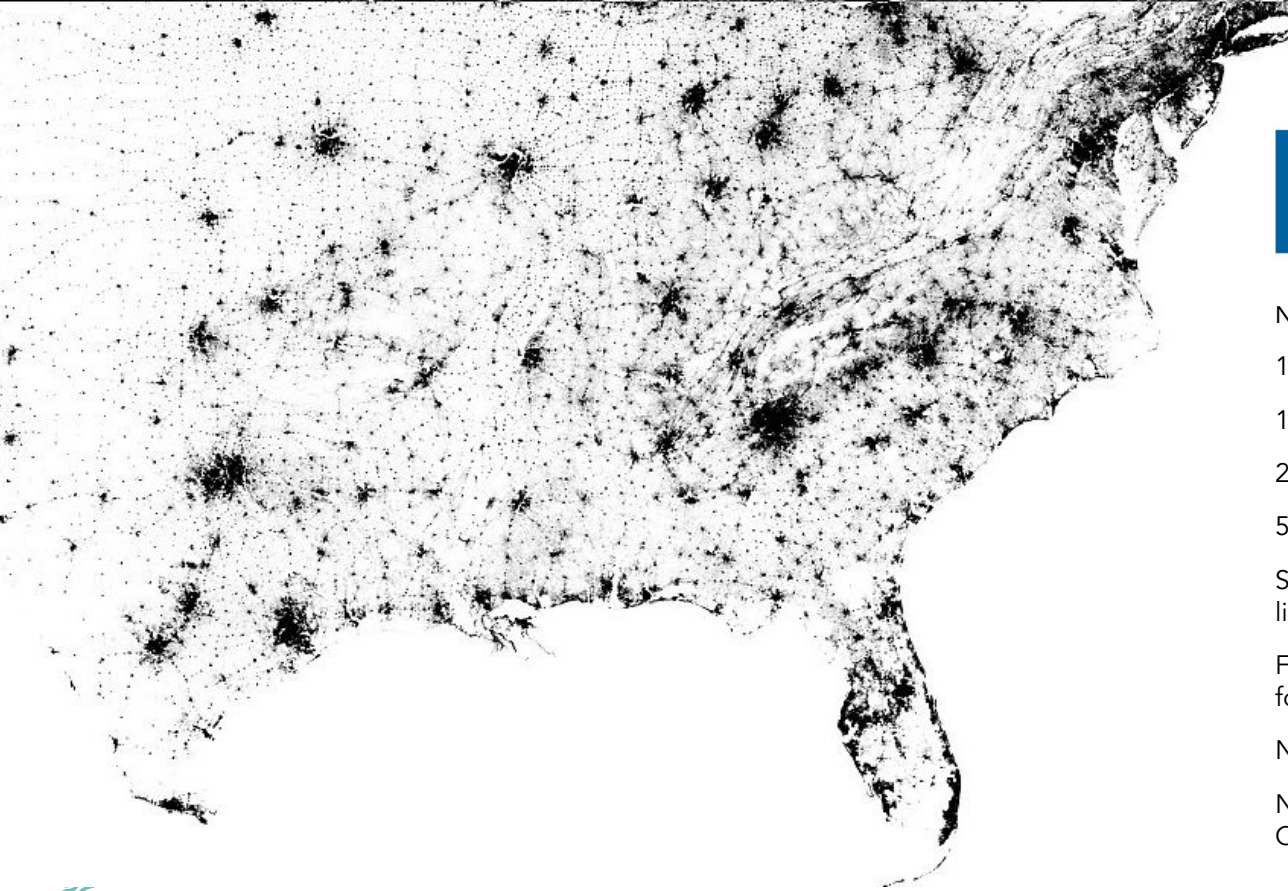
TruAge runs on W3C Verifiable Credentials and Decentralized Identifiers.

