



Other topics of interest

Small Business Digitization Initiative (SBDI) - Bonus

By Marc Lijour

March 22, 2017



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- Why it matters

2 Challenges to our Freedom

3 Working Efficiently AND (not OR) Protecting our Freedom



Savoir-faire
LINUX

Devices for Digital Consumption

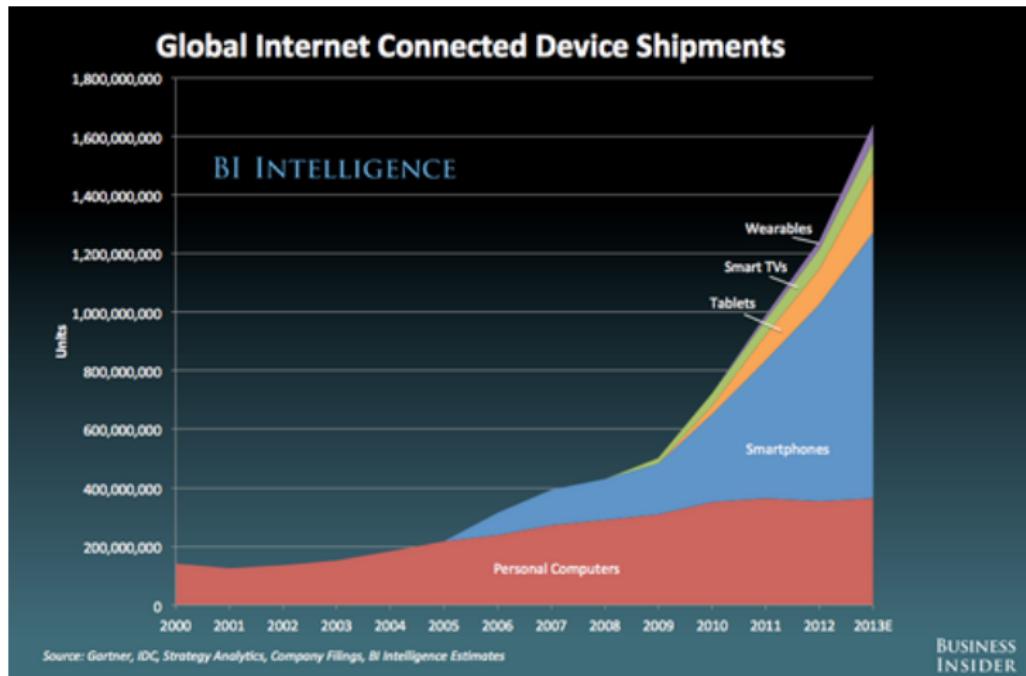


Figure: Picture from Maquabela, 2013



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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

All our data is online



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All our data is online

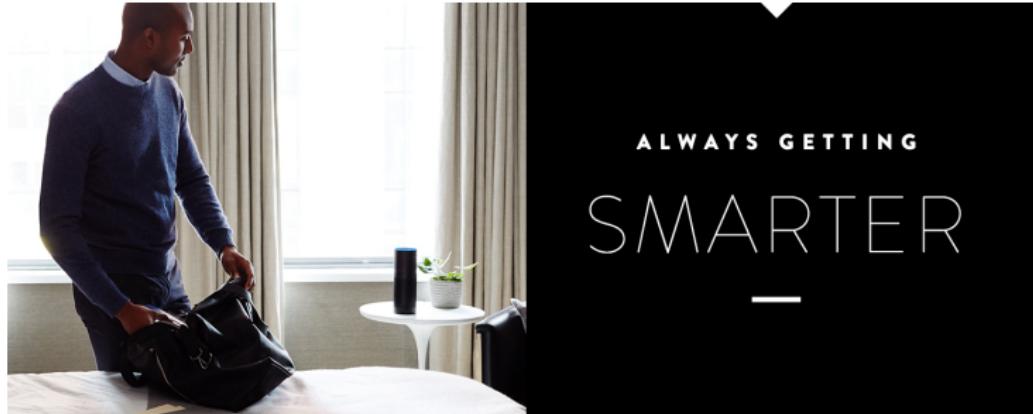


Figure: The AI from Amazon is (almost) always listening, and the police is interested (Bradley, 2017)

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



Canada has managed to stay on the safe side

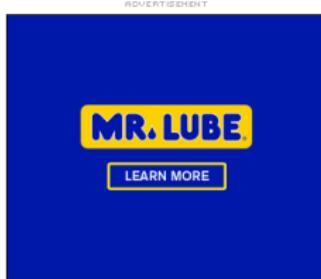
Your internet provider can't pick which apps and services count against your data cap, says CRTC

