

Zeno Davatz

## **Linux OpenSource Concept for Switzerland**

18.6.2025

[Audio](#)

[Video](#)

**[00:00:01.660] - Zeno Davatz**

Thank you very much for hosting this event, Josua Schmid.

**[00:00:06.940] - Zeno Davatz**

Thank you very much for inviting me.

**[00:00:09.360] - Zeno Davatz**

My name is Zeno R.R. Davatz. I'm Swiss, I'm 50 years old.

**[00:00:17.640] - Zeno Davatz**

We have been doing Ruby since at least 2003.

**[00:00:30.280] - Zeno Davatz**

I was even more surprised to know and see that Masaomi Hatakeyama is here.

**[00:00:33.480] - Zeno Davatz**

The inventor of Ruby is Yukihiro Matsumoto.

**[00:00:42.049] - Zeno Davatz**

[https://en.wikipedia.org/wiki/Yukihiro\\_Matsumoto](https://en.wikipedia.org/wiki/Yukihiro_Matsumoto)

**[00:00:42.580] - Zeno Davatz**

Always good to have a Japanese in the team.

**[00:00:45.650] - Zeno Davatz**

When my co-founder left me, Masaomi Hatakeyama was his successor.

**[00:00:51.590] - Zeno Davatz**

He couldn't have been a better successor.

**[00:00:54.110] - Zeno Davatz**

I want to thank Masaomi Hatakeyama once again for his great work.

**[00:00:58.260] - Zeno Davatz**

I am not really a coder. I'm a good debugger, and I'm a strategist. I'm an acquisition guy, but I don't write code on a daily basis.

**[00:01:08.380] - Zeno Davatz**

Now with AI, vibe coding, maybe a little bit more.

**[00:01:13.740] - Zeno Davatz**

We use Git since day one, 7. April, 2005.

**[00:01:17.940] - Zeno Davatz**

I attended the RubyKaigi in Nerima, Japan in 2011.

**[00:01:25.460] - Zeno Davatz**

I was a little bit upset with Ruby because they are not always very consistent when they upgrade their versions.

**[00:01:35.020] - Zeno Davatz**

When they upgraded from version 1.8.6 to 1.8.7 they completely screwed up the regular expression with the the Oniguruma patch.

**[00:01:45.690] - Zeno Davatz**

They didn't merge the Oniguruma patch in.

**[00:01:50.840] - Zeno Davatz**

At that time when I was at the RubyKaigi in Japan, I also attended the Linux conference.

**[00:01:56.600] - Zeno Davatz**

Linus Torvalds is a very big idol of mine.

**[00:02:00.000] - Zeno Davatz**

I really like him. I like what he does. He invented Linux. He pushed the Linux Kernel forward, he pushed Git forward.

**[00:02:08.460] - Zeno Davatz**

Linus Torvalds always gets very angry with his developers when they break the userspace.

**[00:02:13.625] - Zeno Davatz**

<https://lore.kernel.org/lkml/CA+55aFy98A+LJK4+GWMcbzaa1zsPBRo76q+ioEjbx-uaMKH6Uw@mail.gmail.com/>

**[00:02:14.120] - Zeno Davatz**

I went up to Yukihiro Matsumoto and told him: Matsumoto-san, when you do an upgrade, can't you just stick to the philosophy of the Linux Kernel?

**[00:02:25.820] - Zeno Davatz**

You don't break userspace.

**[00:02:27.600] - Zeno Davatz**

When I upgrade to a new Ruby version, then I don't have to have 1,000 headaches.

**[00:02:35.240] - Zeno Davatz**

I think he kind of took it serious.

**[00:02:38.660] - Zeno Davatz**

At least he listened to me. That made me very happy.

**[00:02:44.100] - Zeno Davatz**

What do we do?

**[00:02:45.680] - Zeno Davatz**

I will switch over now because the title is: Linux Open Source Concept for Switzerland.

**[00:02:53.470] - Zeno Davatz**

All the code that we write since 2020, all our code is on GitHub.

**[00:02:58.230] - Zeno Davatz**

It's either GPLv2 or it's GPLv3.

**[00:03:01.560] - Zeno Davatz**

We are also the authors of the spreadsheet Gem.

**[00:03:05.400] - Zeno Davatz**

It's probably our most downloaded Gem.

**[00:03:07.390] - Zeno Davatz**

65 million downloads since the initial date.

**[00:03:10.043] - Zeno Davatz**

<https://rubygems.org/gems/spreadsheet/versions/1.3.4>

**[00:03:10.700] - Zeno Davatz**

It's GPLv3.

**[00:03:12.880] - Zeno Davatz**

Here may be a little small question.

**[00:03:14.920] - Zeno Davatz**

How do you guys make money if everything is open source?