CONVENIENCE STORES PROCESS 54 MILLION AGE-RESTRICTED TRANSACTIONS EVERY DAY



 = 1 MILLION

CONVENIENCE STORES PROCESS 54 MILLION AGE-RESTRICTED TRANSACTIONS EVERY DAY



NACS[®]

National Association of Convenience Stores

152,720 stores nationwide

165M+ transactions per day

200M+ customers per year

54M+ age checks per day

Sell to a minor? \$2.5K fine, 12 months jail, lose liquor license - sting enforced

Fraudulent IDs, fallible clerks, no national system for product restrictions

Need digital Federal and State IDs

Needed a privacy-respecting solution - GDPR, CCPA, VCDPA

MOVE RETAIL INDUSTRY TO THE UNIVERSAL, NATIONWIDE SOLUTION NEEDED AND WHAT CUSTOMERS WANT

Retail Needs It

Customers Want It



UNIVERSAL APPROACH

All age-restricted products treated with equal gravity across all channels



100% AUTHENTICATION

Ensuring every driver's license presented is an authentic document issued by a US state agency



CONSUMER ADOPTION

Verification must evolve to be frictionless, and always maintain personal privacy and identify. Benefits must exceed cost of any inconvenience or concern



90% support a **nationwide standard** for age verification

TRUAGE IS SIMPLE

- Keep adult products out of underage hands
- Shut down social selling
- Standardize the “carding” process
- Protect people’s privacy

TruAge™ unlocks a better experience, on both sides of the counter. Built for any store or brand that sells age-restricted products, TruAge™ verifies a customer’s age at all points of sale while keeping personal information private.



CORE TENANTS OF TRUAGE

CHANNEL UBIQUITY

Available to all retail channels—convenience, grocery, mass, club & more

Works across bricks & mortar, delivery and online

ID VALIDATION

To be successful in shutting down sales to minors, we must tackle the fake ID issue

PRIVACY

TruAge onboards using only four pieces of information:

- DL issuer
- DL number
- Date of Birth
- Expiration date

No other PII is captured or stored at any time

SYSTEMIC VOLUME LIMITATIONS

Social selling is an issue.

TruAge has the ability to set volume limitations at the product & category levels, both within and across transactions in a given time period

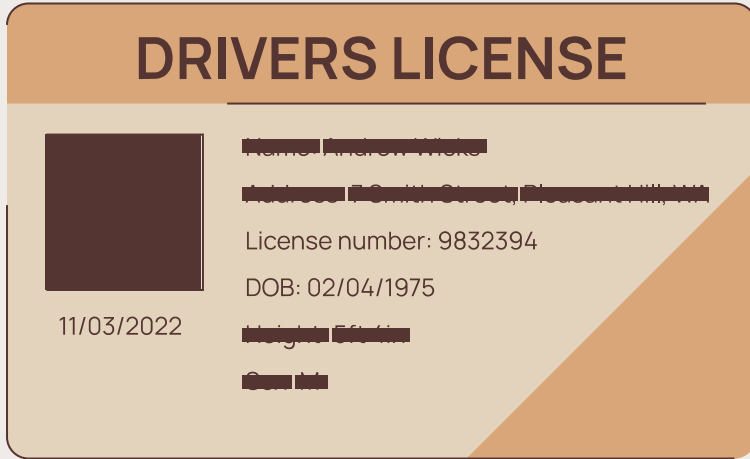
FREE

To ensure ubiquity of installation and adoption, TruAge is **FREE** to retailers, POS providers and consumers

TruAge is a non-profit organization

TruAge: How it Works

Only requires **four** pieces of Personal Information



- Issuing Authority
 - e.g., State DMV
- Document Identifier
 - e.g., Driver's License Number
- Date of Birth
- Document Expiration Date

Encrypted and Pseudonymized

Personal information is double-encrypted, requires multiple parties to unlock, and can only be accessed via a subpoena process.