In a win for net neutrality advocates, carriers can't use a controversial pricing practice called zero-rating

By Matthew Braga, CBC News | Posted: Apr 20, 2017 4:00 PM ET | Last Updated: Apr 21, 2017 10:01 AM ET



If zero-rating is allowed, an internet provider could decide to exempt a video streaming service such as YouTube from counting against a user's data cap — a move that critics say is in violation of the principle of net neutrality. (Dado Ruvic/Reuters)



Stay Connected with CBC News



Figure: see the recent article from CBC News (Braga, 2017) and see OpenMedia's presentation at the CRTC hearing (2016)



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Savoir-faire
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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
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- Human Rights



The meaning of Freedom

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- Democracy
- Citizenship
- Human Rights
- Rule of Law (Justice, Equity)



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- 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)



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What could go wrong?

Excessive (?) Government Surveillance & Intervention

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- Patriot Act (& others: French Govnt Act, 2015...)



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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



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What could go wrong?

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- Patriot Act (& others: French Govnt Act, 2015...)
- Chinese Firewall
- Government-led Cyberattacks



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



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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>

Support the OpenMedia's Net Neutrality Campaign

 **Donate to OpenMedia today**

CHIP IN TO DEFEND OUR WIN AT THE CRTC



The CRTC just decided in favour of historic Net Neutrality rules that prevent Big Telecom from unfairly manipulating data caps to discriminate against certain apps and services.

Telecom giants were fighting for new powers to make certain apps more expensive than others through a controversial practice called "zero rating." And today, they lost.

But our victory is not safe yet. Why? One chilling phrase: Big Telecom's lawyers.

This is exactly the type of ruling that we can expect Big Telecom to challenge in the courts or on Parliament Hill. **Can you donate to make sure we're ready to hold onto this huge victory?**

Our work to protect Internet freedom wouldn't be possible without the support of people like you.



I'D LIKE TO MAKE A

Monthly Gift One Time Gift

OF

\$10 \$20 \$35 **\$50** \$100
\$200 Other amount

MY INFO

First Name Last Name
Email Phone
Address City
Country
- Select -

Figure: <https://act.openmedia.org/zerorating/donate/?src=161479>



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

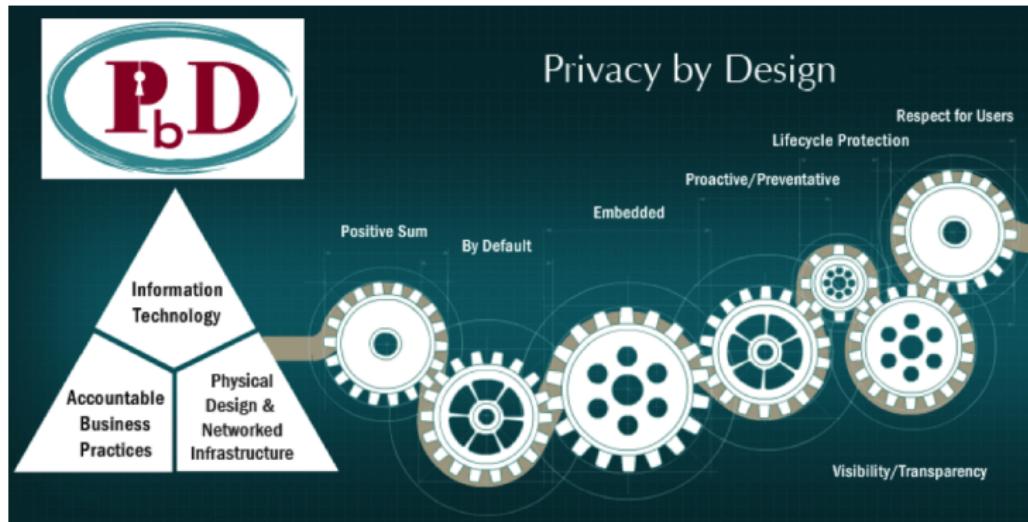


Figure: Dr. Ann Cavoukian, Executive Director, Privacy and Big Data Institute (Dr. Cavoukian, 2011)