**[00:03:18.220] - Zeno Davatz**

Big companies like IBM or Facebook or whoever, if they use our Gem, they will find out in their legal department that, Oh, here's a software, and it has a non-standard license.

**[00:03:33.680] - Zeno Davatz**

They will automatically contact us and ask us, well, we are not all open source, so what do we do?

**[00:03:41.340] - Zeno Davatz**

Then I just tell them, ok, you have to buy a non-GPL3 license and it costs this and this amount.

**[00:03:47.140] - Zeno Davatz**

Of course, around the world, there are a lot of companies that probably use the spreadsheet gem and they violate the GPLv3 license.

**[00:03:56.110] - Zeno Davatz**

But what can you do? You can't always win.

**[00:04:00.460] - Zeno Davatz**

Yeah, so that's the spreadsheet Gem.

**[00:04:04.220] - Zeno Davatz**

I will tell you a short story about Open Drug Database.

**[00:04:08.430] - Zeno Davatz**

<https://ch.oddb.org>

**[00:04:08.660] - Zeno Davatz**

So you know where we come from.

**[00:04:10.100] - Zeno Davatz**

Open Drug Database compares drug prices between original drugs and generic drugs.

**[00:04:15.420] - Zeno Davatz**

So if you have any questions, just interrupt me, okay?

**[00:04:18.280] - Zeno Davatz**

I'm ADHD, so I will jump back and forth. If you can't follow my pictures, you just have to tell me.

**[00:04:26.420] - Zeno Davatz**

Open Drug Database compares the drug prices in Switzerland.

**[00:04:30.000] - Zeno Davatz**

In Switzerland, we have 9,000 drugs that are paid by the official Swiss Health Insurance.

**[00:04:36.457] - Zeno Davatz**

<https://spezialitaetenliste.ch/>

**[00:04:37.600] - Zeno Davatz**

We came up with an idea in 2003 that we could compare drug prices based on the ATC code.

**[00:04:44.420] - Zeno Davatz**

[https://de.wikipedia.org/wiki/Anatomisch-Therapeutisch-Chemisches\\_Klassifikationssystem](https://de.wikipedia.org/wiki/Anatomisch-Therapeutisch-Chemisches_Klassifikationssystem)

**[00:04:44.420] - Zeno Davatz**

It is a seven-digit code.

**[00:04:45.800] - Zeno Davatz**

It's an anatomical, therapeutical, chemical code, according to the WHO.

**[00:04:55.660] - Zeno Davatz**

You have the same active agent, the same dose, and everything for the same indication of drug.

**[00:05:00.980] - Zeno Davatz**

I went to the monopolistic company in Switzerland, e-mediast, and I told them, guys, we need your data to compare the drug prices.

**[00:05:08.120] - Zeno Davatz**

They said, yes, you can have it here. The license is going to cost you 2,000 Swiss Francs per year.

**[00:05:12.840] - Zeno Davatz**

Then we started developing.

**[00:05:16.640] - Zeno Davatz**

The pharmaceutical companies started coming and they said: well, this is a nice software and everything. They didn't like the name.

**[00:05:22.040] - Zeno Davatz**

The name was: <http://nachahmer.ch>

**[00:05:22.540] - Zeno Davatz**

In English, that's like imitations, guys.

**[00:05:28.020] - Zeno Davatz**

We changed the name to <https://generika.cc>

**[00:05:30.860] - Zeno Davatz**

CC stands for Cocos Islands. CC also stands for carbon copy.

**[00:05:36.620] - Zeno Davatz**

A generic drug is a carbon copy of the original patented drug.

**[00:05:39.810] - Zeno Davatz**

We started developing, it was a success.

**[00:05:45.300] - Zeno Davatz**



The monopolistic company, e-mediat, came and said: no your license is no longer 2,000 Swiss Francs per year, it is now 125'000 Swiss Francs per year.

**[00:05:54.180] - Zeno Davatz**

I said: wow, this is too much.

**[00:06:01.318] - Zeno Davatz**

I cancelled all the contracts.

**[00:06:01.840] - Zeno Davatz**

I approached the BAG, Bundesamt für Gesundheit, that collects the data according to federal law and to Swissmedic and said: you guys, you're required to collect this data. And because the data is required by government law, it cannot be copyright protected.

**[00:06:24.460] - Zeno Davatz**

If you buy a drug in Switzerland, it comes with a package leaflet, indications, contraindications, and stuff like that.

**[00:06:31.290] - Zeno Davatz**

The same information is available not only for the patient, but also for the doctor.

**[00:06:35.580] - Zeno Davatz**

And the doctor information for Keytruda or some drug against cancer will have 50 pages.

**[00:06:41.200] - Zeno Davatz**

So that information was still in a monopolistic database.

