

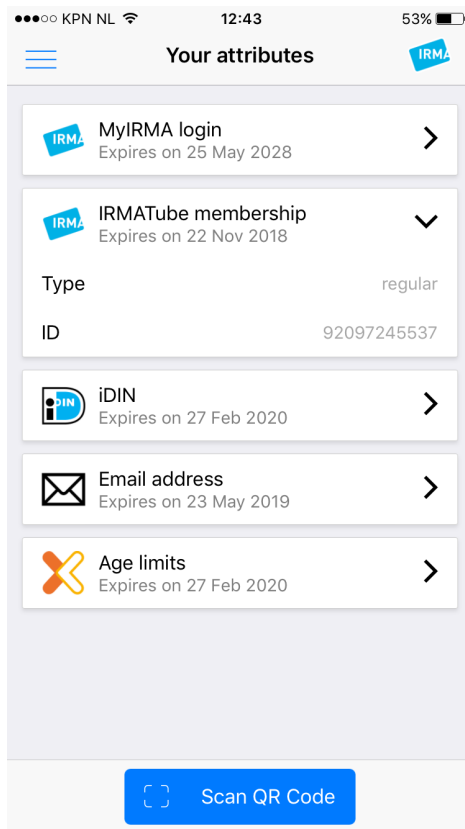
Introduction to IRMA and overview of new developments

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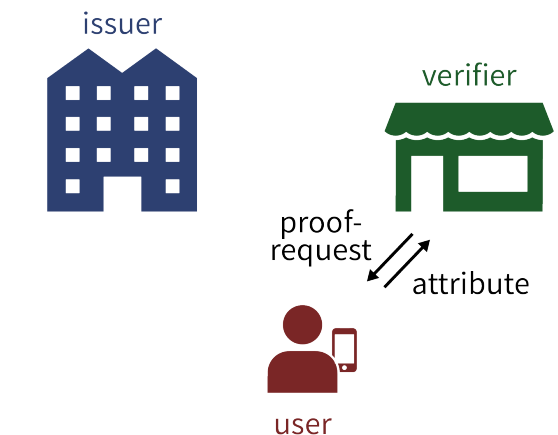
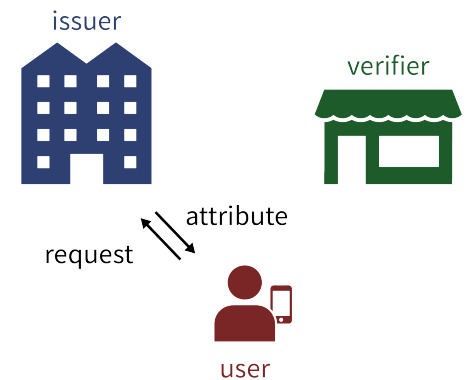
Overview

- * (Re-)introduction to IRMA
- * IRMA app improvements
- * New developments
- * Collaborations
- * Developer tools
- * Future directions

(Re-)introduction to IRMA

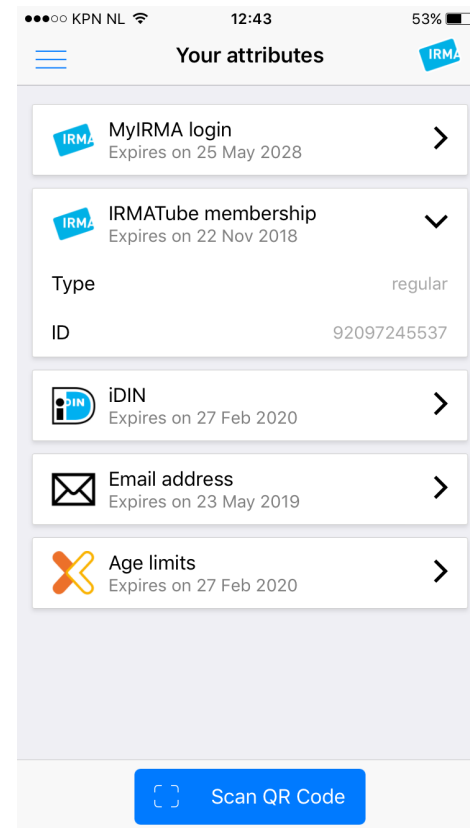
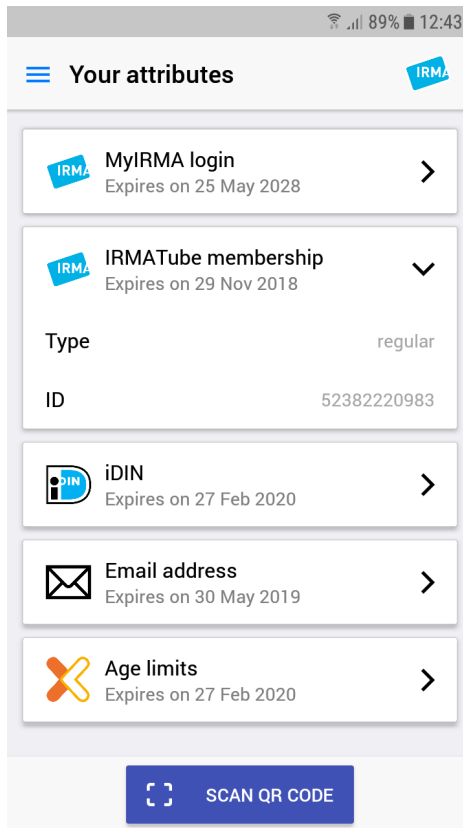


