



Other topics of interest

Small Business Digitization Initiative (SBDI) - Bonus

By Marc Lijour

March 22, 2017



The registered trademark Linux® is used pursuant to a sublicense from LMI, the exclusive licensee of Linus Torvalds, owner of the mark on a world-wide basis.

Table of Contents

1 Privacy Matters

- Why it matters

2 Challenges to our Freedom

3 Working Efficiently AND (not OR) Protecting our Freedom



Savoir-faire
LINUX

Devices for Digital Consumption

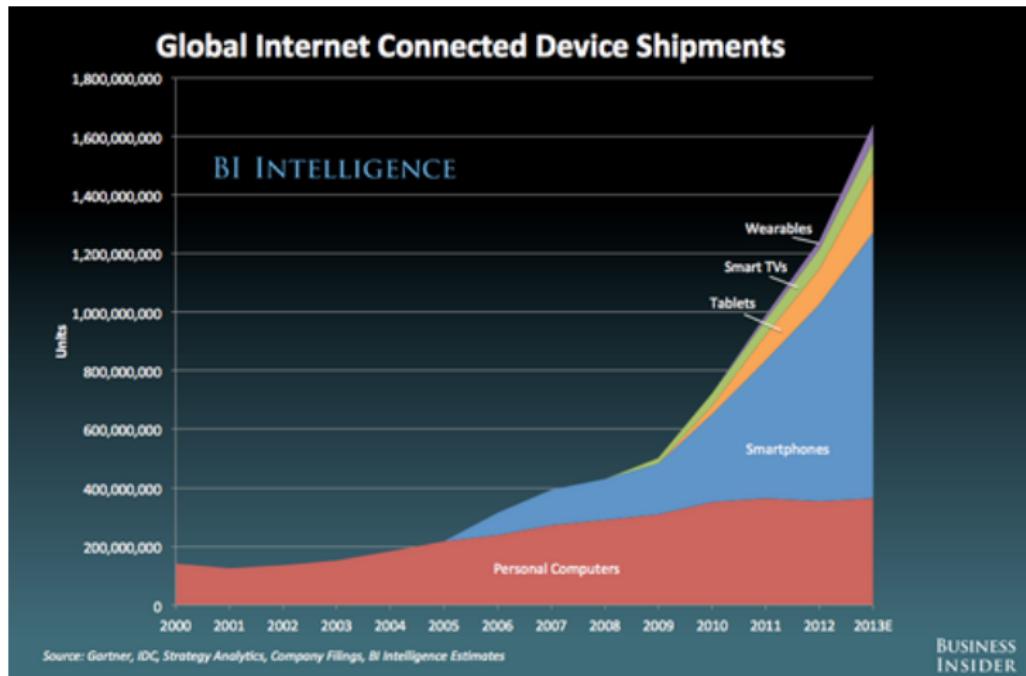


Figure: Picture from Maquabela, 2013

Microsoft's View on IoT by 2015

Devices sharing information about our lives



Figure: IoT across devices with Windows 10 and Azure IoT Suite by Tuzović, 2015



Savoir-faire
LINUX

All our data is online



Savoir-faire
LINUX

All our data is online

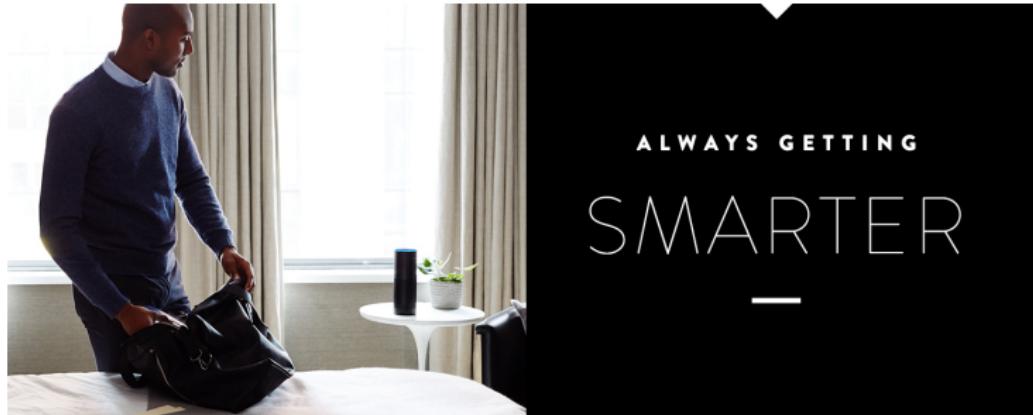


Figure: The AI from Amazon is (almost) always listening, and the police is interested (Bradley, 2017)



What could go wrong?