Prefer Decentralized Systems that put you in control

Examples: Blockchain, and Ring for Secure Communications

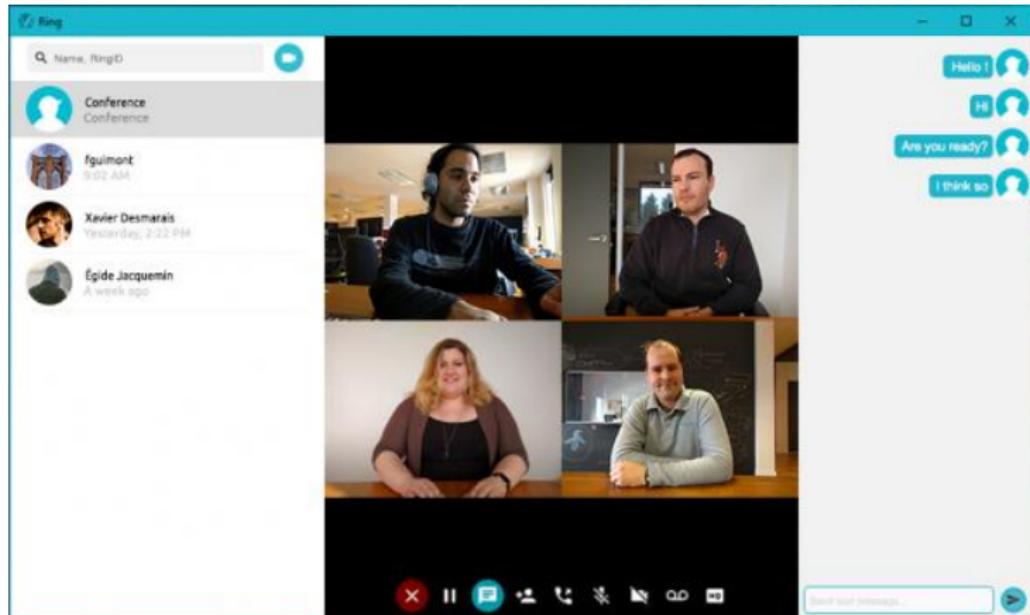


Figure: Data is shared as a need-to-know basis, see <http://ring.cx>



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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



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)



