Identity, Privacy & Trust with the TSB

Dr David Lund
Cyber Security & Resilience @ HWC

• **Privacy** and consent management
• **Trust**, provenance and controlled information exchange

• Also
  – CyberDefence - Vulnerability assessment in complex networks
  – Risk management and technologies for Critical Information Infrastructure Protection (CIIP)
  – Resilience in wired and wireless communication
  – Vulnerability assessment in complex networks
Who is EnCoRe?

Ensuring Consent and Revocation

Hewlett-Packard Laboratories (Co-ordinator)
HW Communications
University of Warwick
London School of Economics
HeLEX Centre, University of Oxford
QinetiQ
Consent ...

... by an individual, to the collection, storage, use and onward sharing of personal data about himself/herself
The overall vision of this project is to make giving consent as reliable and easy as turning on a tap...
…and revoking that consent as reliable and easy as turning it off again
EnCoRe is undertaking three domain specific case studies

1. Enhanced Employee Data Sharing ✔

2. Biobanks ✔

3. Cabinet Office/IdA Programme
Overview of EnCoRe Functionalities

- Changing privacy choices over time
- Revocation of consent

- Data Tracking
  - Audit Logs
  - Compliance Checking
  - Risk Assessment

User

Organization 1

EnCore Toolbox

Organization 2

EnCore Toolbox

Fine-grained Consent when disclosing Personal Data (PII), by means of privacy choices e.g.:
- Notification about PII usage/disclosure
- Allowed usage/disclosure purposes
- Data deletion criteria

Explicit enforcement of users’ privacy choices by means of:
- Privacy-aware access control policies
- Obligation policies

Integration with traditional Security Policies

Privacy-aware disclosure of data to third parties
- Propagation of privacy choices and Policies

Data Tracking
- Audit Logs
- Compliance Checking
- Risk Assessment
## Donors

### Doe, Jane

<table>
<thead>
<tr>
<th>Name</th>
<th>Jane</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surname</td>
<td>Doe</td>
</tr>
<tr>
<td>Gender</td>
<td>FEMALE</td>
</tr>
<tr>
<td>DoB</td>
<td>02/02/02</td>
</tr>
<tr>
<td>Telephone</td>
<td>1234567890</td>
</tr>
<tr>
<td>Mobile</td>
<td>0987654321</td>
</tr>
<tr>
<td>E-mail</td>
<td><a href="mailto:null@null.org">null@null.org</a></td>
</tr>
<tr>
<td>Address</td>
<td>Up a Creek, Without a Paddle</td>
</tr>
<tr>
<td>Samples</td>
<td>View - Add</td>
</tr>
</tbody>
</table>
My Info

Please log in to manage your Biobanking data and consents

The following explains how to use the portal.

- **My Donations** give a list of all donations that you have made to the Biobank
- **My Consent** allows you to manage what the Biobank is allowed to do with your donated samples and data
- **My Notifications** gives you some information on what you samples and data have been used for where you have opted to be notified
- **My Personal Data** allows you to see what data we store about you and to keep your personal data and contact details up date
## My Donations

<table>
<thead>
<tr>
<th>Date of Donation</th>
<th>Sample Type</th>
<th>Sample Quantity</th>
<th>Taken by</th>
<th>Number of uses</th>
<th>View Notifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>12th July 2010</td>
<td>Blood</td>
<td>100ml</td>
<td>Dr S H Needle</td>
<td>1</td>
<td>View Notifications</td>
</tr>
<tr>
<td>12th July 2010</td>
<td>Skin Tumor</td>
<td>0.2g</td>
<td>Dr S H Needle</td>
<td>2</td>
<td>View Notifications</td>
</tr>
</tbody>
</table>
My Consent

In the next three pages, you can view and change your consent to control the use of your donated samples and associated data with respect to:

- Samples and data which could be used to identify who you are
- Samples and data for which it is extremely difficult to identify who you are
- Your DNA which may be derived from your samples

Click here to start the process and review your consent for identifiable samples and data >>>>
My Consent - DNA

Your current consent is as follows. Please modify if required and click the button below to update our records.

My DNA can be used

- [ ] for any research purpose as long as it has been approved by ORB and has met all the ethical standards of research
- [ ] only for the research purposes that I have agreed to
- [X] only by the research team that treats me

Click to be notified when related samples and data are used

Update consent

<table>
<thead>
<tr>
<th>Purposes</th>
<th>Exceptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any</td>
<td>None</td>
</tr>
</tbody>
</table>
### My Notifications

<table>
<thead>
<tr>
<th>Date of Use</th>
<th>Sample Type</th>
<th>Consented Purpose</th>
<th>Detailed Use</th>
<th>Used By</th>
<th>Revoke Purpose</th>
<th>Revoke End User</th>
<th>Disable Notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>7th Sept 2010</td>
<td>Skin Tumor 12/7/10</td>
<td>Cancer Research</td>
<td>UV Exposure</td>
<td>Oncology, Oxford Radcliffe</td>
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<td>Disable Notification</td>
</tr>
<tr>
<td>27th Oct 2010</td>
<td>Skin Tumor 12/7/10</td>
<td>Cancer Research</td>
<td>UV Exposure</td>
<td>Oncology, Oxford Radcliffe</td>
<td>Revoke Purpose</td>
<td>Revoke End User</td>
<td>Disable Notification</td>
</tr>
</tbody>
</table>
Who is TEASE?

**Trust Enabling Augmented Reality**

Thales Research and Technology

HW Communications

University of Warwick
Who is TEASE?

Trust Enabling Augmented Reality

The TEASE project is developing innovative tools to assist users in assessing the confidence they should place in the reliability of the information that is presented to them.
Where Next??

Breaking Organisation Silo’s into sectors

The Connected World (who cares what the actual technology is!)

Public Protection
- Police
- Fire
- Ambulance
- Military

Crisis Management

HealthCare
- Hospital Dept
- Clinics
- GPs
- Biobanks
Where Next??
Breaking Organisation Silo’s into sectors

The Connected World
(who cares what the actual technology is!)

Public Protection
- Police
- Fire
- Ambulance
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HealthCare
- Hospital Dept
- Clinics
- GPs
- Biobanks

Personalised Medicine
Where Next ??

Fully Flexible
Information
Domains

The Connected World
(who cares what the actual technology is!)

- Public Protection
  - Police
  - Fire
  - Ambulance
  - Military

- HealthCare
  - Hospital Dept
  - Clinics
  - GPs
  - Biobanks

Accident and Emergency
dlund@hwcomms.com

www.encore-project.info

www.tease-project.info

http://www.twitter.com/encore_project
http://www.youtube.com/user/EnCoReProjectVideos