(and should we trust government?)



Figure: <http://www.zerohedge.com/news/2016-08-08/trump-financial-plan>

Marc Lijour

Digitization Theory Bonus

March 22, 2017



Table of Contents

1 Privacy Matters

- Why it matters

2 Challenges to our Freedom

3 Working Efficiently AND (not OR) Protecting our Freedom



The meaning of Freedom

- Do what you like while respecting the next in kind's freedom



The meaning of Freedom

- Do what you like while respecting the next in kind's freedom
- Democracy



The meaning of Freedom

- Do what you like while respecting the next in kind's freedom
- Democracy
- Citizenship



The meaning of Freedom

- Do what you like while respecting the next in kind's freedom
- Democracy
- Citizenship
- Human Rights



The meaning of Freedom

- Do what you like while respecting the next in kind's freedom
- Democracy
- Citizenship
- Human Rights
- Rule of Law (Justice, Equity)



The meaning of Freedom

- Do what you like while respecting the next in kind's freedom
- Democracy
- Citizenship
- Human Rights
- Rule of Law (Justice, Equity)
- Liberté - Égalité - Fraternité



What could go wrong?

Excessive (?) Government Surveillance & Intervention

- Citizen Biometric Registry –a real perspective in France (Sayer, 2016)



What could go wrong?

Excessive (?) Government Surveillance & Intervention

- Citizen Biometric Registry –a real perspective in France (Sayer, 2016)
- Patriot Act (& others: French Govnt Act, 2015...)



Savoir-faire
LINUX

What could go wrong?

Excessive (?) Government Surveillance & Intervention

- Citizen Biometric Registry –a real perspective in France (Sayer, 2016)
- Patriot Act (& others: French Govnt Act, 2015...)
- Chinese Firewall



What could go wrong?

Excessive (?) Government Surveillance & Intervention

- Citizen Biometric Registry –a real perspective in France (Sayer, 2016)
- Patriot Act (& others: French Govnt Act, 2015...)
- Chinese Firewall
- Government-led Cyberattacks



Savoir-faire
LINUX

The User is the Product

GAFAM & Corporate Interests under scrutiny

- Users are the product (e.g. Google, according to Kepes, 2013)
- Microsoft launched a “Scroogled” campaign as a result (O'Reilly, 2015), but what about privacy issues in Windows 10 (Bott, 2016)?
- In a case against Google, US Magistrate Judge Paul Grewal declared: “in this model, the users are the real product”
- Follow the money:
 - US Internet Advertising Revenue in 2015: \$59.6 billion
 - Google: \$30 billion
 - Facebook: \$8 billion
- Big Data & Analytics is thriving with multiple data points (devices, apps, cameras...)
- Organizations are vulnerable to security breaches



Savoir-faire
LINUX

Table of Contents

1 Privacy Matters

- Why it matters

2 Challenges to our Freedom

3 Working Efficiently AND (not OR) Protecting our Freedom



Savoir-faire
LINUX

Educate about Cybersecurity

Example: CyberTitan

- ICTC program for high school students



Figure: <http://www.cybertitan.ca>



Educate about Cybersecurity

Example: CyberTitan

- ICTC program for high school students
- in partnership with the US Air Force Association's CyberPatriot Program



Figure: <http://www.cybertitan.ca>



Educate about Cybersecurity

Example: CyberTitan

- ICTC program for high school students
- in partnership with the US Air Force Association's CyberPatriot Program
- to develop in-demand skills needed to work in CyberSecurity, and other STEM areas