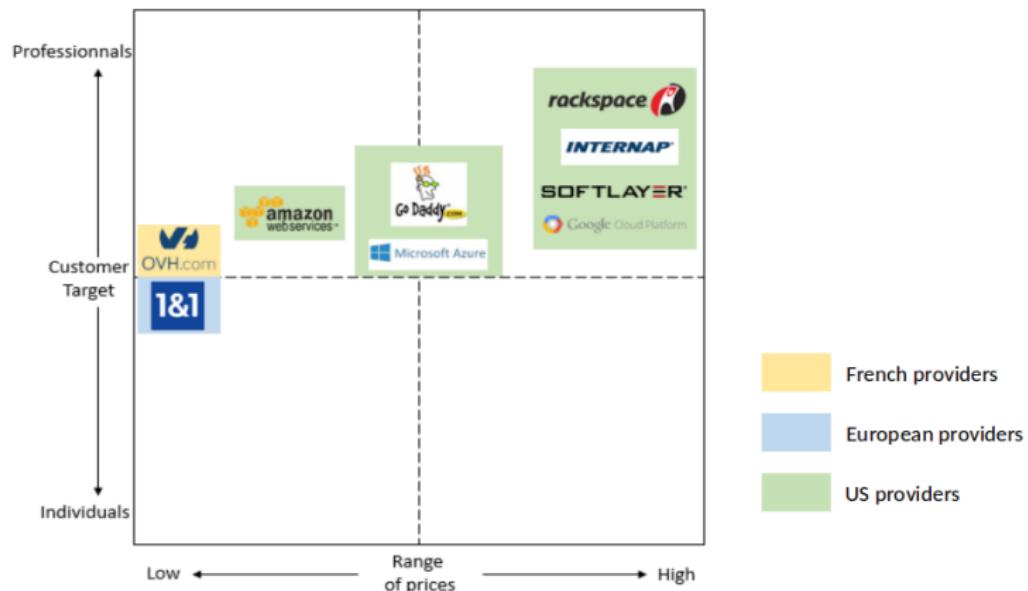
Build Community Clouds that you control

- 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



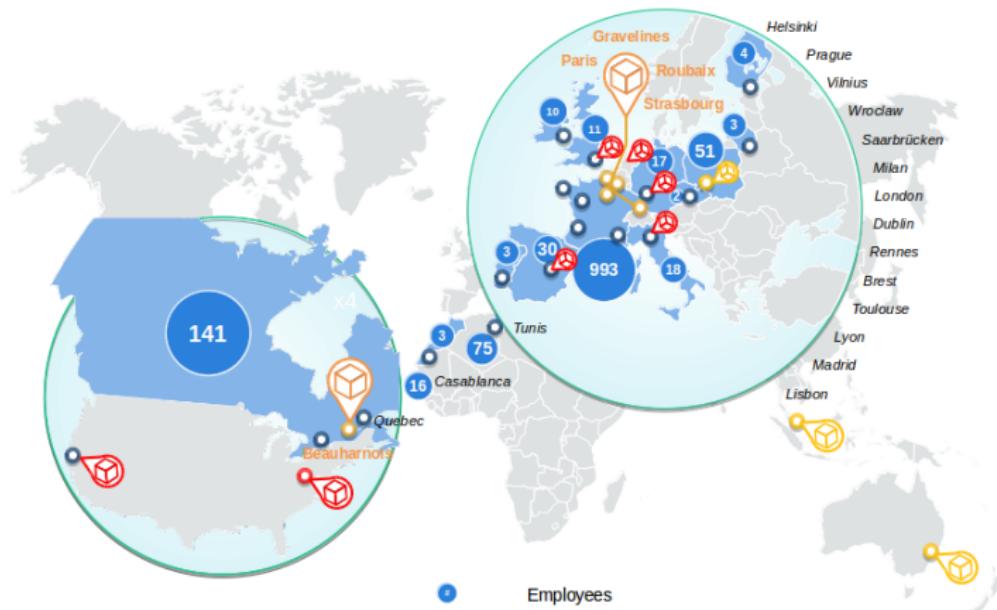
OVH in Canada

- +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

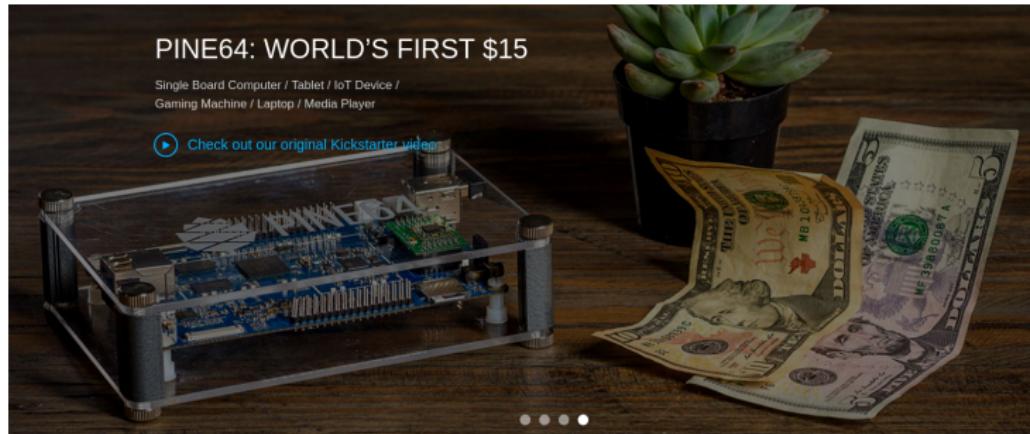
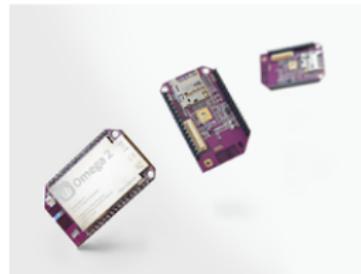


Figure: <https://www.pine64.org>

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...



Framacalc ↔ Google Spreadsheet

The screenshot shows a Google Sheets spreadsheet with the following data:

	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



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Framagenda ↔ Google Calendar

Agenda

septembre 2016

lun. mar. mer. jeu. ven. sam. dim.

jour Semaine Mois Auj.

+ Nouvel agenda

● Démonstration ⚡ Partagé ***

5 6 7 8 9 10 11

15:00 Conférence ownCloud

+ Nouvel abonnement

Conférence

12 13 14 15 16 17 18

19 20 21 22 23 24 25

26 27 28 29 30 1 2

3 4 5 6 7 8 9

Paramètres

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

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 – Voyons, Nasreddin ! Pourquoi te donnes-tu tant de peine ? Tu ne mangeras jamais les fruits de ce pommier.

5 Tu sais bien que tu mourras avant qu'il ne commence à produire des pommes.

6 Ce à quoi Nasreddin répondit :

7 – Oh Sultan ! Nous mangeons les fruits des pommiers plantés par nos pères, et nos enfants mangeront les fruits

8 des pommiers plantés par nous.

