Agenda

- Programme overview and progress update – Lesley & Mike
- User Research & Service Design update – Stephen Adam
- Workshop I. Exploring the “in person” identity verification journey

- Lunch

- Your views!
Programme Overview

Lesley Allen
Programme Aim

To develop a common public sector approach to online identity assurance, as part of digital public services. A solution that;

<table>
<thead>
<tr>
<th>Is a <strong>common approach</strong> to online identity assurance and authentication for access to public services, that supports the landscape and direction for <strong>digital public services delivery</strong></th>
<th>Is designed with and for <strong>members of the public</strong> (service users) and that stakeholders can support.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Works: is <strong>safe, secure, effective, proportionate, easy to use, and accessible</strong>; and forms part of public sector digital services</td>
<td>Can <strong>evolve and flex</strong> with changes that occur in the future (future proofed), e.g. changing in response to new technologies</td>
</tr>
<tr>
<td>Where members of the public can be confident that their <strong>privacy</strong> is being protected</td>
<td>Brings <strong>value for money and efficiencies</strong> in the delivery of digital public services</td>
</tr>
</tbody>
</table>
Digital identity is one of the public commitments for Digital and Data within the Programme for Government 2018-19;

“Digital Strategy for Scotland 2017 contains the commitment to; Work with stakeholders, privacy interests groups and members of the public to develop a robust, secure and trustworthy mechanism by which an individual member of the public can demonstrate their identity online.”
Supported by Ministers

Mike Russell, Cabinet Secretary for Government Business and Constitutional Relations, launch of the Open Government in Scotland Action Plan 18-20, 31 Jan/19:

"We are proactively publishing more information than ever before, and taking an open approach in our policy-making, particularly with the Digital Identity Scotland team... ...Why do I use that example? Because it's a key example of making sure the digital age serves the needs of a modern democracy."
Scottish Approach to Service Design

Digital identity Scotland adopts the Scottish Approach to Service Design:
“Committed to designing, collaboratively, inclusively and empathetically. Users are at the heart of what we do and we work alongside other areas of the public sector in order to meet user needs more effectively.”

The programme is focussed on embedding the Scottish Approach to Service Design by putting users at the heart of what we design.

We have two members of our multidisciplinary team, from the Office of the Chief Designer, leading on user research Service Design.

Awareness sessions and embedding SD are available through the Scottish Digital Academy for anyone with an interest.
Advisory Groups

The programme also has a clear directive from ministers to work with stakeholders, privacy interests and members of the public to develop a robust, secure and trustworthy mechanism by which an individual can demonstrate their identity; To support this we have set up:

• **Expert Group** is made up of individuals across the UK who have technical, privacy, rights and legal expertise including from public services, academic and industry experts and invited individuals with sectoral knowledge and skills. This has the remit to provide expert advice to inform the design, direction and prioritisation of the work;

• **National Stakeholder Group** includes service providers, public bodies, local government, privacy interests, third sector, citizen interests, and professional interest groups. Meetings are publically advertised, and those who wish to can attend and participate. This has the remit to inform the design, direction and prioritisation of the work programme from a stakeholder perspective.
High-level Timeline

January – May 18
Initial Discovery by Snook undertaken focussing on User Research and Tech options

May – Oct 18
Post-Discovery
Further discovery research to understand wider landscape, users and explore tech options

Nov 18 – May 19
Expected Alpha phase with OIX

April 2019 – Onwards
Procurement Strategy Draft ITT

31st May 2019
End of Alpha POC and Standards

w/c 10th June 2019
Technical Assurance – pre procurement gate

July 19
Procurement for Beta build and into Live service

Digital Scotland
Digital Identity Scotland
For the ‘alpha’ phase, the project team has joined the Open Identity Exchange (OIX), a worldwide, non-profit, cross-sector membership organization in order to collaborate with a range of organisations with interest in digital identity.
Partnership with the Open Identity Exchange (OIX)

The benefits include:

• A worldwide, non-profit, cross sector membership group, providing industry leadership for online identity assurance.

• Access to a very broad range of orgs. operating in the online ID space including the potential ID provider (IDPs) that we would seek to collaborate – Improvement Service (myaccount) GDS (GOV.UK Verify) and other providers of identity services (e.g. Post Office and Experian);

• Compatible with our Open Government approach, projects are conducted in the open, participation in the alpha and observation is also open to non OIX members.
<table>
<thead>
<tr>
<th>Stream 1 Proof of Concept</th>
<th>Stream 2 Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>A technical work stream has been designed to demonstrate that a defined sub set of the overall required functionality can be implemented.</td>
<td>A second, analytical, stream is assessing the steps that will be required to be taken to deliver an interoperable and standardised digital identity service for Scotland.</td>
</tr>
<tr>
<td>This POC stream will utilise a combination of methods and technologies provided by participant organisations.</td>
<td></td>
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</tbody>
</table>

After ‘alpha’ has concluded, the programme will move into a procurement phase to appoint a digital partner working towards the first live services.
An Agile approach

The whole team has successfully transitioned to a flat structure, skills based approach, where talent and resources are shared across professions and working groups.