Figure: <http://www.cybertitan.ca>

Learn from Mozilla Internet Citizen



Figure: <https://blog.mozilla.org/internetcitizen/>



Solve the toughest 21st Century Challenges with PIE®



Figure: <https://prepr.org>



Design your EdTech Environment with Privacy in Mind

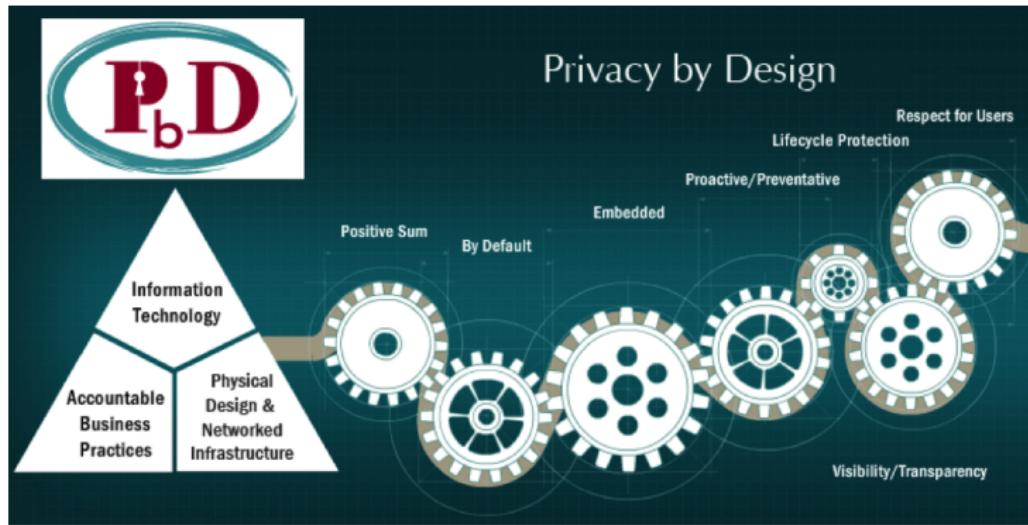


Figure: Dr. Ann Cavoukian, Executive Director, Privacy and Big Data Institute (Dr. Cavoukian, 2011)



Prefer Decentralized Systems that put you in control

Examples: Blockchain, and Ring for Secure Communications

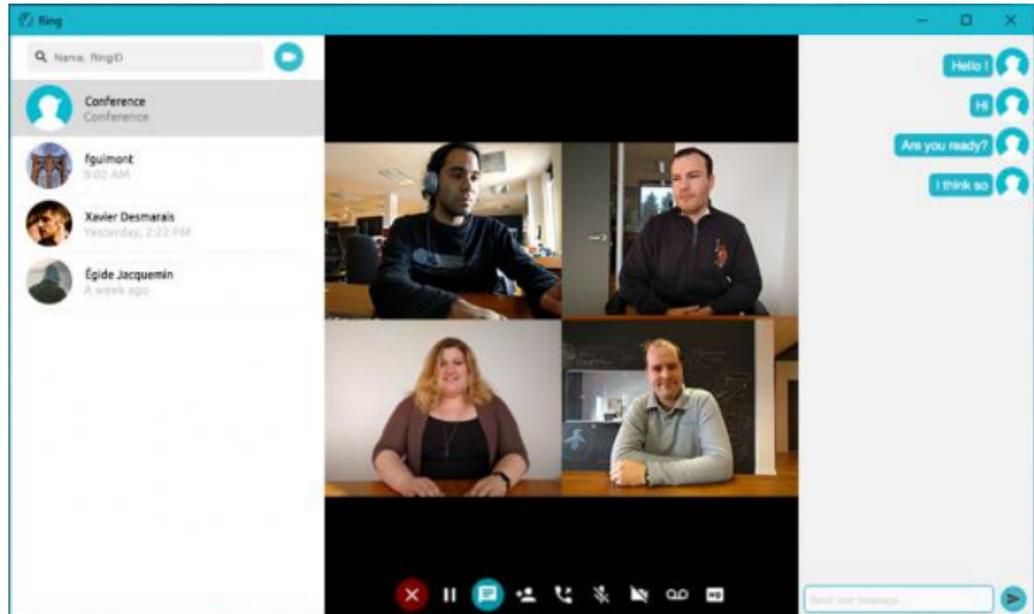


Figure: Data is shared as a need-to-know basis, see <http://ring.cx>



Savoir-faire
LINUX

Build Community Clouds that you control

- Hosted in Canada



Build Community Clouds that you control

- Hosted in Canada
- On your premises or at a secure location



Build Community Clouds that you control

- Hosted in Canada
- On your premises or at a secure location
- As a school board, or an association of privacy-conscious teachers



