

2019 S&T Cybersecurity and Innovation Showcase

Solutions Now | Innovations for the Future



Homeland
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Mobile Device Attribute Validation (MDAV)

Steve Wilson | Lockstep Technologies / ValidIDy

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Team Profile



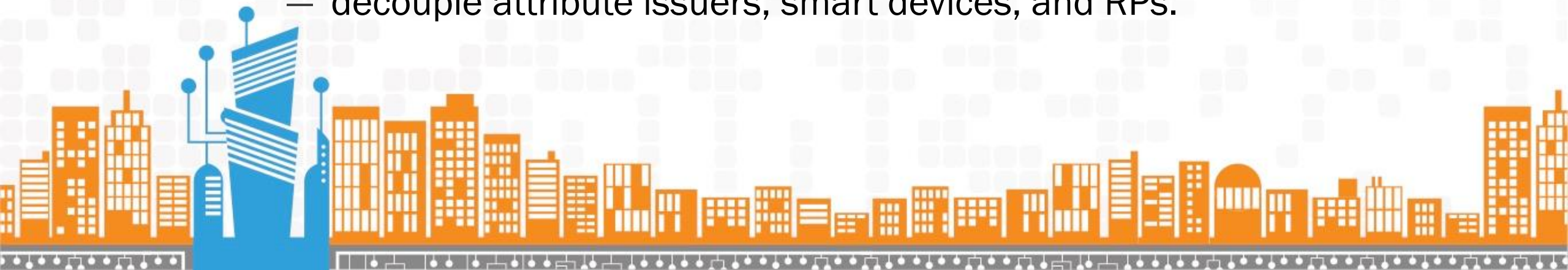
- Lockstep / ValidIDy
 - Steve Wilson – Principal Investigator
 - Les Chasen – Technical Architect
- Kantara Identity & Privacy Incubator - Colin Wallis, Ruth Puente
- CCICADA, Rutgers University - Prof Janne Lindqvist
- DHS Program Management - Anil John, Ryan Triplett





Customer Need

- First Responders (keystone customers)
 - proof of First Responder credentials, with low or zero network
 - including proof of issuer (provenance)
 - tamper resistant storage in mobile devices.
- Broader users (healthcare, government, Open Banking)
 - manage multiple attributes
 - anonymously, pseudonymously
 - decouple attribute issuers, smart devices, and RPs.





Approach

- Updating “*Attribute Certificates*” with simplified X.509 profile
- Working with partner DigiCert to innovate managed PKI services
- Mature proven technology stack
 - Certificate Authorities (“security printer for digital certificates”)
 - Registration Authorities
 - iOS, Android, web clients





Benefits

More Secure

- Ensures provenance of individuals, devices and issuers
- Forgery resistant
- More resilient (resistant to network impacts, no SPOF)

More Private

- No need for “honeypot” centralized registries
- No Intermediaries
- Minimized information disclosure

More Cost Effective

- No impact to current business processes
- Mature and standard technology stack
- Greater interoperability.





Benefits



If something is true in the real world,
then we make it true in the digital world.





Competition/Alternatives

- Existing physical cards
- Centralized directory lookup
- Blockchain technologies remain experimental





Current Status

- V1 Reference Implementation available Apple & Android
- Evaluated by National Urban Security Testing Laboratory (NUSTL)
- Closing out developer support
- Working with pilot partners
- Launched valididy.com





Transition/Completion Activities

- NUSTL testing (report available soon)
- Launched commercial go-to-market entity
- In advanced discussion with
 - Healthcare, for Electronic Visitor Verification
 - Healthcare, for consent management across HIEs
 - Open Banking, for provenance of customer data





Contact Info

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VALIDIDY