This practice aims to reduce silos, stop bottlenecks, ease working pressures on individuals, develop new skillsets and to flexibly meet the needs of the Alpha stage.
<table>
<thead>
<tr>
<th>Programme Team are using Agile Scrum methodology.</th>
<th>Team Collaboration tools facilitating improvement:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Daily Stand Ups</td>
<td>• Virtual and onsite co-location)</td>
</tr>
<tr>
<td>• Backlog Prioritising</td>
<td>• JIRA managing workload and development</td>
</tr>
<tr>
<td>• Sprint Planning</td>
<td>• Team communication through Slack</td>
</tr>
<tr>
<td>• Retrospectives</td>
<td>• ERDM connect for all document management (externally)</td>
</tr>
<tr>
<td>• Show and Tells</td>
<td>• Whiteboard for meetings and outcomes</td>
</tr>
</tbody>
</table>
COLLABORATION

- Subordination
- Teamwork
- Inspiration
- Support
- Share
- Exchange
- Assist
- Meeting
- Trust
Collaborative communication

Slack

- Team communication
- Different channels for different chats
- Saves email clogging
Collaboration tools

**Jira**

- Virtual whiteboard
- See all task in the sprint
- Edit / change / move and assign to different team members
- Used externally
- Different ‘Epics’
Support with revision of Identity Standards

This guidance will help organisations decide how to check someone’s identity.

This guidance was written by Government Digital Service (GDS) with help from organisations across the public and private sectors. Key contributors include:

- Department for Work and Pensions (DWP)
- Driver and Vehicle Licensing Agency (DVLA)
- HM Revenue and Customs (HMRC)
- Home Office
- Ministry of Defence (MoD)
- National Cyber Security Centre (NCSC)
- Barclays
- Digidentity
- Experian
- IDEMIA
- Post Office

This guidance aligns with these international standards and regulations:
Close monitoring of GOVUK Verify

House of Commons
Committee of Public Accounts

Accessing public services through the Government’s Verify digital system

Ninety-Fifth Report of Session 2017–19

Report, together with formal minutes relating to the report

Ordered by the House of Commons to be printed 1 May 2019
Getting it right for citizens

*Working with stakeholders, privacy interests groups and members of the public*

<table>
<thead>
<tr>
<th>National Stakeholder Group</th>
<th>Communications and Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Membership includes:</td>
<td>• Proactively publish Board and other programme papers</td>
</tr>
<tr>
<td>o Public service representatives</td>
<td>• Regularly publish blogs, Tweets and articles</td>
</tr>
<tr>
<td>o Privacy groups</td>
<td>• The team regularly engages directly with citizen representatives, such as privacy groups</td>
</tr>
<tr>
<td>o Interested citizens</td>
<td></td>
</tr>
<tr>
<td>• Meets every 4 months (approx.)</td>
<td></td>
</tr>
<tr>
<td>• Advertised on Eventbrite and is open to all</td>
<td></td>
</tr>
</tbody>
</table>
## Getting it right for service providers

<table>
<thead>
<tr>
<th>Service Provider Workshop</th>
<th>Getting out and about</th>
</tr>
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<tbody>
<tr>
<td>• In February the team brought service providers from across Scotland together with the aim of understanding their thoughts on digital identity and their needs for a future identity solution.</td>
<td>• The team have also had more in-depth conversations with individual service providers to:</td>
</tr>
<tr>
<td>• The half-day workshop explored current verification practices, ongoing digital transformation programmes and the participants hopes and fears for the programme.</td>
<td>o better understand how their services are delivered</td>
</tr>
<tr>
<td></td>
<td>o gain insights into how this programme can address and improve the way in which they provide identity services.</td>
</tr>
<tr>
<td></td>
<td>• This has enabled us to test assumptions and is helping us design a solution that meets both service provider and citizen needs</td>
</tr>
</tbody>
</table>
In conversation with...
Proof of Concept Update
The Alpha will have two distinct streams that will be run in parallel;

The two streams will work independently of each other;

• The first stream will deliver a working Proof of Concept to test technical interoperability of services and to support user research. It will use “real-world” examples of the need for a digital ID

• The second stream will be an analytical workstream assessing the steps that will be required to be taken – by the Scottish Government or service providers – to deliver an interoperable and standardised digital identity service for Scotland
Who is involved?

