### More secure WITIN less "security" **Tobias Mueller** Stef Walter



# **GNOME**<sup>TM</sup>

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application containment enhanced disk encryption support Tor integration user control over diagnostic reporting features robust VPN routing application integration with system-wide privacy settings control how GNOME devices are identified on networks anti-phishing features for Web, the GNOME browser





memegenerator.net



### human [hyoo-muhn or, often, yoo-]

"Filtering out extraneous information is one of the basic functions of consciousness" — Barry Schwarz

### freedom = choice

### IF YOU FORCE THE USER TO BEA PART OF A SECURITY SYSTEM

# VOUEGONAHABABADTIME

The extent of the human's involvement in security prompts is to identify themselves

# Experts?

the worst possible time to ask a user a risky question?

### when they're trying to do something else.



# Prompts are OUDEOUS

# Security prompts are Wrong

# Interrupting the user to make a permanent security decision is EVIL

#### Untrusted connection



This connection is untrusted. Would you like to continue anyway?

The identity provided by the chat server cannot be verified.

The certificate is self-signed.

- Certificate Details
- Remember this choice for future connections

Cancel

Continue

The software is not signed by a trusted provider.



The software is not signed by a trusted provider. Do not update this package unless you are sure it is safe to do so.

Malicious software can damage your computer or cause other harm. Are you **sure** you want to update this package?



Force install



Abrt found a new update which fix your problem. Please run before submitting bug: pkcon update --repo-enable=fedora -repo-repo=updates-testing tracker-0.14.1-1.fc17. Do you want to continue with reporting bug?

No Yes	No	Yes
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# 

# 

# Stop interrupting

# Let the user express their intent...

# ... and make security decisions based on intent.

# Example: Portals



#### Upload Photo



Do you want to upload possibly private EXIF data?

No	Ye
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# Example: EXIF



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Kressbronn, Baden-Würtemberg, Germany 09-Sep-2012 15:34

43 N M

Photos

MISE

×

≎

# Fix(ing) it!

Bye bye Certificate Prompts

### Certificate Viewer

Identity: CA Cert Signing Authority Verified by: CA Cert Signing Authority Expires: 03/29/2033

🗆 Details

#### Subject Name

O (Organization): Root CA

OU (Organizational Unit): http://www.cacert.org

CN (Common Name): CA Cert Signing Authority

EMAIL (Email Address): support@cacert.org

#### Issuer Name

O (Organization): Root CA

OLL (Organizational Unit) - http://www.cacert.org



### Just drop the connection

## But but but
#### Configure an Enterprise CA

### Can now store anchors

## **Experts:** Pin certificates to accounts

#### **Shared System Certificates**



## Command line tools

## GUI

#### real soon now...



NSS, GnuTLS, Java, OpenSC, OpenSSH, OpenVPN, QCA (QT), GNOME Keyring, TrueCrypt, GLib, OpenSSL (sorta) ...

## Library: p11-kit

http://p11-glue.freedesktop.org/p11-kit.html

# Go forth and kill prompts

Ellisons Law: For every keystroke or click required to use a crypto feature the userbase declines by half.

## Any Questions?

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## Credits:

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