IDDY Awards Webcast: User Centric Identity in NZ
Background – Who We Are

• NZ State Services Commission
  – The Commission works with Public Service departments, Crown entities and other State sector organisations to ensure the New Zealand government operates efficiently and effectively.

• All-of-government Authentication Programme
  – Develop and Manage Authentication Standards
  – Build and Operate Shared Authentication Services for Govt
  – Develop ‘Future’ Authentication Services
What’s The Problem?

- Agencies spend considerable resources in collecting, verifying, and maintaining information that is already authoritatively known to other parts of government:
  - Multiple investments across government
  - A reliance on secondary (paper) documents to move information between agencies via customers
What’s The Problem? continued

• For people and organisations there is inconvenience, extra costs, and delays.

• Customers (people and organisations), rather than government, are forced to integrate services across agency silos.

• There are transactional risks for both agencies and its customers.
What’s The Problem? continued

• At a system level, sharing of information across structural silos is an obstacle to reaching the transformation and joined-up government vision.

• This will make it difficult for us to achieve the Development Goals, in particular the CAN goals.
Generic Government Operations

Agency processes information

Information input  Decision, action, etc.

- Many examples of this across government
Student Loan Example

Birth Certificate- DIA
IRD Number- IR
Citizenship (DIA) or PR visa (DoL)
Eligible Course- University

Approval ✓
StudyLink
What Does “Government” Know About You?

Quite a bit actually…

- Name
- Date of birth/age
- Place of birth
- Gender
- Marital status
- Parents
- Children, siblings
- Right to drive
- Drivers Licence number
- Which car you own
- Car registration
- Warrant of fitness
- Warrant of fitness
- Donor status
- Student status
- Student loan balance
- IRD number
- How much you earn
- Where you work
- Student allowances/benefits you get
- Previous names
- Address
- Phone number, email
- Passport number
- Permanent Resident
- Overseas travel
- Goods imported/exported
- Life events, e.g. marriage
- Previous names
- Criminal/police history
- Educational record
- Fines
- Business interests
- Property interests
- Library history
- Health record
- GP
- Test results
- Blood Group
- Medicines
- NHI number
- Accidents
- Educational record
What kind of information sharing is required?
## Types of Information Sharing

Depends upon the role that the person is playing and function of Government

<table>
<thead>
<tr>
<th>Person’s role</th>
<th>Government function</th>
<th>Information sharing approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject of the State</td>
<td>Authorising, Defending, Protecting, Rulemaking, Upholding rules</td>
<td>Agency-centric</td>
</tr>
<tr>
<td>Customer</td>
<td>Assisting, Enabling, Enriching</td>
<td>User-centric</td>
</tr>
<tr>
<td>Citizen+ (right to demand accountability)</td>
<td>Administration (internal), Informing, Infrastructure, Policy making, Representing</td>
<td>None (aggregated only)</td>
</tr>
</tbody>
</table>

Adapted from OECD and FONZ (NGLS metadata)
User-centric Information Sharing

• User-centric is when information sharing between agencies is:
  – At the request of the user
  – Active consent of the user is obtained before information is sent
  – The user can cancel the request at any time
  – The user reviews the information before it is sent (but cannot change the information that is sent)
  – The user is authenticated to the appropriate strength
Benefits

• Agencies
  – Significant reduction in operational costs
  – Reduced transactional risks
  – Greater consistency in decision making

• People and organisations
  – Convenience, reduced compliance costs
  – Speedy decision making

• Government as a whole
  – Key enabler for transformation and joined-up service delivery
  – Real time government
Real-time Government

- In many cases, agencies will now have ALL the information they need to make routine operational decisions in real-time, consistently, and cost effectively.
Where Do We Start From?

• Government has accepted the truth of claims people have made
• Government often holds these truths authoritatively in one place
• Government can – and does – use these authoritative sources of data in many ways
Alternatives Considered

• The following alternatives to implement the proposed framework were considered:
  – Standalone agency solutions
  – Extending existing Authentication services
  – A centralised database
  – Citizen vault

• None of them provide a viable alternative.
High-Level View: Recommended Solution

Provisional NZ patent (number 554656) filed by SSC in April 2007
The Internal Name: GOAAMS

G Government
O Online
A Attribute
A Assertion
M Meta
S System
What GOAAMS Isn’t

- A comprehensive identity management system for government.
- An exclusive way to share information, e.g. agency-centric information sharing is still required for some roles that government plays.
- Suitable in all cases of user-centric information sharing, e.g. a publish & subscribe type of service or single document submitted to multiple agencies.
GOAAMS is a Framework

• Technical implementation is only a minor component with acceptable risk.
• A cross-government transformational effort is required to further develop and implement:
  – Policy and principles (including, possibly, legislation)
  – Governance
  – Funding and charging models
  – Liability
  – Standards
  – Enabling delegation and proxies
  – On-going strategy and private sector participation
Implementing the Framework

- Extend the all-of-government infrastructure, systems, and processes being put into place by the Authentication Programme
Implications for the Authentication Prog

• Focus was on online authentication

Name = Joe Bloggs  
Date of birth = 01/01/1970  
Place of birth = Wellington  
Sex = male

Username = joe, Password = joeblo22

Identity Verification Service (IVS)

Government Logon Service (GLS)
But Identity Is Far More Complex

- **Identity** = information about people and organisations

  ![Identity Onion Diagram]

- Uniqueness
- Essential self
- Affinities
- Reputation
Example of Transformed Government

- Student applies for a loan online. The loan application is processed in real-time (as opposed to 5-10 days).
Extending the Example

• This is a natural platform for joined up government. If the student doesn’t have an tax number, she can apply for one (and be issued with) simultaneously.

• There is an obvious need to extend the framework to the private sector, both provider and consumer sides. Many issues required to be resolved first.
Challenges

- Commercial Model (including liability when things go wrong)
- Reaching the Tipping Point
- References? Examples of similar systems?
- Point-in-time assertion vs. managing on-going changes to the attribute at source
- Partial failures or source unavailability, maintaining state
- Where do you put the business logic? “Meta business logic”? 
Questions?

Comments?

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