Privacy and Identity

Werkconferentie Nijmegen

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Dimensions of privacy

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Privacy has many interacting dimensions, such as:

- **Legal**: what are the rules?
- **Ethical**: what do we see as right or wrong?
- **Technical**: how does privacy protection work (or fail)?

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- it's value-driven design, connecting principles and solutions
- relevant values: self-sovereignty, transparancy, independence
- catch-phrase: contextual authentication
- governance is a interesting & challenging issue in itself

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- When explained like this, almost everybody cares about privacy
- The Google's and Facebook's of this world make us use the same identifier everywhere or track us via Like  and cookies
  - they break-up contexts, and destroy our basic privacy intuitions
  - Mark Zuckerberg: "Having two identities for yourself is a lack of integrity" 

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- **Technicalities** of identification, authentication, authortisation
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Challenge: self-sovereignty in a data-driven world

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Experience: business-based solutions are not sufficiently trusted to become universal; they put too much emphasis on the privatisation of information and the modeling of users as consumers

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IRMA basics: reveal only relevant attributes

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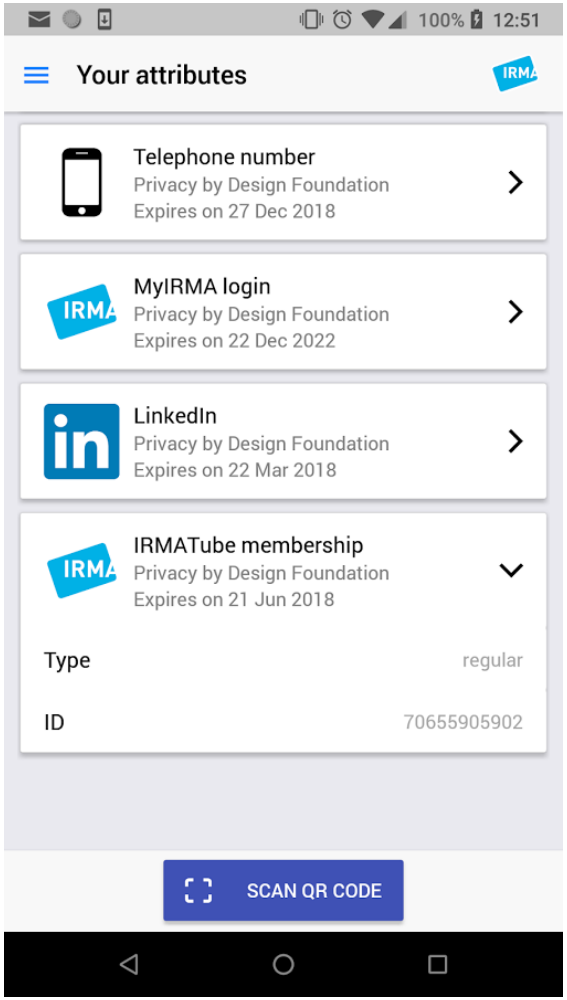

Authentication essentials:

- attributes instead of identities
- collected by user him/herself
- attributes are reliable (digitally signed by source)
- IRMA is free & open source
- decentralised architecture: attributes only on users own phone

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- **2016 – now**: technology deployment via non-profit foundation
  - https://privacybydesign.foundation set up in fall 2016
  - foundation runs infrastructure, and issues attributes
  - eg. from: iDIN (banks), SURFconext (academia), BIG (health)
  - both Android and iOS apps, with common code-base in **Go**
  - attribute verification pilots are emerging
  - attribute-based signatures will be added soon

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Centralised versus decentralised, schematically

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Centralised: everything goes via the Identity Provider (think iDIN)