- Sitekit (Hub provider)
- Post Office (IDP)
- GDS Verify and Standards team
- Improvement Service (myaccount IDP)
- Social Security Scotland (Service Provider)
- North Lanarkshire (Service Provider)
- OIX Community
- SME’s
- Ademia (IDP)
- Experian (IDP)
- Verisec
- tScheme
- Avoco (IDP)
Who is doing what?

Service Layer:
- Identification
- Authentication
- Attributes

Abstraction Layer:
- Discovery
- Identifiers
- Routing
- Translation

Identity Provider:
- Identifiers
- Authentication
- Attributes
- Storage

Source:
- Other Sources

Relying Party as a Source:
- RP Data

Social Security
North Lanarkshire
Sitekit
Post Office
Improvement Service / Yoti

Digital Scotland
Digital Identity Scotland
Proof of Concept (PoC) - Schematic
PoC Status – Integration Layer

*Integration Layer*

- The Integration Layer (cloud-based, built using Microsoft Azure Active Directory B2C and provided by Sitekit) is available and in use.
Relying Party A: Social Security Scotland

- The connection from development system for the Social Security Scotland “Digital Portal” for the Child Disability Living Allowance benefit is in place and working - with limited supporting functionality (as an RP)
- Richer functionality is expected to be provided by the Factory Test environment to be available “imminently”

Relying Party B: North Lanarkshire Council

- North Lanarkshire’s digital services are front-ended by the Matrix CRM product provided by Squiz
- Following discussions with NLC and Squiz we are working with Squiz as a “proxy RP” for the purposes of the PoC
- Squiz are currently enhancing their core product to add OIDC capability and hence no connection has yet been established.
PoC Status - IDPs

**Identity Provider 1: myaccount**
- Improvement Service’s myaccount test service is connected to the Integration layer and working
- This also enables access to Yoti’s trusted identity platform via the myaccount domain

**Identity Provider 2: Post Office**
- As is the case for GOV.UK Verify the technology powering the Post Office offering is provided by Digidentity
- Connection of Digidentity to the Integration Layer is scheduled to start 14-May-19
- Social Security are ready to run some limited tests to demonstrate the use of multiple IDPs via the Integration Layer - with more capability when their Factory Test environment is available.
## PoC revised timetable

<table>
<thead>
<tr>
<th>Date</th>
<th>Desired</th>
<th>Objective-Endangering</th>
</tr>
</thead>
<tbody>
<tr>
<td>12(^{th}) April</td>
<td>1 x RP (SS), hub, 1 x IdP (IS) – registration working</td>
<td></td>
</tr>
<tr>
<td>19(^{th}) April</td>
<td>1 x RP (SS), hub, 2 x IdP (PO+IS) – 2 x registration working</td>
<td>1 x RP, hub, 1 x IdP – registration working</td>
</tr>
<tr>
<td>26(^{th}) April</td>
<td>2 x RP (SSD+NLC), hub, 2 x IdP (PO+IS) – 2 x registration working, identity portability working</td>
<td>1 xRP (SS), hub, 2 x IdP (PO) – 2 x registration working</td>
</tr>
<tr>
<td>3(^{rd}) May</td>
<td></td>
<td>2 x RP (SSD+NLC), hub, 2 x IdP (PO+IS) – 2 x registration working, identity portability working</td>
</tr>
<tr>
<td>10(^{th}) May</td>
<td></td>
<td>PoC ‘dev’ work complete</td>
</tr>
</tbody>
</table>
PoC Complexity
PoC Lessons Learned (so far…)

- Relying on goodwill has led to resource constraints from all participants and this has slowed progress (considerably)
- The OIDC protocol is broadly suitable for our needs
- (As is usually the case) just because two solutions support the OIDC protocol does not mean they will communicate “out of the box” however
- The integration challenges encountered so far have been relatively easily overcome
- Microsoft has a specific implementation of the OIDC protocol
- The findings of PoC suggest that the high level architecture and design of the DIS Service is appropriate to meet the programme’s objectives.
Discussion re Scottish Government & Private Sector IDPs
Identity Provider Options

1. Private sector IDPs only
   a. SG could augment this with specific capabilities like in-person identity verification or access to the NEC process for example
   b. Key question - what if the market fails to develop?
Identity Provider Options

2. Government IDP only
   a. Assuming this is not viable but to be validated
Identity Provider Options

3. Private sector IDPs and a SG IDP all on the same footing
   a. Key question – How to make it attractive to commercial providers, so they want to participate
   b. On what basis would SG IDP operate?
Identity Provider Options

4. Private sector IDPs with SG IDP on a different footing

   a. How could the SG IDP be differentiated? E.g. In person only.

   b. If SG IDP focused on hard to reach, say, could this be done in a way that is not discriminatory?
## Workstream 1