**[00:06:45.010] - Zeno Davatz**

We wrote a spider and we spidered out all the information from the Documed database, from the monopoly, and we put it into our database.

**[00:06:52.060] - Zeno Davatz**

The prices and everything, we had the activations, from Swissmedic.

**[00:06:55.220] - Zeno Davatz**

<https://swissmedic.ch>

**[00:06:55.220] - Zeno Davatz**

Swissmedic is like the FDA in Switzerland.

**[00:06:57.420] - Zeno Davatz**

BAG is responsible for the prices.

**[00:07:00.160] - Zeno Davatz**

Then we got sued by Documed.

**[00:07:01.320] - Zeno Davatz**

They said: you are taking our data. The data is copyright protected, blah, blah, blah.

**[00:07:08.400] - Zeno Davatz**

I said, No, it's required by government law. That is why it cannot be copyright protected.

**[00:07:12.420] - Zeno Davatz**

After several years, several steps, it went to the Supreme Court of Switzerland, and there was a decision that said: we done nothing wrong.

**[00:07:22.350] - Zeno Davatz**

[https://ywesee.com/uploads/Main/ywesee\\_GmbH\\_Bundesgerichtsurteil.pdf](https://ywesee.com/uploads/Main/ywesee_GmbH_Bundesgerichtsurteil.pdf)

**[00:07:22.350] - Zeno Davatz**

So we won everything through all the instances of the courts until the Bundesgericht in 2008.

**[00:07:27.960] - Zeno Davatz**

At the same time, I accused Documed of having a monopoly.

**[00:07:33.840] - Zeno Davatz**

The WEKO, Wettbewerbskommission, in Switzerland, they investigated for three years and they fined Documed, which were publishing that medical information with 50,000 Swiss Francs

**[00:07:47.278] - Zeno Davatz**

[https://ywesee.com/uploads/Main/Eroeffnung\\_Verfuegung\\_WEKO\\_16.7.2008\\_web.pdf](https://ywesee.com/uploads/Main/Eroeffnung_Verfuegung_WEKO_16.7.2008_web.pdf)

**[00:07:48.220] - Zeno Davatz**

Now we were legally allowed to publish this information on the internet.

**[00:07:54.980] - Zeno Davatz**

What then happened was that a pharmaceutical company, Laboratoire Jacques Rebohet fils SA came and said: we don't want to publish our data not with Open Drug Database, also not with Documed.

**[00:08:08.060] - Zeno Davatz**

We want that you publish the data over our own official website.

**[00:08:11.190] - Zeno Davatz**

That was another law case between Swissmedic and Laboratoire Jacques Reboh et fils SA, took another three years.

**[00:08:14.600] - Zeno Davatz**

[https://yweseec.com/uploads/Main/17.6.2011\\_BVGER\\_Swissmedic\\_Laboratoire\\_Reboh.pdf](https://yweseec.com/uploads/Main/17.6.2011_BVGER_Swissmedic_Laboratoire_Reboh.pdf)

**[00:08:15.220] - Zeno Davatz**

The Bundesverwaltungsgericht (BVGER) basically quoted our first two cases.

**[00:08:18.450] - Zeno Davatz**

It changed all the laws in Switzerland, how the Swiss pharmaceutical companies have to publish their information.

**[00:08:26.940] - Zeno Davatz**

What followed was a World Trade Organization (WTO) invitation to tender.

**[00:08:31.210] - Zeno Davatz**

[https://yweseec.com/uploads/Main/Simap\\_Projekt-ID\\_82539.pdf](https://yweseec.com/uploads/Main/Simap_Projekt-ID_82539.pdf)

**[00:08:31.640] - Zeno Davatz**

If you have a government contract in Switzerland that goes over 250,000 Swiss Francs, you have to make it public so everybody can apply for the job.

**[00:08:45.300] - Zeno Davatz**

We applied for the job and e-mediast applied for the job.

**[00:08:46.740] - Zeno Davatz**

The Galenica Group applied for the job, and they won.

**[00:08:52.860] - Zeno Davatz**

We offered for 3,5 million Swiss francs, and they got the job for 475,000 Swiss francs.

**[00:08:58.790] - Zeno Davatz**

They completely under swept us by price dumping, but they are a huge billion-dollar company, so what could we do?

**[00:09:05.440] - Zeno Davatz**

At that time, I was really pissed off, and I basically managed to prove that they're blackmailing the pharmaceutical industry.

**[00:09:15.000] - Zeno Davatz**

So they went to the pharmaceutical industry and said, you guys, if you don't pay our fee for our database, then we will kick you out of the database.

**[00:09:23.400] - Zeno Davatz**

So if you walk into a pharmacy and you want to find Ponstan from Mepha, you will not find it.