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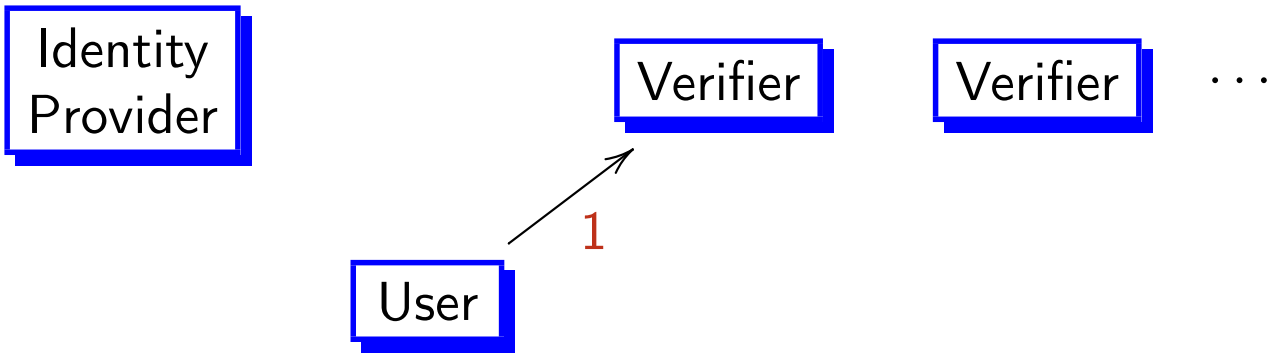

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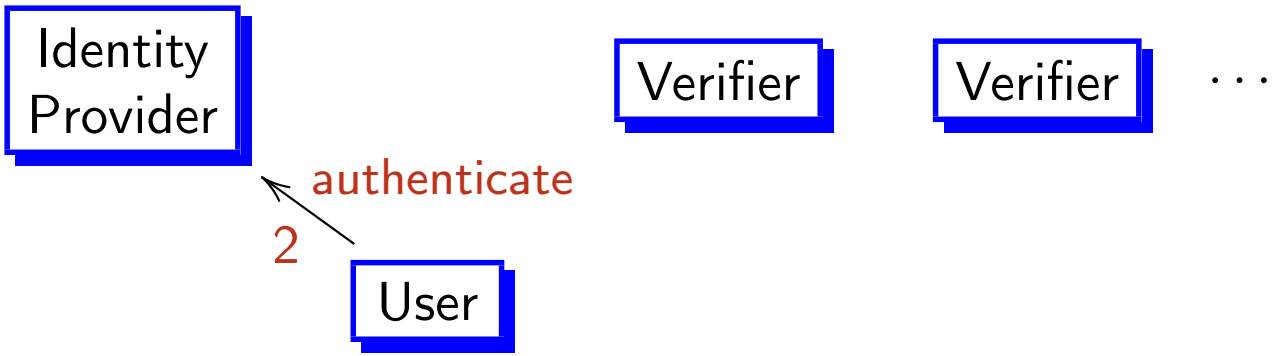

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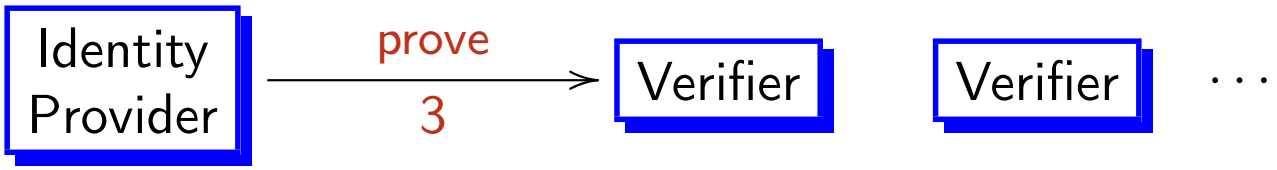