Pseudonymous One-time Use Tokens

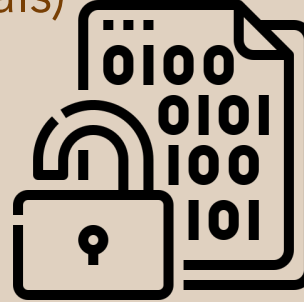
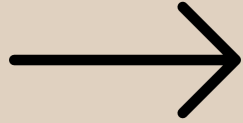


One time use tokens prevent tracking by retailers.

TruAge Registration (Verifiable Credentials)



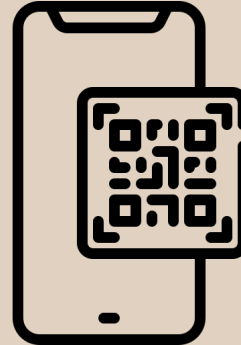
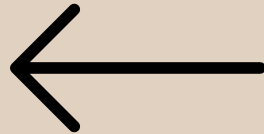
Customer onboards to TruAge providing 4 pieces of information



PII is tokenized, encrypted and locked away and only accessible via subpoena



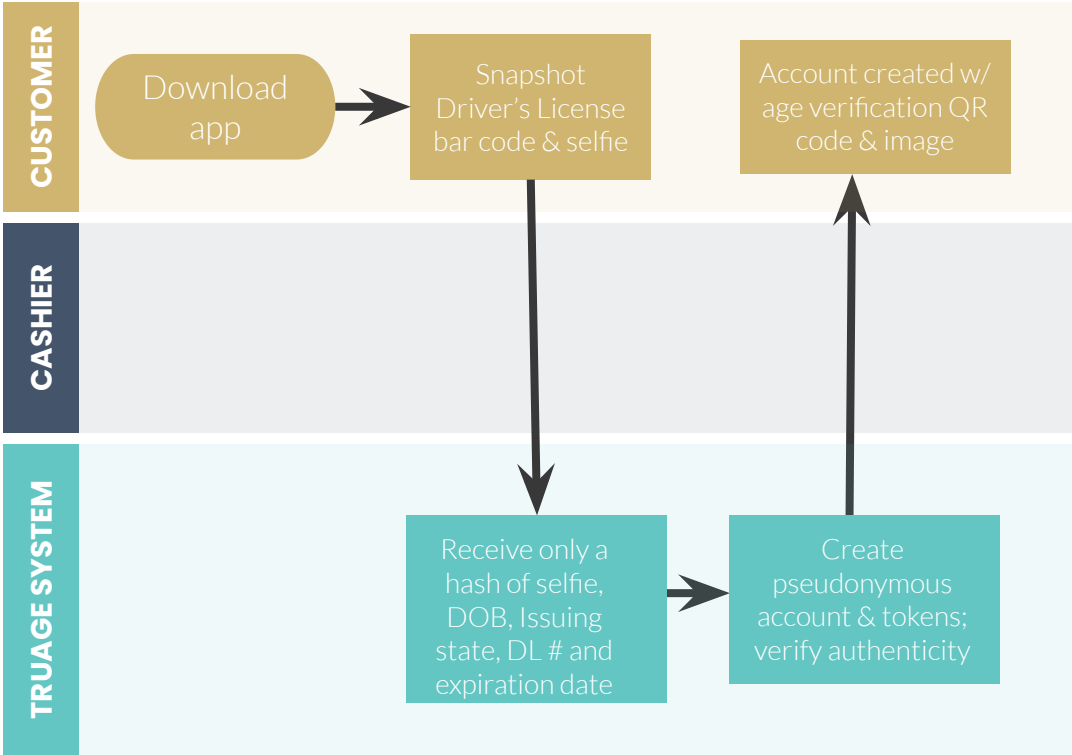
Customer is identity proofed at c-store (tokens activated)