- * Attribute-based
- * Collected by user
- * Digitally signed by issuer
- * Identifying (name) or not (> 18)
- * Decentral: attributes stored only on phone



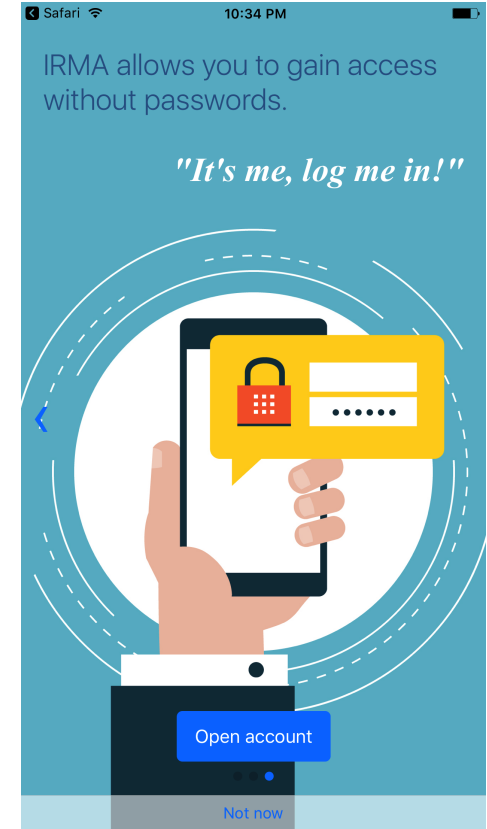
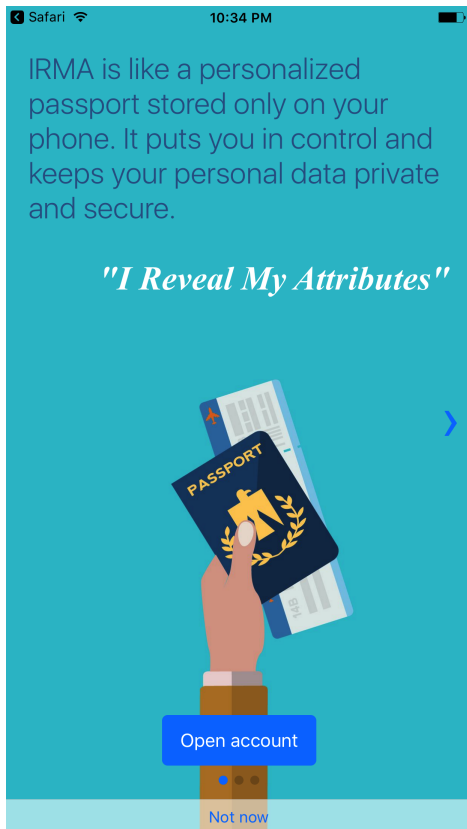
The IRMA app

* For Android and iOS



The IRMA app

- * For Android and iOS
- * Improved registration and made email address optional