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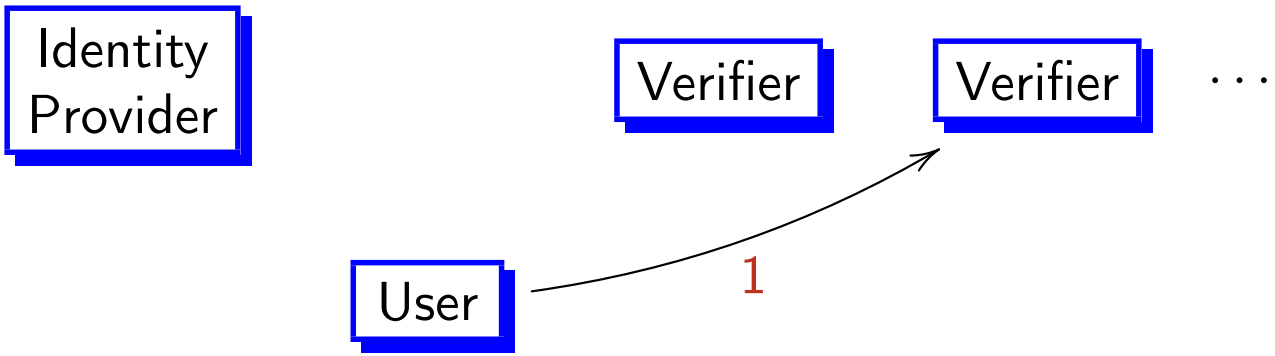

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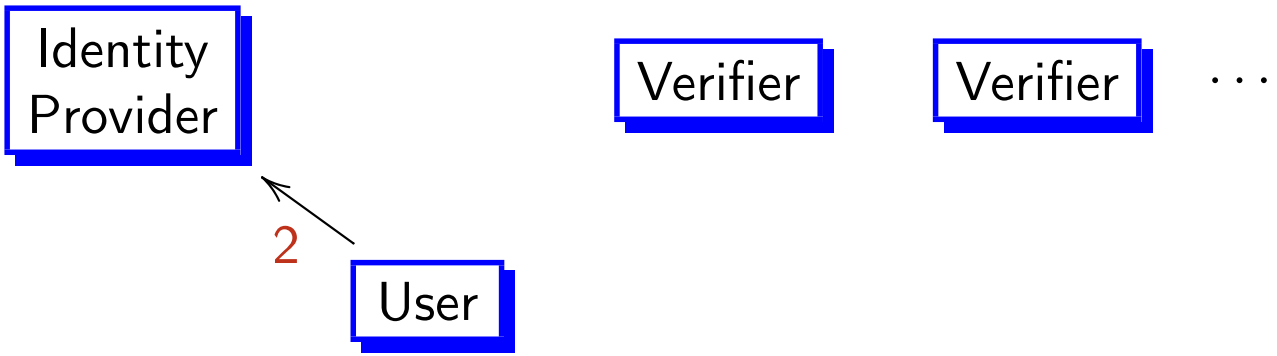

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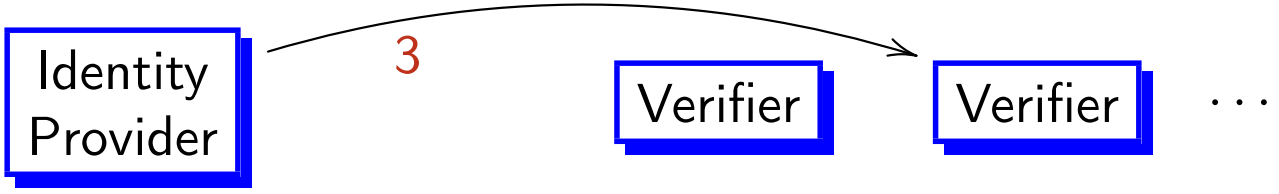

