



Remote Education: My children's Freedom and Privacy at Stake



Javier Sepúlveda

*GNU Speaker
GNU Education Team*

About me



Valencia (Spain), June 6, 1975

PRESENT

- *Free Software advocate and volunteer*
- *GNU Speaker. Member of the GNU Education Team*
- *GNU/Linux System Administrator*
- *Make my living **thanks** to Free Software*

PAST

- *1977-1997 – summers in Norwich, England*
- *1999 – Paris, France*
- *1998 – Summer Internship, Norwich, England → USA*
- *2000 – Internship at Schaumburg, Chicago, IL*
- *2002 – NYC*
- *2000-2012 - Computer Science teacher. Valencia(Spain)*
 - *> 10.000h*
 - *Odd jobs as programmer, system administrator and consultant*
- *2013 – Started VALENCIATECH hosting company*
 - *Primary goal: using ONLY Free Software*

My children

- Javi (2007)
- Marta (2009)
- Marta attends to the elementary School of music
- Javier, attends to the superior conservatory of music
- They both attend to the local school of English
- They both receive English lessons every Saturday through BBB
 - Thanks to my very good friend John Troike (uncle John for them)



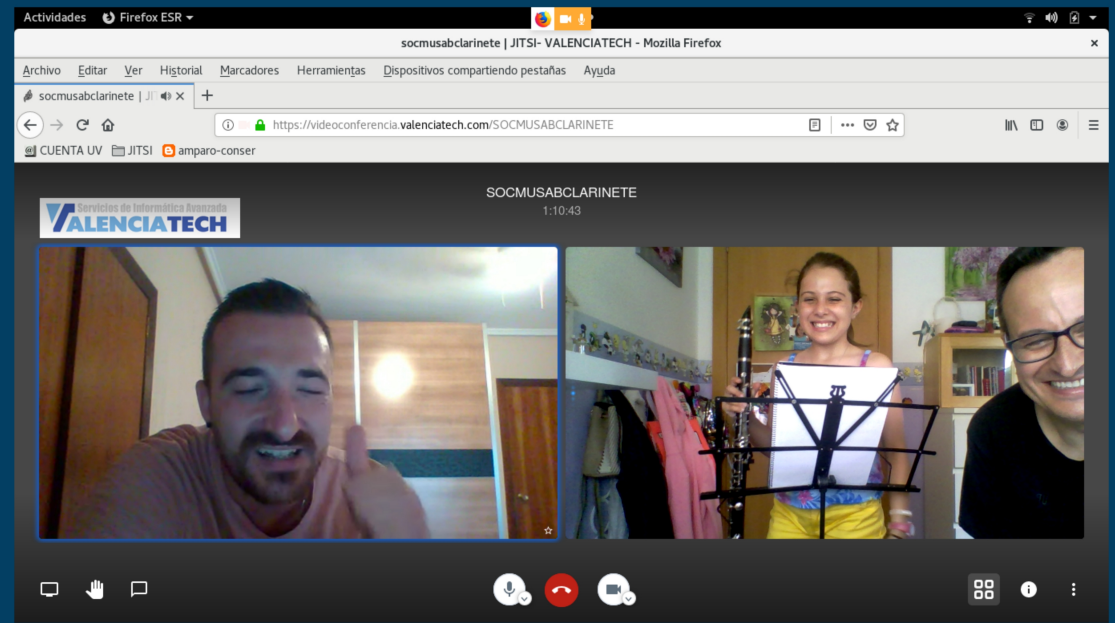
My fight

The music school

SOCIEDAD MUSICAL DE SAN ANTONIO DE BENAGEBER

- *Around 100 students - Almost all instruments*
- *Elementary school of music*
- *They hadn't infrastructure for continuing the music lessons*
- *Call me to **ASK**, about opening a **Skype** account for Javi and Marta*
- *I explained over the phone there were safer tools to use such as **JITSI***
- *They adopted **JITSI** in just 2 days.*
 - *<https://videconferencia.valenciatech.com>*
- *A single phone call (ethical reasons → protecting minors)*
- *A concise email with technical instructions*
- *A few weeks ago they called me up asking for a service to share music sheets to face the **THIRD WAVE** – I setup an **OWNCLOUD** server **GRATIS** to help them a little more, to overcome the pandemic.*
 - *socmusab.valenciatech.cloud*
- *All students from the Music School have spent the whole winter playing their instruments outside the school suffering the cold of the winter*

Music lessons through JITSI



<https://videoconferencia.valenciatech.com>



English academy

28/03/2020

I don't want Javier and Marta to use Skype. I was okay today with it, as I didn't want them, to feel apart.

