

## BITS OF FREEDOM VERDEDIGT DIGITALE BURGERRECHTEN

Rejo Zenger | rejo.zengerßbof.nl | abitsoffreedom | Arejozenger


# Designing freedom 






The medium is the message




Computer code regulates conduct in much the same way that legal code does.

## Four major regulators: Laws, Norms, Market and Architecture.





## Why relevant to freedom?





## HANDS UP DOMT SHUUI

 Husticefolikikebow


TOP SECRET//SI//NOFORN
Current Efforts - Google
Public internet. Google Cloud.


"There are fewer and fewer technical constraints on what we can do. That places a special obligation on us to ask though questions about what we should do."

## So, now what?

Don't ask for details you don't need.


Decentralise whenever possible.


Don't have others spy on your users.


## Encrypt everything.





## Host your own code.



## Or even better: own everything you do.



## Be transparant to the user.



Name
First M
Middle
Last S

## Name Changes



Networks


# It's useable when your user thinks it is. 

| PGPkeys |  |  |  |  | 凹目 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| Name | Yalidity | Trust | Creation | Size |  |
| $\nabla$ Alma Whitten＜almaces．cmu．edu＞ | －\】 | CET | 9／24／98 | 1024／2048 | $\triangle$ |
| $\nabla \quad \bigcirc$ Alma whitten＜alma＠os．cmu．edu＞ |  |  |  |  | 目 |
| © ${ }^{\text {a }}$ Alma Whitten＜alma＠os．cmu．edu＞ |  |  | 9／24／98 |  |  |
| D Jom Bill Blanke＜wjb＠pgp．com＞ |  |  | 5／14／97 | 1024／4096 |  |
| D（10w Brett A．Thomas＜bat＠pgp．com＞ |  |  | 5／19／97 | 1024／2048 |  |
| D \1m Jason Bobier＜jason＠pgp．com＞ |  |  | 6／4／97 | 1024／2059 |  |
| D \＄1m Jeff Harrell＜jeff＠pgp．com＞ |  |  | 5／20／97 | 1024／2048 |  |
| D OTTleffrey I．Schiller＜jis＠mit．edu＞ |  |  | 8／27／94 | 1024 |  |
| D \＄0e jude shabry＜jude＠pgp．com＞ |  |  | 6／9／97 | 1024／2048 |  |
| D \1w Lloyd L．Chambers＜lloyd＠pgp．com＞ |  |  | 5／20／97 | 1024／4096 |  |
| D Jwo Mark B．Elrod＜elrod＠pgp．com＞ |  |  | 6／4／97 | 1024／2048 | $\checkmark$ |
| D T100 Mark H．Weaver＜mhw＠pgp．com＞ | $\square$ |  | 6／10／97 | 1024／2048 | $\sqrt{1 /}$ |

# Why Johnny Can't Encrypt: A Usability Evaluation of PGP 5.0 

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## Abstract

User errors cause or contribute to most computer security failures, yet user interfaces for security still tend to be clumsy, confusing, or near-nonexistent. Is this simply due to a failure to apply standard user interface design techniques to security? We argue that, on the contrary, effective security requires a different usability standard, and that it will not be achieved through the user interface design techniques appropriate to other types of consumer software.

## 1 Introduction

Security mechanisms are only effective when used correctly. Strong cryptography, provably correct protocols, and bug-free code will not provide security if the people who use the software forget to click on the encrypt button when they need privacy, give up on a communication protocol because they are too confused about which cryptographic keys they need to use, or accidentally configure their access control mechanisms to make their private data world-readable. Problems