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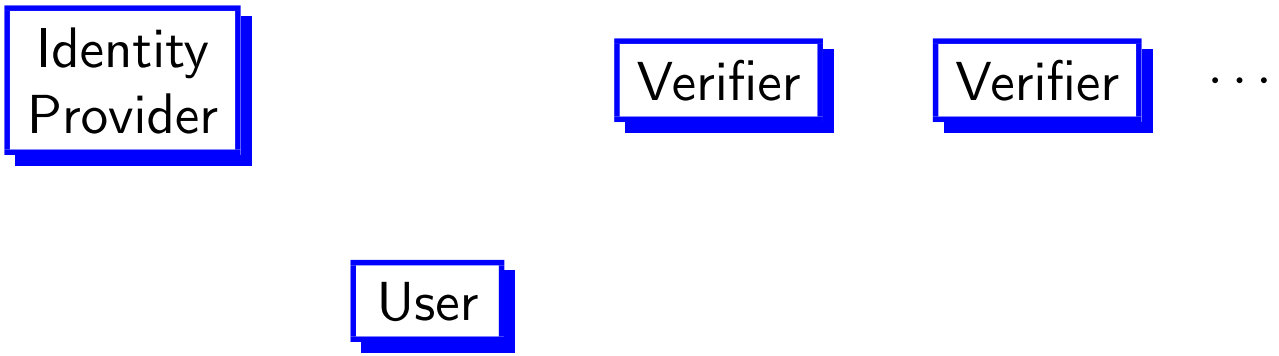

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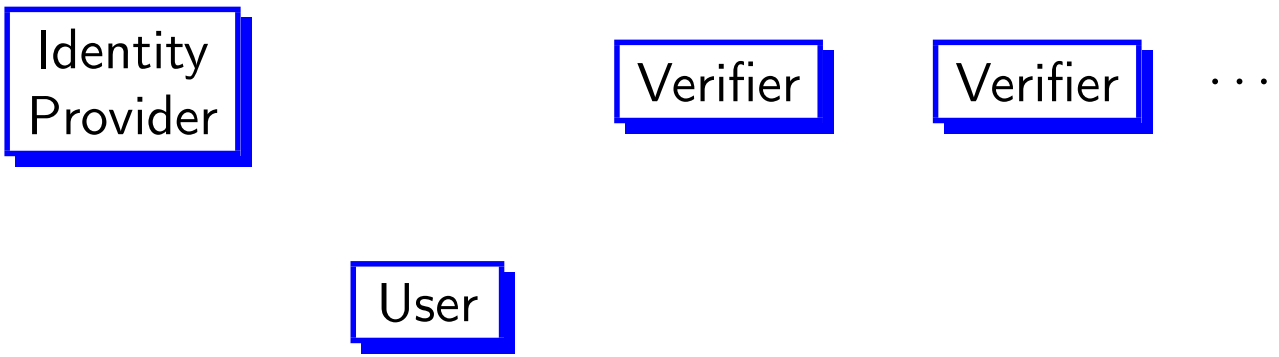

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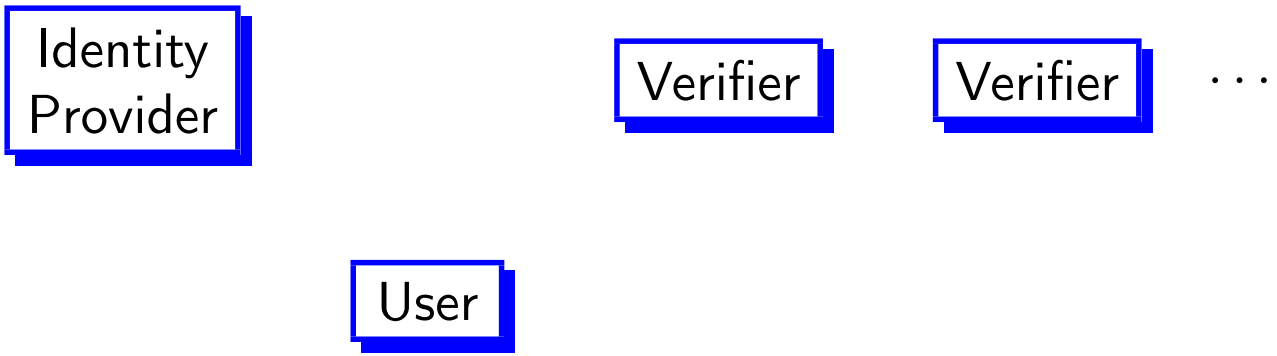