Due to all this Covid-19 situation I could imagine you were overwhelmed, therefore you had no other choice, than using a well-known tool.

Skype software is developed by Microsoft (a company which develops ***proprietary software***, thus I decided today, to read the terms of service of Skype).

-- Proprietary software, means software you don't know how it is programmed, or what it does when you use it.
-- Free software, means software you know how it has been programmed, and what it does when you use it.
--- What is free software : <http://www.gnu.org/philosophy/free-sw.en.html>

After reading Skype's terms of service, I can not let my children to use this tool anymore.

-- They have some some abusive clauses, like having the right to record and analyze conversations either by humans beings or by artificial intelligence software, with the aim of making improvements on Skype. Furthermore, they can share this data with subsidiary companies they might work with.

<https://privacy.microsoft.com/es-es/privacystatement/>

###

The good thing is, that this can be easily fixed. And thanks to --free software-- there is an alternative tool, you can safely use, to teach your students.

I suggested to Magda a Software called JITSY, last week. This piece of software respects the user's privacy. And it is safe to use.

Thanks as well to my recommendation, right now -- Sociedad Musical de San Antonio de Benageber-- it's using JITSY successfully.

(
<https://www.socmusab.es/pasacalle/retomamos-clases-on-line-desdecasasinalir/>
)

They are now using JITSY to teach all instrument and music lessons.

They are now using JITSY to teach all instrument and music lessons.

Today, it was nice to see Marta in her room, having her clarinet lesson. I felt confident that nobody was spying on her.

This software is capable to handle both video and voice, however regarding for English lessons, I have realized today that having video enabled, doesn't add any value.

HOW TO START USING JITSY

You just have to --choose a unique room name -- and the program will generate one URL for you (you can copy it from the address bar). Then, you will be able to share this URL with the students.

Example of URL : <https://meet.jit.si/friday-c2>

Advantages of using JITSY :

No need to install any program. Just visit the URL
No registration required
No need to login (any password is involved)
Any third party wont have the chance to record the conversation
It is free software
It doesn't cost any money neither (is gratis)

###

Apart from all the information explained above, it will be way easier to share this URL just once with each group.

I am sure you will find this Software much useful than Skype.

Each student will visit their URL at their time, with no more worries.

You will have to send the URL to each group --JUST-- once, through email, which won't change until the end of the course.

In the top of this (apart of being --free software-- and having you privacy guaranteed). This software is able to handle reliably a conference with several students, while Skype might have difficulties handling more than four users at a time.

Long emails don't work!

Today during our Friday's C2 lesson with Katie, I asked Katie if she was okay trying this tool. She asked very kindly to the rest of the students if they were up to use this --free software-- instead of Skype. They all agreed. Thus we tried JITSY, and we had a very enjoyable class. Then afterwards teacher Magda joined the class through this very same software, and as I far as I know, she liked too.

Another feature which is also nice, about this software, is that it is possible to use it through a phone or tablet (Android or Apple), as it has as well phone App.

###

I profoundly hope not to be causing any trouble to your work or business, or causing any discomfort to the rest of students, but --for my moral grounds-- I can not let my children to use certain Software, and I am obliged to say no.

In short, I hope all these reasons can invite you to try ***free software*** so we can all participate in your English classes, without feeling threatened by the software itself.

You know, I am super willing to help you, with any question you might have.

I wish you the best of success overcoming this Covid-19 situation.

Thanks very much for your time and comprehension.