**[00:09:29.200] - Zeno Davatz**

The pharmaceutical companies, they got afraid, and they started paying the fee, and I could prove that.

**[00:09:34.220] - Zeno Davatz**

So the WEKO opened a second investigation.

**[00:09:37.400] - Zeno Davatz**

[https://ywesee.com/uploads/Main/Verfugung\\_WEKO\\_vom\\_19.\\_Dezember\\_2016.pdf](https://ywesee.com/uploads/Main/Verfugung_WEKO_vom_19._Dezember_2016.pdf)

**[00:09:37.400] - Zeno Davatz**

This second investigation took another three years, and they said, No, this time, the fine is not going to be 50,000 Swiss Francs, it's going to be 4.5 Million Swiss Francs.

**[00:09:49.580] - Zeno Davatz**

So this investigation was 121 pages by the WEKO after three years of investigation.

**[00:09:56.570] - Zeno Davatz**

In Switzerland, you can take that to court again.

**[00:09:59.560] - Zeno Davatz**

So Galenica took this to court again.

**[00:10:00.320] - Zeno Davatz**

They said: we're not going to pay this fine.

**[00:10:05.080] - Zeno Davatz**

So the Bundesverwaltungsgericht, so if you fight with an official institution in Switzerland, it doesn't go to the Bundesgericht, it goes to the Bundesverwaltungsgericht.

**[00:10:14.520] - Zeno Davatz**

They lowered the fine down from 4.5 million to 3.7 million Swiss Francs after investigating for another three and a half years.

**[00:10:24.660] - Zeno Davatz**

[https://ywesees.com/uploads/Main/B-2597\\_2017.pdf](https://ywesees.com/uploads/Main/B-2597_2017.pdf)

**[00:10:25.070] - Zeno Davatz**

Their summary was 235 pages.

**[00:10:28.770] - Zeno Davatz**

So they summarized 121 pages with another 235 pages.

**[00:10:33.320] - Zeno Davatz**

That's bureaucracy. That is is how it works.

**[00:10:36.700] - Zeno Davatz**

That went to the Bundesgericht.

**[00:10:38.260] - Zeno Davatz**

On 23.1.2025 the final decision was taken by the Bundesgericht (BGER).

**[00:10:38.303] - Zeno Davatz**

[https://ywesees.com/uploads/Main/2C\\_244\\_2022\\_23.01.2025.pdf](https://ywesees.com/uploads/Main/2C_244_2022_23.01.2025.pdf)

**[00:10:38.600] - Zeno Davatz**

The BGER confirmed the monopoly, they reduced the fine.

**[00:10:47.160] - Zeno Davatz**

Generally speaking, we are on the right side.

**[00:10:51.500] - Zeno Davatz**

This shows a little bit the whole dynamics that you have when you try to push data into the public domain.

**[00:10:58.740] - Zeno Davatz**

There are a lot of people there who don't agree with you, and they just are there to make money.

**[00:11:05.220] - Zeno Davatz**

All they want to do, they care about is money.

**[00:11:07.400] - Zeno Davatz**

Money is not innovation. Money has nothing to do with innovation. Innovation is innovation, and money is money.

**[00:11:14.660] - Zeno Davatz**

If you look now at the whole AI thing, you look at Android, you look at all the big companies in the world, what do they run on? They all run on Linux.

**[00:11:23.460] - Zeno Davatz**

Linus Torvalds is not a billionaire.

**[00:11:25.010] - Zeno Davatz**

His salary is 1.5 million USD, something like that.

**[00:11:28.170] - Zeno Davatz**

The stock price of Microsoft, it went through the roof after they started switching over from closed-source, not calling Linux "Cancer", but completely embracing Linux into the data center as a subsystem in Windows and so on.

**[00:11:48.600] - Zeno Davatz**

This is something I also think is really important that if you have a personal itch, and my personal itch is to teach the kids in Switzerland about OpenSource and about Linux.

**[00:12:01.200] - Zeno Davatz**

When we had apprentices at ywese, when they came for a job interview, I said: okay, bring your laptop and set up Gentoo Linux from scratch.



**[00:12:14.300] - Zeno Davatz**

It takes you as long as it takes you, but I want to see that you can set up Linux.

**[00:12:22.320] - Zeno Davatz**

If you can't do that, then we will help you.

**[00:12:24.320] - Zeno Davatz**

I managed to build up this system where we have six 16-year-old kids that were compiling and setting up Gentoo Linux by themselves.

**[00:12:35.120] - Zeno Davatz**

They were basically prepared to show the other kids who were doing the Application Developer Apprenticeship how to do it.

**[00:12:43.100] - Zeno Davatz**

Then I went to the Minerva school and I asked the Minerva guys, Okay, why don't we somehow make a system where Apprentice A teaches Apprentice B how to set up Linux?