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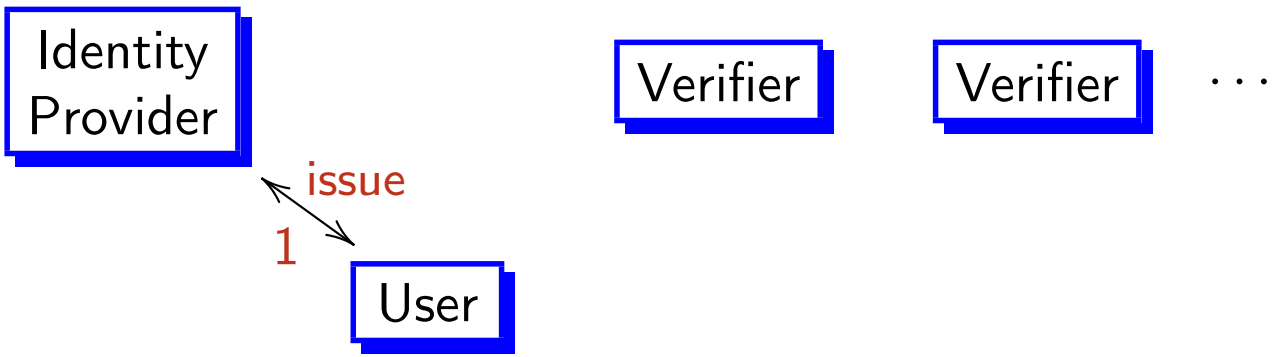

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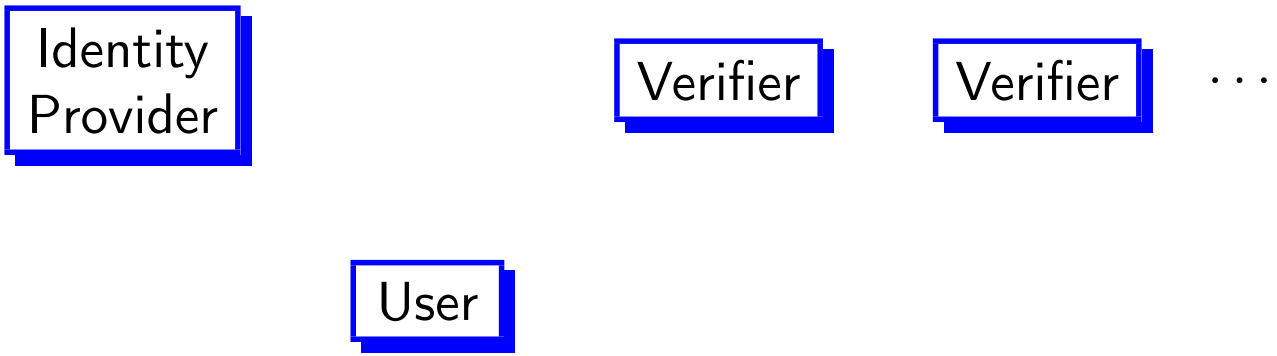