Best regards,

Javier

Stages of confinement

- *March 2020 → End of June 2020.*
- *My children's school teachers were not ready for the continuation of the classes remotely*
 - *Level I: Google Classroom, Google Meet, Webex,*
 - *Level II: Skype, Microsoft Teams, Zoom!*
- **My FIGHT**
 - *No willing to let my children use certain programs for their extracurricular activities*
- **Setting up servers**
 - *Jitsi, Mumble, Etherpad, BigBlueButton,*
- **Explaining and sharing these new tools**
 - *Long & helpful emails | Short & concise emails | Phone Calls*
- **Writing articles** – *Document everything*
- **Summer break!**

JITSI SERVERS

<https://videoconferencia.valenciatech.com>

<https://jitsi.gnulinuxvalencia.org>

<https://frenalacurva.gnulinuxvalencia.org> + JIBRI

BIGBLUEBUTTON SEVERS

<https://bbb.valenciatech.com> (account approval)

<https://bbb.gnulinuxvalencia.org> (members only)

OTHER

<https://docs.valenciatech.com> - ETHERPAD

144.91.127.101:37896 - MUMBLE

GRATIS services following the steps of Framasoft

<https://www.valenciatech.com/servicios/servicios-gratuitos/>

Second, third and fourth Wave.

- *September 2020 → Present*
- **High demand of BigBlueButton servers at work**
 - *Language company in Valencia*
 - *School in Málaga*
 - *Government of the Vasque country*
 - *University of Murcia – (just an account)*
- **No one asked me, about having their own Jitsi Server**
- **ICECAST SERVER**
 - *A very wise solution to decrease stress of a BigBlueButton server*

BigBlueButton server instances - 16GB/6vcores

GNU/Linux local group (Valencia, Spain)

Military English Academy – BBB

IT Academy (Málaga, Andalucía)

Basque government entity (Guipuzkoa, País Vasco)

Asociación de Ciencia Salud (Segovia, España)

Free BBB accounts at bbb.valenciatech.com

University of Murcia

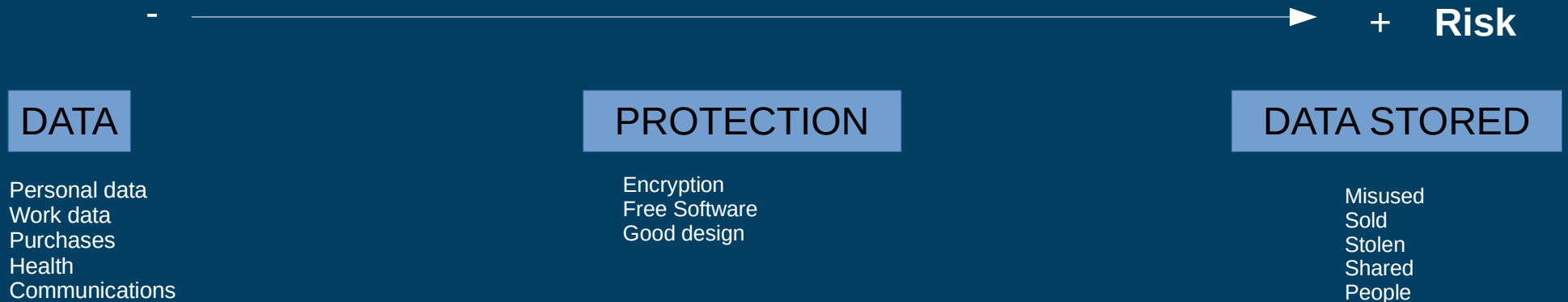
Some GNU colleagues

*Regenerative Medicine and Heart Transplantation Unit
La Fe Hospital (Valencia, Spain)*

Do not hesitate to ask for a GRATIS BBB account if you might need one for occasional use

DATA

- *Once data is collected → It is misused*
- *Therefore it is of utmost importance to avoid its recollection and accumulation*
- *Data stored in servers can be stolen by thieves (not hackers)*
- *Using proprietary software is risky*
- *The only safe data is the one which is encrypted*



Document everything

- *Write articles about new achievements or worrisome subjects*
- *Sometimes it is worthwhile to write something first, and then try to improve it later.*
- *Translating articles is a very useful thing to do*