**[00:12:52.600] - Zeno Davatz**

They were completely overwhelmed.

**[00:12:54.830] - Zeno Davatz**

The IT teacher from the Minerva school, he couldn't even setup Windows from a CD.

**[00:13:04.500] - Zeno Davatz**

When you do an Application Developer Apprenticeship at Minerva you pay something like 50'000 Swiss Francs.

**[00:13:05.050] - Zeno Davatz**

For their education they pay a huge sum of money.

**[00:13:11.300] - Zeno Davatz**

At our place they learned to code, they learned to setup Linux.

**[00:13:17.740] - Zeno Davatz**

We paid them a salary.

**[00:13:22.160] - Zeno Davatz**

For me that kind of did not work out.

**[00:13:22.220] - Zeno Davatz**

I stopped with the apprentices, but I still believe in the idea of somehow in one way or the other, bringing Linux into the schools.

**[00:13:41.480] - Zeno Davatz**

I have two kids. My wife is Japanese.

**[00:13:43.960] - Zeno Davatz**

If you look what the kids today are doing in Sekundarschule, a lot of it is just Brawl Stars, Gaming. They have no clue what Linux is.

**[00:13:48.440] - Zeno Davatz**

But it is there and it is OpenSource and you can use it.

**[00:13:48.780] - Zeno Davatz**

Nobody can stop you from using it.

**[00:14:05.680] - Zeno Davatz**

This is one part that I think is very important.

**[00:14:13.980] - Zeno Davatz**

Now, coming to another part of what I also think is important, where I feel that the FOSS stack could be very interesting is the digital ID.

**[00:14:25.000] - Zeno Davatz**

We had a vote about the digital ID in Switzerland.

**[00:14:29.960] - Zeno Davatz**

<https://www.republik.ch/2021/01/28/die-probleme-mit-der-schweizer-e-identitaet>

**[00:14:30.000] - Zeno Davatz**

The Swiss Post and some other companies tried to control the digital ID and it got washed down.

**[00:14:31.321] - Zeno Davatz**

[https://de.wikipedia.org/wiki/Eidgen%C3%B6ssische\\_Volksabstimmung\\_%C3%BCber\\_das\\_E-ID-Gesetz](https://de.wikipedia.org/wiki/Eidgen%C3%B6ssische_Volksabstimmung_%C3%BCber_das_E-ID-Gesetz)

**[00:14:31.420] - Zeno Davatz**

If you look at India, how they done it, I don't know if you're familiar with the digital identification system in India.

**[00:14:43.540] - Zeno Davatz**

It's called Aadhaar.

**[00:14:44.863] - Zeno Davatz**

<https://de.wikipedia.org/wiki/Aadhaar>

**[00:14:46.060] - Zeno Davatz**

You do a biometrical face scan, the eyes, the face, fingerprint and everything.

**[00:14:51.800] - Zeno Davatz**

Then you're in the system and you connect the anonymous profile when you sign up for the mobile phone, for example, you connect that.

**[00:15:00.900] - Zeno Davatz**

Then when you open your phone in India, you don't have to log in.

**[00:15:06.410] - Zeno Davatz**

You're automatically logged in.

**[00:15:08.520] - Zeno Davatz**

They use a lot of open source technologies for the digital ID.

**[00:15:13.300] - Zeno Davatz**

I feel, or I would really love to see that in Switzerland, we do the same.

**[00:15:18.640] - Zeno Davatz**

That in Switzerland, we use open source technology to do a digital identification system on a full scale government level.

**[00:15:30.000] - Zeno Davatz**

I don't know when that's going to happen because Switzerland is a little bit of a monotheistic culture.

**[00:15:35.100] - Zeno Davatz**

We are fully banked.

**[00:15:36.860] - Zeno Davatz**

In India now, over Aadhaar and their banking system, you can move one Rupee from Kerala to Bombay.

**[00:15:45.580] - Zeno Davatz**

It doesn't cost you anything.

**[00:15:46.800] - Zeno Davatz**

Here in Switzerland, of course, everybody has a banking account. You're fully banked.

**[00:15:51.860] - Zeno Davatz**

But we do not have the digital ID.

**[00:15:54.940] - Zeno Davatz**

If we would have a digital ID, then you could log in to Brack, Galaxus.

**[00:15:58.920] - Zeno Davatz**

Another thing is the EPD, Elektronisches Patientendossier, electronic patient record.

**[00:16:03.600] - Zeno Davatz**

Your electronic patient record from the doctor, is another huge catastrophe in Switzerland. It just doesn't work.

**[00:16:07.980] - Zeno Davatz**

We have different local companies (Stammgemeinschaften) in the healthcare industry that all have their own PDF management, and it just doesn't work.