Savoir-faire
LINUX

Build Community Clouds that you control

- Hosted in Canada
- On your premises or at a secure location
- As a school board, or an association of privacy-conscious teachers
- As an individual (for example on OVH or Microsoft Azure)



Savoir-faire
LINUX

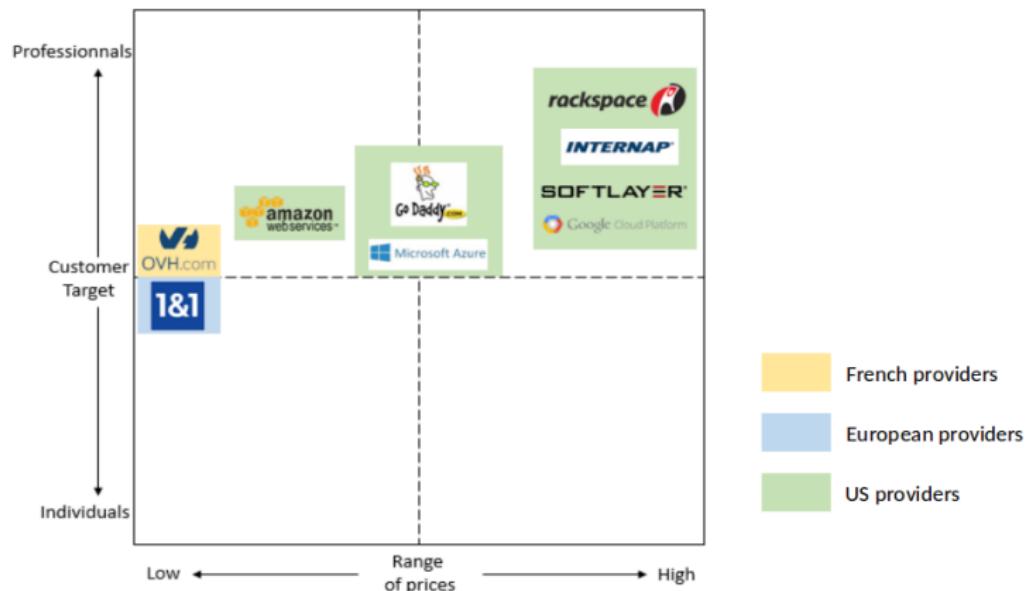
Build Community Clouds that you control

- Hosted in Canada
- On your premises or at a secure location
- As a school board, or an association of privacy-conscious teachers
- As an individual (for example on OVH or Microsoft Azure)
- With the help of students