How to be persuasive effectively

- *Avoid LONG emails. Short emails work better → Phone call.*
- *Be concise, and go STRAIGHT to the POINT*
- ***SHORT QUESTIONS*** *are the most effective thing to do.*
- *Be always willing to **HELP***
- *Always offer to try the software first, if possible → Demo account or a test URL*
- *Explain them the major advantages of using free software*
 - *Freedom*
 - *Privacy*
 - *Control*
 - *Investing the money saved into servers or improvements*

Questions / Statements that work

- Have you read the Terms of Service ?
- Are you going to base your communications in a GRATIS service for doing your work?
- WHY do you think this company is offering these services GRATIS ?
 - Servers are expensive to maintain.
- Coming from a major company doesn't mean it's safe.
- Do you know ZOOM was forbidden for a few months in the state of New York?
- Do you know ZOOM didn't have full encryption (E2EE) and they were saying they had it?
- Using free software will exonerate you, of any future privacy violation claim, from your users

FREE SOFTWARE FOR VIDEOCONFERENCING

JITSI - Features

- WebRTC
- Jitsi is not Jitsi Meet
- Self-hosted
- Multi-platform
 - GNU/Linux, Windows, Mac OS
- Mobile App
 - Android, iOS
- Anonymous
- No facial recognition
- Fully encrypted - E2EE
- No recollection of data
- Recordings
 - JIBRI
- Share screen feature
- Chat
- Multi-language
- You can join using the telephone
- Useful to speak with a few people

JITSI instances

(public and gratis)

- <https://videoconferencia.valenciatech.com>
 - 16GB RAM – 6 CPU v.cores
- <https://jitsi.gnulinuxvalencia.org> - GNU/Linux Valencia
 - 8GB RAM – 4 CPU v.cores
 - user : password → socio17 : 7704

BigBlueButton

- WebRTC
- Self-hosted
- LMS integration
 - Moodle or WordPress
- Anonymous
- Encrypted - E2EE
- Shared board
- Share screen
- Web administration interface
- Up to 100 attendees per room
- Up to 150 attendees per server
- Public and private chat
- Recordings
- Good design for teaching online
 - List of attendees
- Breakout-rooms

GNU Jami

- P2P (no centralized server)
- PC program
 - (GNU/Linux, Windows, MacOS)
- Mobile App (Android, iOS)
- Encryption
- Anonymity
- No facial recognition
- No data collection or storing
- Host small conferences
- Share and record your screen
- Make audio/video calls and
- Put calls on hold
- Chat
- Call history
- Manage contacts
- Multi-language

The importance of community

- *Never stay isolated*
- *You can do amazing things sometimes alone, but sharing, and learning from others is beneficial*
- *Join a local group or try to start one*
- *Make and maintain new contacts*
 - *If they are nice with you, then they can be good friends at long term too.*
- *Have a trustworthy team to whom you can ask for help.*
- *Be informative when working with others,*
 - *if you don't have time to work, say it!*
- *Give talks in your area*
- *Having either a work website, personal website or blog, can be very useful.*
- *You can share your achievements or experiences*
- *Publish short articles and tutorials*
- ***Work as volunteer at GNU.org***

Collaborating with GNU

- *You don't have to be a programmer to help.*
- *There is a lot of work of Systems Administration*
 - *A lot of servers need work*
- *A good start would be Savannah, it has a nice Web interface understandable for almost any one.*
- *Help the GNU Education Team. This small group of volunteers undertakes a titanic work, and help is always needed.*
- *Check gnu.org/help to find out about other useful ways to help*

Acknowledgments

- To my mentor **Richard Matthew Stallman**, for his trust, support and help.
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- To my wife **Mcarmen** and my **children**, for their faith in all my projects



A walk of a thousand miles consists of lots of steps.
Each time you don't install some nonfree program,
or decide not to run it that day, that is a step towards your own freedom.
Each time you decline to run a nonfree program with others, you show them
a wise example of long-term thinking.
That is a step towards freedom for the world.