**[00:16:20.400] - Zeno Davatz**

We are wasting millions.

**[00:16:21.821] - Zeno Davatz**

<https://www.nzz.ch/wirtschaft/wenn-es-im-bisherigen-tempo-weitergeht-dauert-es-nur-noch-1250-jahre-bis-alle-einwohner-der-schweiz-ein-elektronisches-patientendossier-haben-ld.1889034>

**[00:16:22.100] - Zeno Davatz**

Of course, we are not China.

**[00:16:23.560] - Zeno Davatz**

You can't stuff one solution down our throats in Switzerland like you can do it in China.

**[00:16:29.720] - Zeno Davatz**

But India is a democracy, and India showed that if some intelligent people come together and they want to change the system, it's not about the money, it's about the personality.

**[00:16:40.200] - Zeno Davatz**

It's about the people who want to change the system.

**[00:16:43.440] - Zeno Davatz**

I'm always looking for people who are interested in changing the system and improving the system for the better.

**[00:16:52.480] - Zeno Davatz**

One result of this whole Open Drug Database history, of all these court cases and everything is now that all the government-required medical information about all the drugs in Switzerland is now at the Refdata Stiftung, a foundation.

**[00:17:08.892] - Zeno Davatz**

<https://ywesee.com/Main/DocumedGalenicaVsYwesee>

**[00:17:09.000] - Zeno Davatz**

Anybody can use the data.

**[00:17:14.120] - Zeno Davatz**

<https://refdata.ch/de/>

**[00:17:14.120] - Zeno Davatz**

We have apps.

**[00:17:14.840] - Zeno Davatz**

We have an Android app, we have an iOS app, we have a web app, we have a Windows app, we have a macOS app. It's all programmed natively.

**[00:17:24.667] - Zeno Davatz**

<https://ywesee.com/AmiKo/Index>

**[00:17:25.720] - Zeno Davatz**

These apps are free.

**[00:17:27.740] - Zeno Davatz**

We generate the database with all this medical information every day with a C++ program, it generates the data in three minutes.

**[00:17:35.900] - Zeno Davatz**

<https://github.com/zdavatz/cpp2sqlite>

**[00:17:35.900] - Zeno Davatz**

When we used to do it with Java, it took four hours.

**[00:17:38.219] - Zeno Davatz**

<https://github.com/zdavatz/aips2sqlite>

**[00:17:39.090] - Zeno Davatz**

Anybody can now do this.

**[00:17:41.820] - Zeno Davatz**

If you guys want to do an app for doctors or you want to do an app for patients and you want to show the medical leaflet that's in the package, anybody could do it because the information is there and nobody can tell you today the license fee is 2,000 Swiss Francs and in two years it's going to be 125,000 Swiss Francs.

**[00:17:59.200] - Zeno Davatz**

This is something where we could really platform the way and I hope it will happen in other areas as well.

**[00:18:06.480] - Zeno Davatz**

That's why also coming back to how can we have an open source concept for Switzerland, I feel that the data is one, the whole political system is another thing.

**[00:18:23.560] - Zeno Davatz**

Of course, our identity, our passport, and so on would be nice if we could build that upon on an open source stack.

**[00:18:34.440] - Zeno Davatz**

What else is there?



**[00:18:43.360] - Zeno Davatz**

One apprentice who also worked for us for three years, he now is one of the founders of Allink.

**[00:18:51.560] - Zeno Davatz**

<https://allink.ch/de/>

**[00:18:52.620] - Zeno Davatz**

Mike Walder, he also hacked a lot of Ruby.

**[00:18:53.450] - Zeno Davatz**

He now runs a company with many employees, and he completely outgrew us.

**[00:19:01.440] - Zeno Davatz**

That's very nice to see.

**[00:19:03.440] - Zeno Davatz**

If you have people who become economically more successful than yourself and at the same time are very happy doing what they do, but you basically took them along the way for a couple of steps.

**[00:19:23.280] - Zeno Davatz**

We have different tools.

**[00:19:24.600] - Zeno Davatz**

aips2sqlite (Java), oddb2xml (Ruby).

**[00:19:24.819] - Zeno Davatz**

<https://github.com/zdavatz/oddb2xml>

**[00:19:24.990] - Zeno Davatz**

We have some redundancies.

**[00:19:36.000] - Zeno Davatz**

These two softwares, they take different public domain sources of data and they generate XML files.

**[00:19:43.600] - Zeno Davatz**

So these XML files then can get loaded into the software for the prescription drugs, for the health care insurances, and so on.

**[00:19:52.600] - Zeno Davatz**

So today, if you prescribe a drug, you go to a hospital and the doctor makes one prescription, the license for the hospital to license that data that they pay these days can be over 100,000 Swiss Francs.