Secure Clouds for your Pocket Book

OVH is the Top 3 Cloud Company with a data centre in Canada



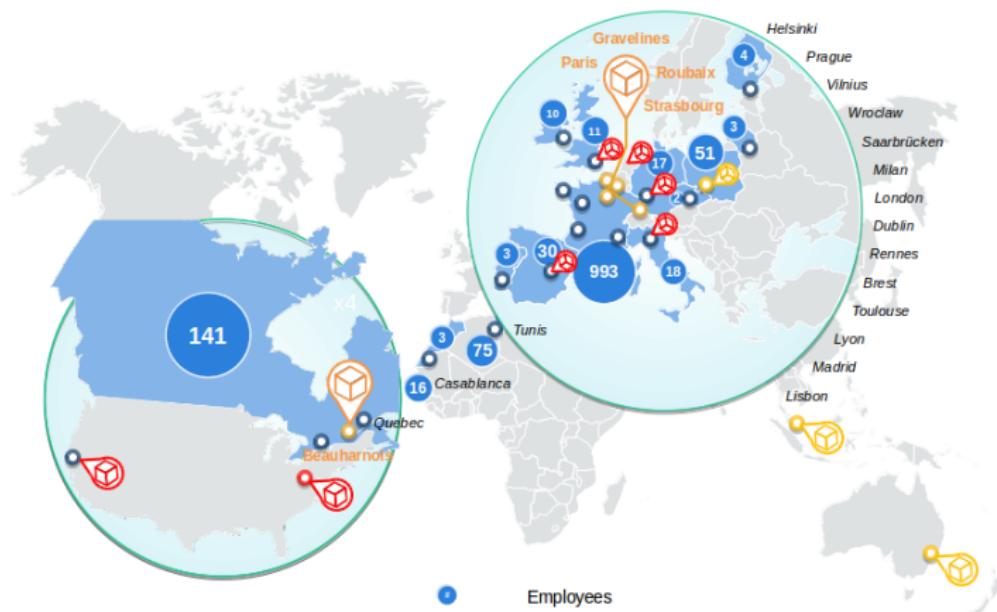
OVH in Canada

- +30M\$ invested in Canada since 2013
- +3,000 Customers in Canada
- 2 PoP in Canada (Montreal and Toronto) and 11 in the US
- Strategic partnerships:
 - Rogers as a reseller of Public Cloud Enterprise solutions Canada-wide
 - VMWare (Partner Innovation Award received in 2016)
 - OpenStack (one of the 3 major contributors WW)
- Technological partners: **Savoir-faire-Linux**, LinkByNet...



OVH Global Footprint

#1 in Europe, Top 3 Globally



Build your own server / IoT device with lunch money

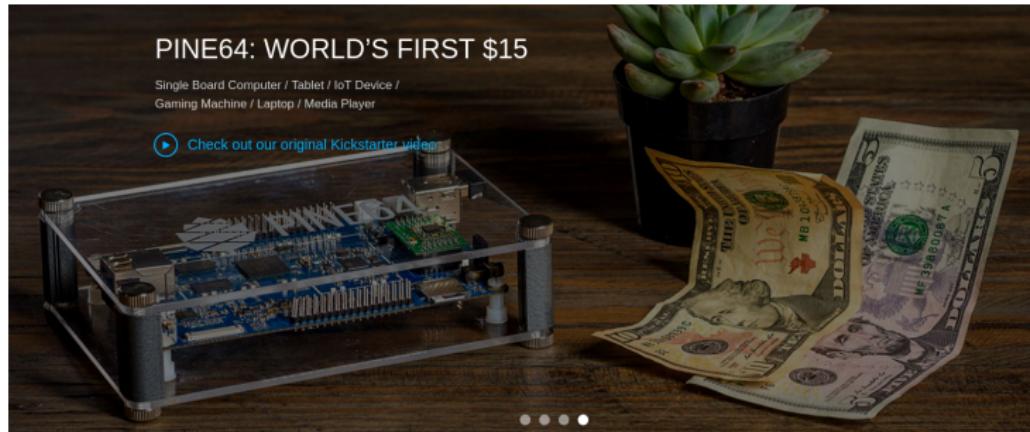
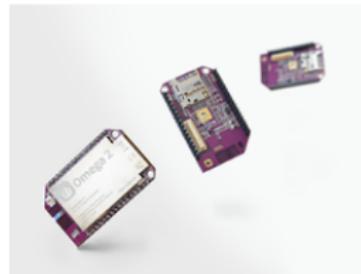


Figure: <https://www.pine64.org>

Build your own server / IoT device on a coffee budget



Introducing the Omega2, the \$5 IoT computer. What the heck is an IoT computer? It is a Linux computer designed specifically for building connected hardware applications. It combines the tiny form factor and power-efficiency of the Arduino, with the power and flexibilities of the Raspberry Pi. With the Omega2, we want to lower the barrier of entry, and allow everyone to take the leap into hardware development.

Figure: <https://www.indiegogo.com/projects/omega2-5-linux-computer-with-wi-fi-made-for-iot>

Use Free Software Alternatives

Example: Framasoft alternative to G Suite for Education & other popular SaaS



Framasoft

<https://framasoft.org>

- Founded in France (2004)
- Promotes and educates about Free Software, Free Culture, Free Services
- Flagship project to offer Free/Libre alternatives to dominant proprietary offers
- 3 FTEs, and a large community
- 30 solutions online (SaaS), or download and install on your own cloud/server



30 Framasoft Services



Figure: <https://degooglisons-internet.org/liste?l=en>

Framadrive ↔ Google Drive

The screenshot shows the OwnCloud web interface. On the left, there's a sidebar with links: 'Tous les fichiers' (selected), 'Favoris', 'Partagés avec vous', 'Partagés avec d'autres', 'Partagés par lien', 'Fichiers supprimés', and 'Paramètres'. The main area displays a list of files and folders:

	Nom	Taille
	Documents	35 kB
	Photos	663 kB
	ownCloudUserManual.pdf	2.1 MB
2 dossiers et 1 fichier		2.8 MB

A large OwnCloud logo is visible on the right side of the interface.

