Proximity Tracing

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Swiss National COVID-19 Science Task Force
Expert Group “Digital Epidemiology & Contact Tracing”
Contact Tracing & Quarantine
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Scenario 1:
one step behind
Contact Tracing & Quarantine

Scenario 1:
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Contact Tracing & Quarantine

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Contact Tracing & Quarantine

Scenario 1: one step behind
Scenario 1: one step behind
Contact Tracing & Quarantine
Contact Tracing & Quarantine

Scenario 2: one step ahead
Contact Tracing & Quarantine

Scenario 2: one step ahead
Proximity Tracing (PT) & Contact Tracing (CT)

Alice

healthy
infected
contagious
ill

Alice’s Contacts:

PT or CT: Same Goal & Handling Health Authorities

call hotline
Hotline
contact tracers

recommend quarantine; if contact accepts, follow standard quarantine protocol
Proximity Tracing (PT) & Contact Tracing (CT)

Contact Tracing is important to **prevent** further transmissions.

It has to be **fast**, because people can be contagious before having symptoms (pre-symptomatic transmission).

(Digital) proximity tracing **supports** classic contact tracing.

The app does not decide - it only **informs**, and asks exposed people to contact health authorities.

All aspects of the app (installation, use, contact of health authorities) are **voluntary**.
Proximity Tracing (PT)
Proximity Tracing (PT)

In reality:

kr38ry34e
3ed840&&7
8@3e2#E#e
&(SE3qeRG
sxW$eW4BH
Proximity Tracing (PT)
Proximity Tracing (PT)
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Proximity Tracing (PT)
Proximity Tracing (PT)
Proximity Tracing (PT)

- Data are continuously **deleted**
- IDs are **encrypted and rotating**
- Contact information always **stays on device**
- **No other** information is collected.
- Code is (already now!) **open source**.
Proximity Tracing (PT)

Decentral model
Proximity Tracing (PT)

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Decentral model

- Contact data stays on device
- Decision about exposure notification is made on device, not on central server
- The server only knows anonymous IDs of infected
- Data are continuously deleted

Proximity Tracing (PT) & Contact Tracing (CT)

Decentralized Proximity Tracing is extremely data-poor. It can be done without collecting personally identifiable information.

The basic idea of the decentralized design is to prevent mass surveillance.

Bluetooth distance estimates are estimates, hopefully as precise as possible with the support of the API by Google and Apple.

DP3T is an international consortium.

www.dpppt.org
DP3T: Fully Open Source Since Day 1
High Priority: International Interoperability

Decentralized Proximity Tracing Interoperability Specification

Release 0.1 (draft)

DP3T Team