The IRMA app

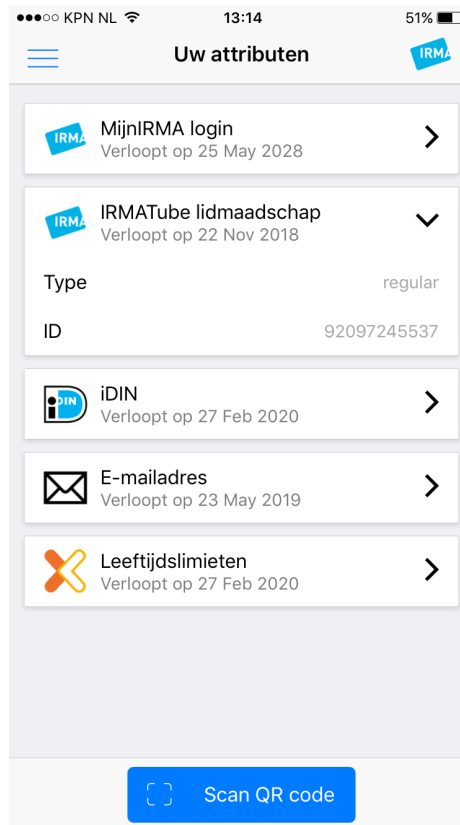
- * For Android and iOS
- * Improved registration and made email address optional

The screenshot shows the 'Open IRMA account' screen. It has a title bar with a back arrow, the text 'Open IRMA account', and an IRMA logo. The main content area is divided into two steps. 'Step 1: Choose an IRMA PIN' is completed, indicated by a green checkmark. 'Step 2: Add your email address' is the current step, indicated by a blue checkmark. Below the step title, there is explanatory text: 'Associate an email address with your account. This is optional, but highly recommended. It allows you to login to your MyIRMA environment in case your phone is lost or stolen, so you can close your account.' There are two input fields: 'Email address' and 'Repeat email address'. At the bottom, there are two buttons: 'Skip' and 'Next'.

The screenshot shows the 'Your attributes' screen. It has a title bar with a menu icon, the text 'Your attributes', and an IRMA logo. The main content area features a 'MyIRMA login' section with a dropdown arrow, showing 'Expires on 13 Apr 2028'. Below this is a 'Username' field with the value 'KI7fyaKKPBw'. At the bottom of the screen, there is a blue button with a QR code icon and the text 'Scan QR Code'.

The IRMA app

- * For Android and iOS
- * Improved registration and made email address optional
- * Added Dutch