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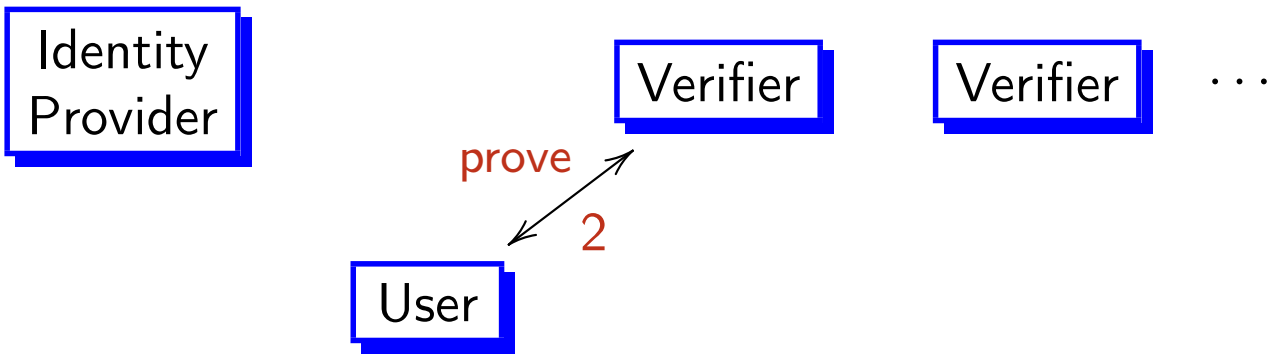

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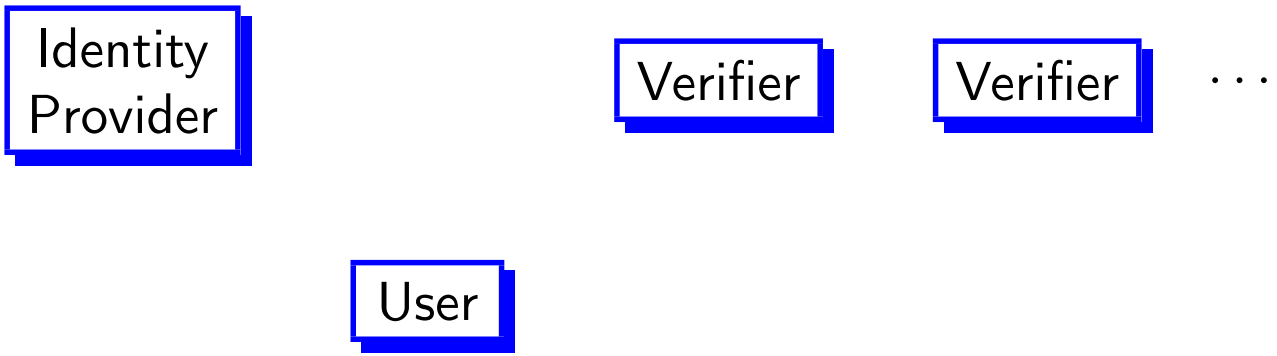

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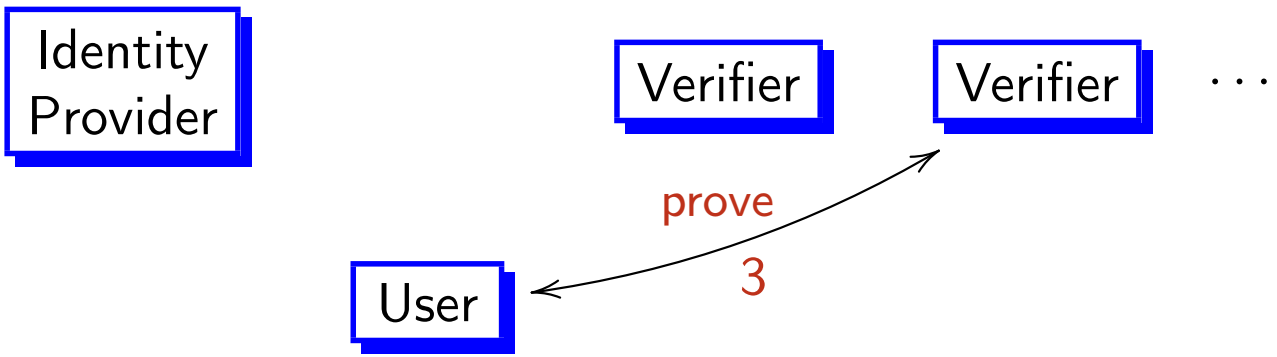

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Interested? Follow twitter.com/IRMA_privacy

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