Figure: Based on OwnCloud -with calendars, contacts, mobile app...



Savoir-faire
LINUX

Framacalc ↔ Google Spreadsheet

	Dénomination	Lien	Licence
1	Framakey Mint		
2			
3	Dénomination	Lien	Licence
4	Logiciels		
5	Framakey 2 (structure interne)	http://framakey.org/Pack/Pack20Base	GPL
6	Linux Mint	https://www.linuxmint.com/	Multiples (Principalement GPL)
7			
8			
9	7-zip	http://www.7-zip.org	GPL
10	Audacity	http://audacity.sourceforge.net	GPL
11	CAFE	http://clief.usb.googlepages.com/cafe	GPL
12	Cdex	http://cdexos.sourceforge.net	GPL
13	ClavicomNG	http://www.i-comprovence.net/?ClavicomNG	GPL
14	Coolplayer	http://coolplayer.sourceforge.net	GPL
15	Ditto	http://ditto-cp.sourceforge.net	GPL

Figure: Based on EtherCalc



Savoir-faire
LINUX

Framagenda ↔ Google Calendar

The screenshot shows the Framagenda web interface with a purple header. The title "Agenda" is at the top left, and "TCIT" is at the top right. Below the header is a navigation bar with a back arrow, the month "septembre 2016", a forward arrow, and buttons for "jour", "Semaine", "Mois", and "Auj.". The main area is a calendar grid for September 2016. The days of the week are labeled "lun.", "mar.", "mer.", "jeu.", "ven.", "sam.", and "dim.". The dates from 29 to 30 are partially visible at the top. The days from 1 to 11 are in the first row. A red box highlights the entry "15:00 Conférence ownCloud" on Saturday, September 10. The days from 12 to 18 are in the second row. A red box highlights "Conférence" on Wednesday, September 13. The days from 19 to 25 are in the third row. The days from 26 to 30 are in the fourth row. The days from 1 to 2 are in the fifth row. The days from 3 to 9 are in the sixth row. At the bottom left, there is a gear icon and the text "Paramètres". At the bottom right, there is a logo for "Savoir-faire LINUX" with a blue circular icon containing a white figure.

Framadate

Make your polls

English OK

		octobre 2014					
		mer. 22	jeu. 23	ven. 24	sam. 25	matin	soir
		10h	19h	15h30	20h	10h-19h	
	Vacé	✓	✓	✓	✓	✓	✓
Agnès		✓	✓	(✓)	✓	✓	✓
Mohamed		✓	✓	✓	✓	✓	✓
Cathy		✓	✓	(✓)	✓	✓	✓
Adelin		✓				✓	✓
Claire		(✓)	(✓)	✓	(✓)	✓	✓
Luc		✓	✓	✓	✓	✓	✓
Somme		2	3	2	2	*4	1

		octobre 2014					
		mer. 22	jeu. 23	ven. 24	sam. 25	matin	soir
		10h	19h	15h30	20h	10h-19h	
	Vacé	✓	✓	✓	✓	✓	✓
Serge		✓		✓	✓	✓	✓
Jeanne		✓		✓	(✓)	✓	✓
Émilie		✓		✓	✓	✓	✓
Xavier			(✓)		✓	✓	✓
Hugo		✓				✓	✓
Somme		★3	2	★3	2		

 Schedule an event

 Make a standard poll



Savoir-faire
LINUX

B I U S Normal A C x² x₂ Entrez votre i
Oscar Yuma

1 Nasreddin et le pommier

2 Nasreddin plantait un pommier dans son jardin quand le sultan vint à passer ;
3 il s'arrêta et dit à Nasreddin, d'un ton moqueur :
4

5 – Voyons, Nasreddin ! Pourquoi te donnes-tu tant de peine ? Tu ne mangeras jamais les fruits de ce pommier.
6 Tu sais bien que tu mourras avant qu'il ne commence à produire des pommes.

7 Ce à quoi Nasreddin répondit :

8 – Oh Sultan ! Nous mangeons les fruits des pommiers plantés par nos pères, et nos enfants mangeront les fruits
9 des pommiers plantés par nous.