- **Stream 1 – Proof of Concept**

<table>
<thead>
<tr>
<th>Phase</th>
<th>#</th>
<th>Description</th>
<th>RP</th>
<th>Start IDP</th>
<th>Start LoA</th>
<th>Req’d LoA</th>
<th>Uplift done by</th>
<th>End LoA</th>
<th>Attributes Requested</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Upfront Onboarding to IDP</td>
<td>SS</td>
<td>None</td>
<td>None</td>
<td>LoA2</td>
<td>IDP (PO)</td>
<td>LoA2</td>
<td>MDS</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Upfront Onboarding to IDP (But insufficient LoA)</td>
<td>SS</td>
<td>None</td>
<td>None</td>
<td>LoA2</td>
<td>IDP (PO)</td>
<td>LoA0 or LoA1</td>
<td>MDS</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Customer already has IDP Account</td>
<td>SS</td>
<td>PO</td>
<td>LoA2</td>
<td>LoA2</td>
<td>IDP</td>
<td>LoA2</td>
<td>MDS</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>Customer already has low LoA IDP Account</td>
<td>SS</td>
<td>PO</td>
<td>LoA1</td>
<td>LoA2</td>
<td>IDP</td>
<td>LoA2</td>
<td>MDS</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>Existing IDP customer accessing LoA1 service</td>
<td>NL</td>
<td>PO</td>
<td>LoA1</td>
<td>LoA1</td>
<td>IDP</td>
<td>LoA1</td>
<td>MDS</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>Existing IDP customer accessing LoA1 service</td>
<td>NL</td>
<td>IS</td>
<td>LoA1</td>
<td>LoA1</td>
<td>IDP</td>
<td>LoA1</td>
<td>MDS</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td>Using RP Vouching to elevate LoA of existing IDP customer</td>
<td>SS</td>
<td>IS</td>
<td>LoA0 or LoA1</td>
<td>LoA2</td>
<td>RP Vouching</td>
<td>LoA2</td>
<td>MDS</td>
</tr>
</tbody>
</table>
2.1.2. **Workflow 2 - Upfront Onboarding to IDP (But insufficient LoA)**

Note that steps 1 – 4, 6, 8 and 9 are the same as in Workflow 1.

<table>
<thead>
<tr>
<th>#</th>
<th>Who has control</th>
<th>Step</th>
<th>Comments/Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RP (SS)</td>
<td>Customer wants to access service at RP</td>
<td>Could be new or existing RP customer</td>
</tr>
<tr>
<td>2</td>
<td>RP (SS)</td>
<td>RP requests attributes at LoA2 from Sitekit</td>
<td>For phase 1, attributes expected to include:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• MDS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Persistent Identifier</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Can LoA request be at granularity of individual attributes (e.g. identifier at LoA2, Name at LoA2, etc)?</td>
</tr>
<tr>
<td>3</td>
<td>Sitekit</td>
<td>Sitekit present “picker” page and customer chooses Post Office</td>
<td>How does customer determine which IDP is the right one for them?</td>
</tr>
<tr>
<td>4</td>
<td>Sitekit</td>
<td>Sitekit redirects customer to Post Office</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>IDP (PO)</td>
<td>IDP onboards customer but can only get to LoA0 or 1 (for identification) but is provided with LoA2 authentication token².</td>
<td>Is this a single process?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>What happens if a break in the process is required?</td>
</tr>
<tr>
<td>6</td>
<td>IDP (PO)</td>
<td>IDP presents attributes to be shared with RP to customer and obtains consent</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>IDP (PO)</td>
<td>Attributes passed to Sitekit for onward delivering to RP</td>
<td>Can IDP signal that attributes are LoA1 but Authentication is LoA2.</td>
</tr>
<tr>
<td>8</td>
<td>Sitekit</td>
<td>Sitekit passes attributes to RP</td>
<td>MDS and persistent identifier and LoA achieved.</td>
</tr>
<tr>
<td>9</td>
<td>RP (SS)</td>
<td>RP uses data received to determine which customer is requesting service.</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>RP (SS)</td>
<td>RP determines next steps based on only receiving LoA1 attributes back</td>
<td>RP could decide to provide service anyway, undertake additional steps itself to assure the identity or send the customer into vouching process (later phase)</td>
</tr>
</tbody>
</table>
Workstream 2

Stream 2: Standards & Interoperability Analysis

There are 5 parts (or Work Packages)
1. Baseline Identity Standards
2. Extended Identity Standards
3. Waivers
4. Standards for Attribute Assertion
5. Commercial Models
More Information…..

@DigitalIDScots & @scotgovopen

blogs.gov.scot/digital/

Face to face with our engagement team
Thank you

Want to find out more? Talk to us!

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