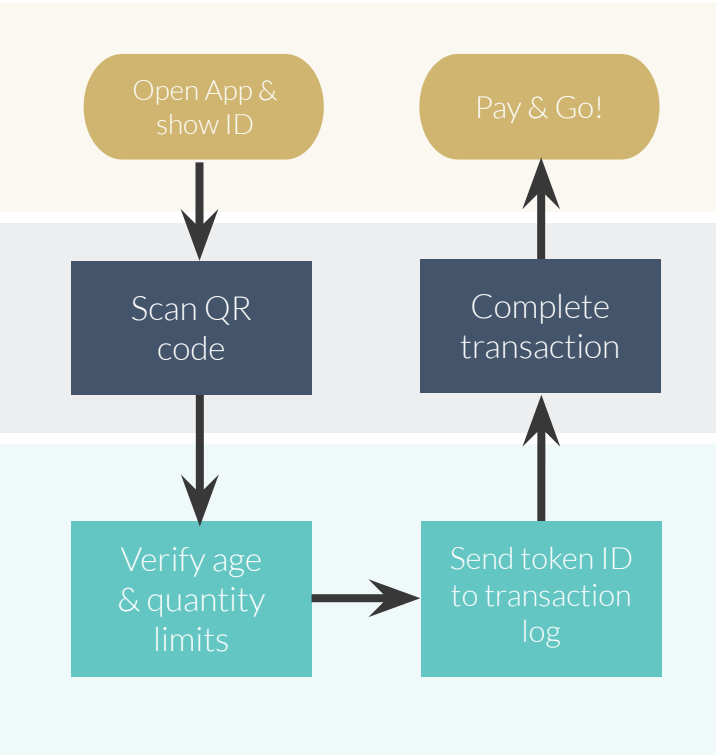
Deactivated tokens returned to consumer device

HOW DOES THE TRUAGE APP WORK?

Account Set Up



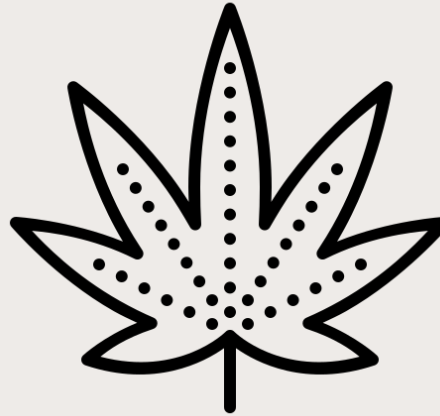
Age Restricted Purchase



FMCG (Fast Moving Consumer Goods) Company
picks a **GTIN** and provides **systemic limitations** for the item



FMCG Company



GTIN 112345678912345

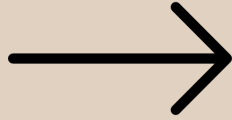


Limit 8000 mg per day
(vape pods)

Customer Buys Product



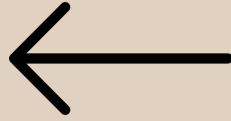
Provides age token



Age token securely mapped to persona



Systemic limit check performed on GTIN(s) being purchased



If pass, **allow** purchase to happen



If fail, **deny** purchase

W3C and CCG Technologies Used

W3C Standards and Pre-Standards Used for TruAge

- W3C JSON-LD 1.1
- W3C Verifiable Credentials v1.1
- W3C Data Integrity
 - RDF Dataset Canonicalization
 - Ed25519Signature2020
- W3C Decentralized Identifiers v1.0
- Conexus Age Verification Standards v1.0
- IETF OAuth2
- CBOR-LD (pre-standard)
- CCG VC API (Issuer, Verifier, and Exchanges)
- CCG Encrypted Data Vaults (EDVs)
- CCG Authorization Capabilities (ZCAPs)
 - HTTP Signatures (pre-IETF draft-12)
- CCG Credential Handler API (CHAPI)
- CCG Credential Refresh 2021
- CCG did:key