10 Cette réponse pleine de sagesse plut au sultan qui, en récompense, donna une pièce d'or à Nasreddin.

11 – Oh Sultan ! , dit Nasreddin en empochant la pièce, voyez comme ce pommier a déjà donné des fruits.

12 Cette remarque fit rire le sultan, qui lui donna une autre pièce d'or.

13 – C'est de plus en plus extraordinaire, s'écria Nasreddin. Voilà un pommier qui donne deux récoltes par an.

14 Le sultan se mit à rire aux éclats et donna une troisième pièce d'or à Nasreddin.

15 Chat

Matéo: Coucou	13:41
Maya: Salut Matéo	13:41

Framacarte: Draw your own maps

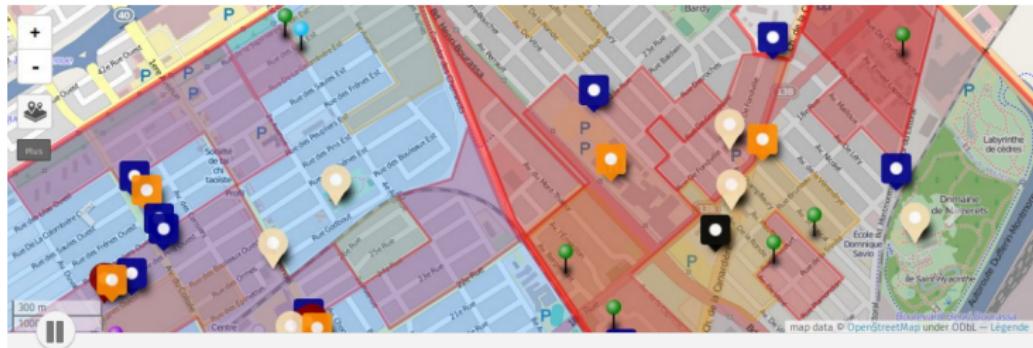


Figure: Based on uMap and OpenStreetMap



Savoir-faire
LINUX

Framinetest ↔ Minecraft

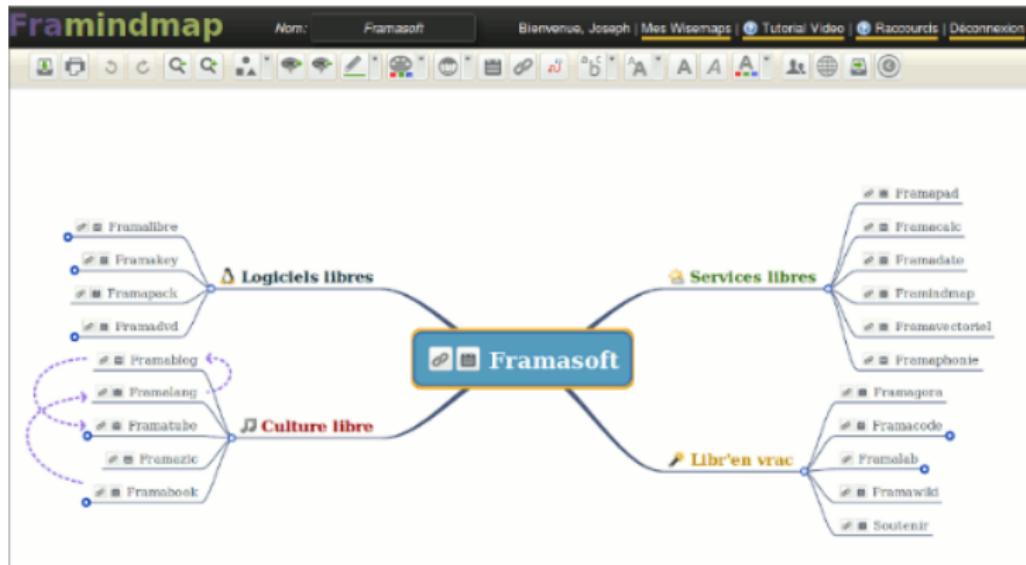


Figure: Based on Minetest



Savoir-faire
LINUX

Framamind ↔ Inspiration / Freemind



Framabookin ↔ Kindle Store (for free books)



Savoir-faire
LINUX

More Software -beyond Framasoft

FREE DVD!  **3 UBUNTU DISTROS**

LINUX FORMAT

Get into Linux today!

Hack! Code! Build!