**[00:20:06.760] - Zeno Davatz**

Whereas they could also work with our data, which is completely free, and it's the same data.

**[00:20:12.427] - Zeno Davatz**

<https://www.hin.ch/de/services/mediupdate-xml.cfm>

**[00:20:12.760] - Zeno Davatz**

It's funny to see that the old school thinking, everybody still just goes after this monopolistic data, whereas you could have the data for free.

**[00:20:22.520] - Zeno Davatz**

Where you have competition, in the software development area of the doctors in Switzerland, we have a very high competition.

**[00:20:29.440] - Zeno Davatz**

We have different small companies, that produce software for doctors.

**[00:20:33.180] - Zeno Davatz**

There, everybody uses our data.

**[00:20:35.660] - Zeno Davatz**

But now you come to pharmacies. In Switzerland, there are exactly three software companies that produce software for pharmacies.

**[00:20:42.300] - Zeno Davatz**

They all signed up for the FUD contract of the competitor, where they basically only use the licensed data and they pay, I don't know, 10 times more.

**[00:20:53.860] - Zeno Davatz**

But the consumer pays it and nobody complains.

**[00:20:58.540] - Zeno Davatz**

This is just the way it is.

**[00:21:01.180] - Zeno Davatz**

Any questions so far?

**[00:21:04.920] - Bemerkung 1**

Maybe off topic.

**[00:21:06.420] - Zeno Davatz**

Yes, please. Off topic is always best.

**[00:21:08.900] - Bemerkung 1**

The ODDDB.org project has a very funny gem file from a perspective of the rails developer today.

**[00:21:17.780] - Zeno Davatz**

Of course.

**[00:21:31.680] - Zeno Davatz**

So we don't use Rails at all.

**[00:21:35.920] - Zeno Davatz**

Basically we create an object, we serialize the object, the object goes into the Postgres database.

**[00:21:43.360] - Zeno Davatz**

You cannot query our database with SQL commands.

**[00:21:46.320] - Zeno Davatz**

You can only query our database via bin-admin writing ruby.

**[00:21:51.760] - Zeno Davatz**

The object comes out of the database, it's being deserialized, and then it's being shown.

**[00:21:56.540] - Zeno Davatz**

If you look at Open Drug Database, the HTML is being generated with Ruby.

**[00:22:01.815] - Zeno Davatz**

<https://github.com/zdavatz/htmlgrid>

**[00:22:01.860] - Zeno Davatz**

The memory management is being done with a separate gem: ODBA.

**[00:22:05.977] - Zeno Davatz**

<https://github.com/zdavatz/odba>

**[00:22:06.580] - Zeno Davatz**

The HTML is being written with htmlgrid.

**[00:22:08.510] - Zeno Davatz**

SBSM, state-based session management. The sessions for the web browser are managed, and the cookies are also managed with our own gem that is written in Ruby.

**[00:22:22.400] - Zeno Davatz**

<https://github.com/zdavatz/sbsm>

**[00:22:22.840] - Zeno Davatz**

It's like a parallel world to the Rails world.

**[00:22:25.801] - Zeno Davatz**

<https://rubyonrails.org/>

**[00:22:26.800] - Zeno Davatz**

But it's more open to develop.

**[00:22:29.750] - Zeno Davatz**

It takes a little bit of time until you're in there in that mental framework.

**[00:22:34.903] - Zeno Davatz**

<https://github.com/zdavatz/shoe>

**[00:23:24.620] - Bemerkung 2**

I started to go to the doctor a lot in the last few months, and they all exchange information with me with HIN.

**[00:23:35.500] - Bemerkung 2**

I find the email to be... I have Gmail, and I find the email to be very Microsoft friendly.

**[00:23:45.380] - Bemerkung 2**

It's like you don't have outlook of what the hell is wrong with you?

**[00:23:49.660] - Bemerkung 2**

I wonder if you share some hatred for the company with me, but I think they're based in Wallisellen.

**[00:23:55.080] - Zeno Davatz**

Yeah, they're right across the corner. Yeah, of course.

**[00:23:58.240] - Bemerkung 2**

Am I offendnig if somebody's cousin, brother, or sister?

**[00:24:03.280] - Zeno Davatz**

Yes, thank you for that question.

**[00:24:07.840] - Zeno Davatz**

The HIN client is, yes, that's exactly the point, right?

**[00:24:11.970] - Zeno Davatz**

I always push them. I tell them, Guys, now they have this ePrescription Signment system, and they're actually not end-to-end encrypted.

**[00:24:19.880] - Zeno Davatz**

Everything goes through their proxy.

**[00:24:22.220] - Zeno Davatz**

From your computer to HIN, everything's encrypted, but then they can read everything.

