ID4Africa
A Seamless Path to Trusted Identity
A SEAMLESS PATH TO TRUSTED IDENTITY
ENABLED BY PKI

The creation of new Government to Citizen relationships by blurring the physical and digital world – increased citizen engagement based on strong digital identity and secure service delivery.
DIGITAL IDENTITY TODAY

Core Identity
• Name
• Place of Birth
• Parents
• ..... 

Biographic Elements
• Address
• Education
• Marital status
• Employment
• Licensing...

Identity is all about you!
Identity is important
- Recognition of unique identity is a birth right
- Attestation to that recognition binds the individual to a community; to a set of social rights; including citizenship
- The foundation for engagement with our government

Critical Items
- One identity provable as authentic and accurate
- Quality in all aspects of Identity attribute data collection
  • Core, Biographic and Biometric
- Government as custodian; not owner of identity
  • Protection, Transparency and Privacy
  • Data Minimization & Consensual release
WHAT WE NEED FOR TRUST

The degree to which these things can be proven conveys assurance of trust in the presented identity & credential.
THE IMPORTANCE OF CITIZEN CREDENTIALS

Strong Credentials are important

– Allow exercise of the value of identification as Citizen
– Demonstrate State’s attestation of identity
– Facilitate easy intuitive access to the rights of citizenship
– But with growing utility comes greater value…to everyone

Critical Items

– Prove Identity of holder without doubt - Integrity & Authenticity
– Demonstrate a strong binding to the Citizen
– Be absolutely “trusted” within the ecosystem in which they operate – validated
PKI KEY FOR IDENTITY ASSURANCE

Selected Attributes
- Core identity
  - Name
  - Place of birth
  - Parents
  ...
- Biographic Elements
  - Address
  - Education
  - Marital status
  - Employment

Credential Data Structure

Data
Hash
Sign

PKI Digital Signature for Trust

Validating Identity

Integrity: by re-computing and verifying the hash it can be proven that the data has not been altered

Authenticity: passive authentication, the credential can be verified to be authentic

The Security Object is an Authorized Attestation of Identity
A SEAMLESS PATH FOR IDENTITY & CREDENTIAL EVOLUTION

The SOD secures the identity attributes to establish assurance in the credential
- It is not dependent on the credential form factor – it is self-secured
- Within a unified identity management architecture can be key to seamless evolution of credentials as different sectors / applications require

Evolution Factors
- eGov Readiness
- Technology Infrastructure
- Citizen Demographics
- Technology Penetration

Potential for Derived Assurance in Evolution
ENABLING TRUST IN CITIZEN USE CASES

• For attended/person-to-person use cases, this Secure Credential may be all that is needed for high assurance proof of identity. Strongest possible mitigation of forgery risk.

• For online and automated (e.g. Kiosk, eGate or Online) proof of the “Binding” of the Holder to the Secure Credential is required. To mitigate impersonation risk.

Validation

Authentication

Know: PIN/CAN
Have: PKI/Keys
Are: Biometrics
Do: Action

Online Transactions
The Mobile platform brings much potential to Citizen Identity

- Integrated, seamless & personal user experience
  - 24/7 Connectivity & Unlimited Application reach
- Versatile multifactor authentication tool
  - Variety of biometric sensory capabilities to elevate proofs of bearer authenticity
- Not just a flexible credential, but a transaction platform
  - Rich applications context and opportunity for data minimization and consensual release of identity data
  - PKI operations e.g. authentication and transaction signing

Lack of an independent ubiquitous security model
Technology and infrastructure itself as a barrier to some demographics
TRUSTED CITIZEN IDENTITY TRANSACTIONS

Improve service levels, control costs and enhance both privacy and security with digital ecosystems based on trusted identity.

CITIZEN REGISTRY

CITIZEN ENROLMENT

ENROLMENT ESSENTIALS

SIMPSONIFIED
ENROLLMENT

Easy to deploy for governments and easy to adopt for citizens.

- Targeting a single High Assurance Citizen Identity Record
- Build Privacy & Integrity Controls into Identity attribute and biometric data collection, migration and registry management processes
• National PKI sound investment as the foundation to secure identity and underpin strong identity credentials
• A unified credentialing and authentication capability across an array of application identity requirements: Health, DL, National ID, ePassport
• Uniform integrity and authenticity built into Secure Issuance across credential form factors
• Fully integrated key and certificate lifecycle management to support citizen transactions
TRUSTED CITIZEN IDENTITY TRANSACTIONS

Improve service levels, control costs and enhance both privacy and security with digital ecosystems based on trusted identity.

- Value of identity is realized through service delivery
- Trust in identity is achieved only through validation!
- Trust of the citizen is based on respect for identity & privacy
TRUSTED CITIZEN IDENTITY TRANSACTIONS

Improve service levels, control costs and enhance both privacy and security with digital ecosystems based on trusted identity.

- Inevitably, success will be measured
  - Citizen engagement
  - Pull for expansion of services
  - Cost and process efficiencies
Thank You