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

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

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

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

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

14 Chat

15 Matéo: Coucou 13:41

16 Maya: Salut Matéo 13:41

Framacarte: Draw your own maps

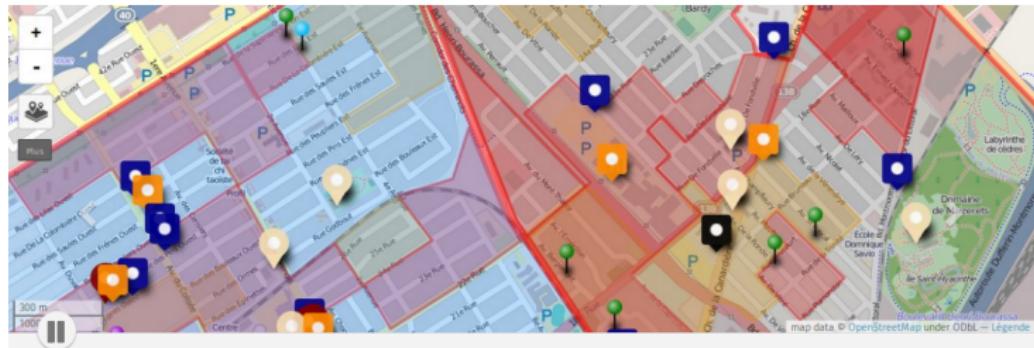


Figure: Based on uMap and OpenStreetMap

Framinetest ↔ Minecraft

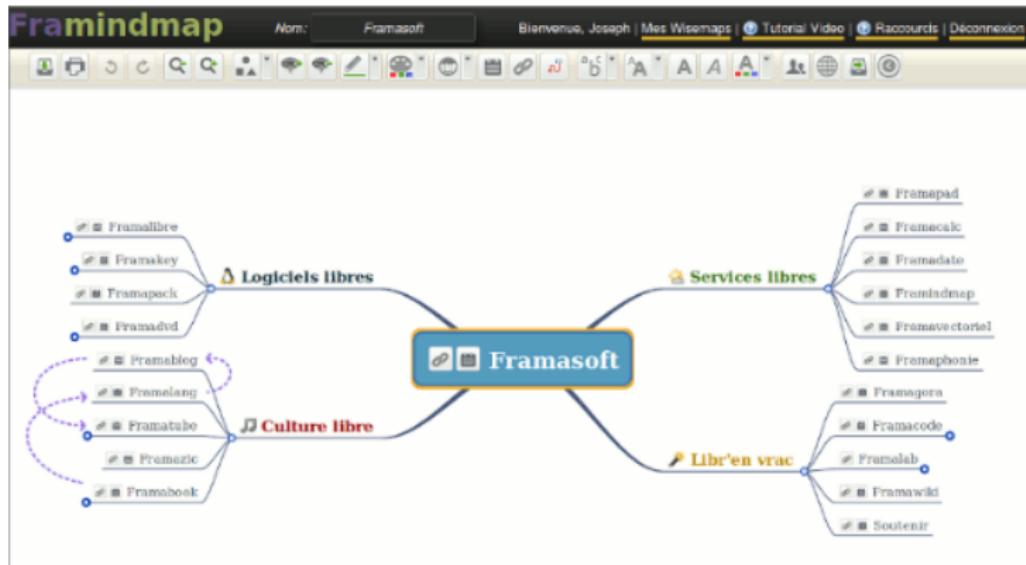


Figure: Based on Minetest



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Framamind ↔ Inspiration / Freemind



Framabookin ↔ Kindle Store (for free books)



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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

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

Future LTPP140 ADVERTISING RATE 38.4k

Security VoIP protection
How to build a SIP phone
How to build a SIP phone
System and protect it too

9 771475192102

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

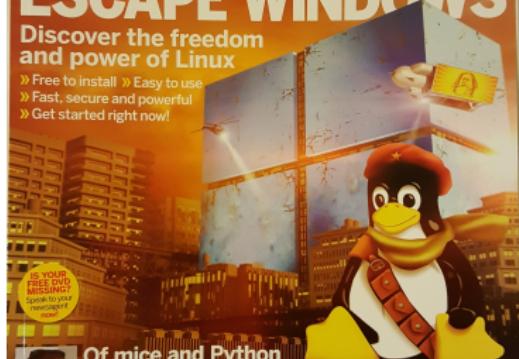
LINUX FORMAT

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

Of mice and Python
It's great for everyone to
use open source, but with
science it's especially important

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

Roundup Backup and secure
How to back up easiest and
fastest Back up tools to use

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

Future LTPP140 ADVERTISING RATE 38.4k

9 771475192102

Conclusion

- Find your comfortable position on the Privacy–Convenience spectrum



Conclusion

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- Full privacy is achievable



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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!



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