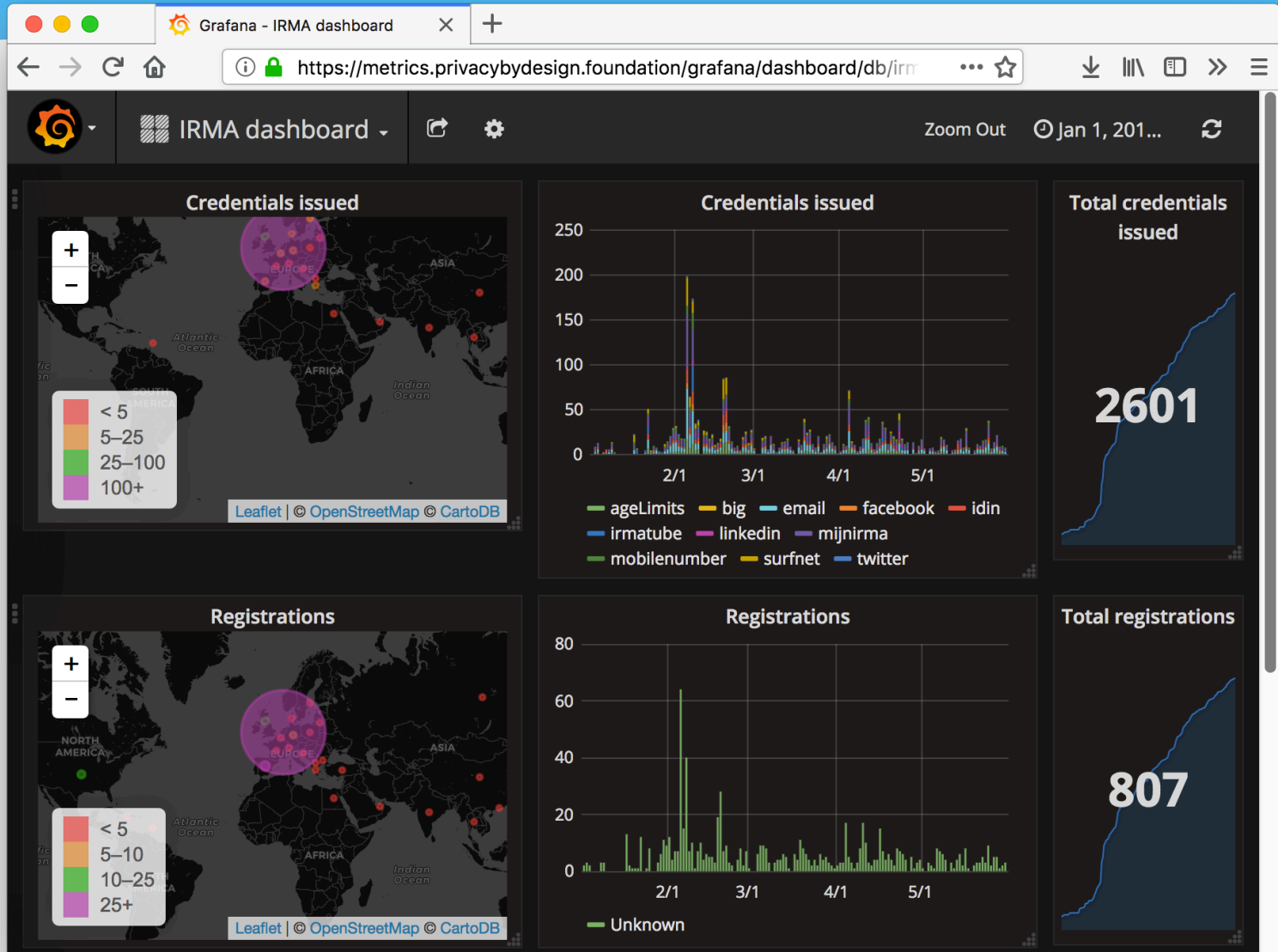


IRMA wins Privacy Award



- * Awarded by Privacy First and ECP
- * For “the privacy by design, the large innovative potential, the immediate applicability, and the potential social impact of IRMA.”


IRMA usage



New developments (1)

IRMA attribute-based signatures

I consent to share my data with my doctor.	
<i>Name</i>	Alice
<i>BSN</i>	12345



- * Digital signature with attributes attached to it
- * Use cases: authorization, permissions, statements, ...
- * See talk by Koen van Ingen

New developments (2)

New attributes:

- * Pilot: from Dutch population register (BRP)
 - * In collaboration with Nijmegen (but for all Dutch citizens)
 - * Personal data, address, travel document, BSN (!)
 - * See talk by Bram Withaar
- * WIP: DUO high school and university diploma attributes
 - * By parsing signed PDFs listing diplomas

Projects and collaborations

- * Utrecht 'huishoudboekje': signed consent statement
- * Nedap: connecting healthcare sectors
- * SURF: strong (2fa) authentication
- * EFRO chronic pain research project: authentication of patients and professionals
- * EFRO citizen science research project: authentication of participants
- * SIDN fonds/SURF: authentication for eduVPN

Developer gadgets

- * Docker image for IRMA API server
 - * Get it running in 2 commands!
- * Tutorial video for integrating IRMA authentication in your website
 - * <https://youtu.be/5aYQ2N7KR3c>
- * Index of available IRMA attributes
 - * <https://privacybydesign.foundation/attribute-index/en>
- * Join our Slack channel!

What's next?

- * Further development of attribute-based signatures
- * Making IRMA software easier to deploy (Docker)
- * IRMA app log screens of past transactions
- * Peer-to-peer attribute verification (e.g. bluetooth)
- * Attribute recovery in case of lost/stolen phone
 - * Ivar Derksen/Alliander

Thanks to

An unordered and inexhaustive list:

- * *Koen van Ingen*: attribute-based signatures
- * *Ayke van Laëthem*: issuance applications, attribute index, demos, ...
- * *Bas Westerbaan*: metrics dashboard, attribute-based signatures
- * *Tomas Harreveld*: new IRMA app
- * *Hanna Schraffenberger*: usability study, UI polishing, video
- * *Joost van Dijk*: integration with SURFnet, strong authentication
- * *Timen Olthof*: Nijmegen issuance, DIVA, ...
- * *Bram Withaar, Martijn van der Linden (ao)*: Nijmegen issuance
- * *Maarten Everts*: Go Idemix implementation

Thank you

← IRMA



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  **Following**

IRMA
@IRMA_privacy

IRMA, short for I Reveal My Attributes, is a privacy-friendly, attribute-based identity management system. IRMA is part of the Privacy by Design Foundation.

 The Netherlands
 privacybydesign.foundation/en/

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 **IRMA** @IRMA_privacy · May 17 ✓
Goed gesprek gehad met netwerkbedrijf @F5Networks. Ze gaan integratie tests doen met @IRMA_privacy.

  1  

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