| PGPkeys |  |  |  |  | 凹目 |
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| D \1w Lloyd L．Chambers＜lloyd＠pgp．com＞ |  |  | 5／20／97 | 1024／4096 |  |
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| Type | Name | ＾Email | Created | Key ID | Validity |
| :---: | :---: | :---: | :---: | :---: | :---: |
| pub | Marina Brown | catskillmarina＠gmail．com | 13 Aug 2011 | E79B0E9C | ㅌ口ロ吅 |
| pub | Marius Gedminas | marius＠gedmin．as | 27 Feb 2002 | E7A6D78F | 트플 |
| pub | Marius Köster | maurice＠prtrc．net | 11 May 2010 | 12266C34 | ㅍ口ロ |
| pub | mark burdett | mfb＠eff．org | 28 Sep 2010 | F4CEFOA5 | ㅍ口■■ |
| pub | Mark H．Wood | mwood＠iupui．edu | 30 Nov 1998 | 9B93286F | ㅍ口ロロ |
| pub | Mark Harrison | mark＠omniti．com | 25 Feb 2008 | 9BD08E13 | ㅌロロ吅 |
| pub | Mark Huizer | mark＠terantula．com | 4 Jun 2000 | 2AF2803E | 틒 |
| pub | Mark Janssen | maniac＠maniac．nl | 11 May 2009 | C4F69BD2 | ㅍ口■■ |
| pub | Mark Janssen | maniac＠maniac．nl | 15 May 2000 | 357D2178 | ㅍ口■■ |
| pub | Mark Lastdrager | mark．lastdrager＠pine．nl | 19 Mar 2002 | FFOEA728 | 틈 |
| pub | Mark Schouten | mark＠tuxis．nl | 8 Oct 2004 | 9AD617FF | 틒 |
| pub | Mark Tinka | mark．tinka＠seacom．mu | 23 Jun 2004 | DE2A6F86 | 픔口 |
| pub | Mark van Buuren | info＠markvanbuuren．com | 22 Jun 2013 | 3B61204E | 틈 |
| pub | Markus Hitter | mah＠jump－ing．de | 4 Mar 2011 | 806F3A3E | 픔口 |
| pub | Markus Miedaner | markusmiedaner＠gmail．com | 18 Jan 2005 | 694F9952 | ㅍ口ロロ |
| pub | Marloes de Boer | marloes＠dataloss．nl | 22 Dec 2003 | 5CE066B5 | ㅌ口ヲ |
| pub | Mart van Santen | mart＠greenhost．nl | 23 Dec 2011 | 10A3D3A5 | 트픔 |
| pub | MartenVijn | info＠martenvijn．nl | 26 Nov 2013 | 93D32504 | 틈 |
| pub | Mártha Csaba | martha．csaba＠steery．com | 3 Apr 2007 | CF20EA3A | ㅌロロ吅 |
| pub | Martien Remijn | m10＠xs4all．nl | 28 Jul 2004 | 003FB5A1 | ㅍ口ロ |
| pub | Martijn Grooten | martij＠＠lapsedordinary．net | 9 Nov 2013 | 5D22FF19 |  |
| pub | Martijn Houtman | martijn＠uncinc．nl | 10 Nov 2009 | 5031763F | ㅍ口■三 |
| pub | Martijn Ras | martijn．ras＠gmail．com | 28 Sep 2004 | F267555B | ㅍ口ロ |
| pub | Martijn van der Heide | mheide＠kpn－cert．nl | 23 Jun 2003 | 7FC616CF |  |
| pub | Martin F．Krafft | mai＠martin－krafft．net | 6 Jul 2009 | 999BBCC4 |  |
| pub | Martin F．Krafft | mail＠martin－krafft．net | 20 Jun 2001 | 330С4A75 | ㅌ口ロ吅 |
| pub | Martin Pitt | martin＠piware．de | 4 Jun 2000 | 5E0577F2 | ㅍ口ロロ |
| pub | Martin Schulze | joey＠infodrom．org | 13 Mar 1999 | 801EA932 | ㅌ口ロロ |
| pub | Martin Untersinger | untersinger＠lemonde．fr | 10 Sep 2014 | BFD0C67C | ㅍ口ロ吅 |
| pub | Martin Weinelt | tor＠linuxlounge．net | 12 Mar 2013 | A192CAF7 | ㅍ口ロロ |
| pub | Martin Weinelt | martin＠linuxlounge．net | 20 May 2010 | 8F63F17E | ㅌロロ |
| pub | Martin Wuertele | martin＠wuertele．net | 15 May 2000 | 3E8DCCC0 |  |
| pub | marty | marty＠goodoldmarty．com | 29 Feb 2008 | A55140A2 | $\square \square \square \square$ |
| pub | Maryant Fernández | edri．intern＠edri．org | 4 Jun 2014 | B6185CC5 | 틈 |
| pub | Maryant Fernández | maryant．fernandez－perez＠edri．org | 9 Sep 2014 | 3D740B42 | ㅍ口■ |
| pub | Mateusz Blaszczyk | blahu77＠gmail．com | 3 Jan 2014 | 721D5959 | ㅍ口ロロ |
| pub | Mathias Bauer |  | 29 Nov 2013 | A7629DE8 | ㅍ口ロ |

1439 of 1439 keys listed
Show secret keys only


## PRIVATE MESSAGING

For iPhone and Android
$\checkmark$ Say Anything - Send high-quality group, text, picture, and video messages, all without SMS and MMS fees.

- Be Yourself - Use your existing phone number and address book. There are no separate logins, usernames, passwords, or PINs to manage or lose.
$\checkmark$ Stay Private - We cannot read your messages, and no one else can either Everything is always end-to-end encrypted and painstakingly engineered in order to keep your communication safe.
$\checkmark$ Get Organized - Archive functionality makes it easy to keep track of the conversations that matter to you right now.
$\checkmark$ Pay Nothing - The development team is supported by community donations and grants. There are no advertisements, and it doesn't cost anything to use.


## $\dot{C}_{\text {Appsion }}$

## Or help your local digital rights organisation. There are many.

## access

PRotecting digital freedom


F ELECTRONIC FRONTIER FOUNDATION
defending your rights in the digital world

## Who? Me?







# Now: question everything. 

# BITS OF FREEDOM VERDEDIGT DIGITALE BURGERRECHTEN 

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[^0]
[^0]:    Credits. Sze Ning (waterpump), Sze Ning (bad waterpump), J.T. Broekhuijse (good waterpump), Leif K-Brooks (Marshall McLuhan), Samwoo E (knife), Niklas Pivic (finger), Joi Ito (Lawrence Lessig), City Clock Magazine (Paris), Dylan Passmore (speed hump), Thomas Mulders (bagage claim), Kenny Louie (Ontario Highway 401), Getty (Ferguson protest), Lassi Kurkijärvi (Amsterdam), Edward Snowden (Platon for Wired), Barack Obama (himself), Fred Blocher (Buckminster Fuller), YSSYguy (trimtab of Plane) and

