# Demo of DANE-Enhanced Version of "Off-the-Record" Private Messaging Tool

Bootstrapping Trust for "Off-The-Record" With DNS and DNSSEC

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### getdnsapi

- getdns is a modern asynchronous DNS API
- getdns performs DNSSEC validation of records returned
- getdns allows applications to access DNSSEC validation

## dnskeys

- dnskeys is a Python library that fetches public cryptographic keys from DNS and validates their authenticity using DNSSEC
  - RFC6698 (TLSA)
  - draft-wouters-dane-openpgp-02
  - draft-wouters-dane-otrfp-01

## Instant Messaging

• real-time text transmission over the Internet

#### Off-The-Record

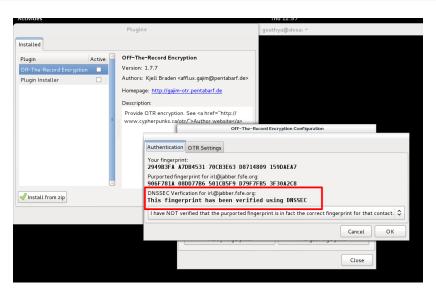
Off-the-Record Messaging, commonly referred to as OTR, is a cryptographic protocol that provides strong encryption for instant messaging conversations.

– Wikipedia

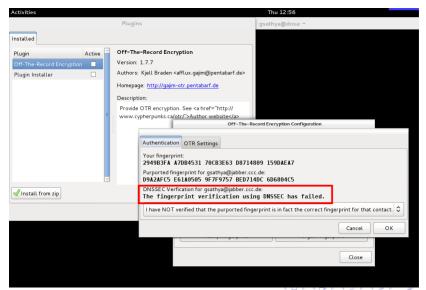
## **OTR Fingerprints**

906F781A08DD77B6501CB5F9D79F7FB53F30A2C8

## Verifying fingerprints with DNSSEC



## Verifying fingerprints with DNSSEC



## http://getdnsapi.net/dnskeys

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