The 100 must-have open source tools for your Linux desktop

- » Improve your documents
- » Monitor your systems
- » Edit video and audio
- » Secure your PCs
- ...and loads more!



IS YOUR FREE DVD MISSING?
Check if you've received it now!

All's faire...
This year we tried to
tempt more food hacks,
the brewers and hot sauces”
MakerFaire UK 1,000s descend, build & eat!

Docker on the Pi!
Build a home Docker cluster
to learn this virtualisation tool

Security
VoIP protection
» How to build a SIP phone

Roundup
Get organised!
» Organise your life and
never miss another task

Future
UPPER ADDITION NUMBER 38-48
9 771475151252

FREE DVD!  **MINT 17.3: TRY IT NOW!**

LINUX FORMAT

Get into Linux today!

ESCAPE WINDOWS

Discover the freedom and power of Linux

- » Free to install
- » Easy to use
- » Fast, secure and powerful
- » Get started right now!



IS YOUR FREE DVD MISSING?
Check if you've received it now!

“It's great for everyone to
use open source, but with
science it's especially important”
Amy Boyle on Python in science p40

Plus: Pi User
8-page Raspberry Pi companion
» Games and GPIO in Scratch
» Discover OpenMediaVault

Roundup
Backup and secure
» Keep your system intact and
safe. Back up tools to use

Network storage
Build a Pi NAS
» Create an eco-friendly and
cost-effective solution

Future
UPPER ADDITION NUMBER 38-48
9 771475151252

Conclusion

- Find your comfortable position on the Privacy–Convenience spectrum



Conclusion

- Find your comfortable position on the Privacy–Convenience spectrum
- Full privacy is achievable



Conclusion

- Find your comfortable position on the Privacy–Convenience spectrum
- Full privacy is achievable
- Most Cloud services have alternatives



Conclusion

- Find your comfortable position on the Privacy–Convenience spectrum
- Full privacy is achievable
- Most Cloud services have alternatives
- Run applications from your trusted machines



Conclusion

- Find your comfortable position on the Privacy–Convenience spectrum
- Full privacy is achievable
- Most Cloud services have alternatives
- Run applications from your trusted machines
- Trust must be earned



Conclusion

- Find your comfortable position on the Privacy–Convenience spectrum
- Full privacy is achievable
- Most Cloud services have alternatives
- Run applications from your trusted machines
- Trust must be earned
- Work towards a more free, secure, and private world



Feel Free
Be Free!



Savoir-faire
LINUX

References |

- Bott, E. (2016, December). *ZDNet*. Retrieved from
<http://www.zdnet.com/article/take-control-of-your-privacy-in-windows-10/>
- Bradley, T. (2017, January). How Amazon Echo users can control privacy. *Forbes*. Retrieved from
<http://www.forbes.com/sites/tonybradley/2017/01/05/alexa-is-listening-but-amazon-values-privacy-and-gives-you-control/#7c920725eed5>
- Cavoukian, A. (2011). Strong privacy protection – now, and well into the future –a report on the state of pbd to the 33rd international conference of data protection and privacy commissioners. Retrieved from <https://www.ipc.on.ca/wp-content/uploads/Resources/PbDReport.pdf>
- Kepes, B. (2013, December). *Forbes*. Retrieved from
<http://www.forbes.com/sites/benkepes/2013/12/04/google-users-youre-the-product-not-the-customer/%5C#2871b0bc1624>

References II

- Maqubela, K. (2013, November). Contrarian Thinking: Mobile vs. PC in Emerging Markets. Retrieved from <http://blog.kanyi.me/post/66994307568/contrarian-thinking-mobile-vs-pc-in-emerging>
- O'Reilly, L. (2015, January). *Business Insider*. Retrieved from <http://www.businessinsider.com/microsoft-shuts-down-scroogled-website-2015-1>
- Sayer, P. (2016, November). French plan for biometric database of 60 million people sparks outcry. Retrieved from <http://www.pcworld.com/article/3139461/security/french-plan-for-biometric-database-of-60-million-people-sparks-outcry.html>
- Tuzović, A. (2015). The Internet of Your Things: Microsoft's Vision for IoT. Retrieved from <https://www.slideshare.net/BosniaAgile/iot-across-devices-with-windows-10-and-azure-iot-suite-by-admir-tuzovi>