**[00:24:27.660] - Zeno Davatz**

It's not end-to-end encrypted.

**[00:24:29.240] - Zeno Davatz**

That I think should really happen at one stage.

**[00:24:32.320] - Zeno Davatz**

What I would like is to come back to in your question is that they do a certificate solution.

**[00:24:38.140] - Zeno Davatz**

They just give out certificates, whatever, P12s or whatever, and you have the certificate on your iPhone, and it's like a COVID certificate.

**[00:24:46.380] - Zeno Davatz**

If you have that certificate, it says you're a doctor.

**[00:24:49.180] - Zeno Davatz**

That kind of relates to the electronic digital ID.

**[00:24:53.340] - Zeno Davatz**

It's a public PKI infrastructure where you put out your public key, the public key is signed through the post office or something with a mail, with an official offline sent mail. It's signed. Then you get the certificate and you load that into your phone and it proves that you're you.

**[00:25:14.380] - Zeno Davatz**

For me, that would be a nice EID solution.

**[00:25:18.320] - Zeno Davatz**

HIN is actually the first company in Switzerland that have the certified digital signature for signing the prescription.

**[00:25:25.540] - Zeno Davatz**

But the whole thing they do with sending back and forth information via this HIN mail, it's like, why can't we think of something more open source where we just have a library, Google can use it, Microsoft can use it, Renuo can use it, I know, Mr. Bünzli can use it, and it just works.

**[00:25:45.670] - Zeno Davatz**

I really wish that would happen, and I hope that Switzerland can play a leading role in Europe for digital personal identification management, of course interfaced with the government, where the government takes a leading leading role, but doesn't control everything and has no access to your private data.

**[00:26:05.280] - Zeno Davatz**

The HIN thing where you have to download an HTML and then enter your email and then get an SMS.



**[00:26:12.780] - Zeno Davatz**

Swiss doctors, they are drowning in bureaucracy.

**[00:26:17.200] - Zeno Davatz**

They're completely drowning.

**[00:26:18.380] - Zeno Davatz**

They're overworked, they're burnt out, and they're not happy.

**[00:26:22.860] - Zeno Davatz**

I know the people at HIN. I'm pushing them, but sometimes your ADHD character can be overwhelming for people.

**[00:26:30.500] - Zeno Davatz**

I can run them over and they're like: Zeno shut up, get out of my way.

**[00:26:35.180] - Zeno Davatz**

But I don't give up.

**[00:26:36.760] - Zeno Davatz**

As you see, I've been doing all these court cases now since 22 years or longer.

**[00:26:41.020] - Zeno Davatz**

So I will continue as long as my physique allows.

**[00:26:44.460] - Zeno Davatz**

I'm happy if you guys want to help.

**[00:26:49.660] - Zeno Davatz**

Did I answer your question?

**[00:26:50.990] - Bemerkung 2**

Yeah, partially. I would like to fight this war with this battle with you someday.

**[00:26:55.360] - Zeno Davatz**

You are a Gemini guy, right?

**[00:27:01.240] - Zeno Davatz**

So what I started doing is I started taking these leaflets of information of the Fachinformation, the FDA-approved information about the drug for the doctor.

**[00:27:13.780] - Zeno Davatz**

And it's like 50 A4 pages.

**[00:27:15.630] - Zeno Davatz**

I threw it all into Gemini and I asked the question, does this drug interact with that drug?

**[00:27:21.790] - Zeno Davatz**

Or can I eat this drug as if I'm a pregnant woman?

**[00:27:25.900] - Zeno Davatz**

If, of course, it's Viagra, it kind of knows that is not for a woman.

**[00:27:30.500] - Zeno Davatz**

I would be interested in that as well.

**[00:27:33.940] - Zeno Davatz**

AI fantasizes a lot, but if you feed them a precise document, the answers can get more precise, right?

**[00:27:41.940] - Bemerkung 3**

Summarization is very hard to hallucinate Because you're basically taking a lot of information and making it smaller. It can happen, but it's incredibly rare.

**[00:27:51.820] - Bemerkung 3**

Hallucination is like when you are trying to connect the dots between things happening on the planet and it just goes in the wrong direction.

**[00:28:00.750] - Zeno Davatz**

I got a message, that's why I'm recording the video, from Alexander Adam.

**[00:28:10.431] - Zeno Davatz**

<https://www.linkedin.com/in/alexander-adam-ch/>

**[00:28:11.160] - Zeno Davatz**

He said: can you please record your speech? I'm very interested to listening to it.

**[00:28:15.280] - Zeno Davatz**

He is, yeah, first we have the crypto hype, and now we have the AI hype. We are just running all after the money.

**[00:28:24.780] - Zeno Davatz**

This is something I really agree with him.

**[00:28:26.880] - Zeno Davatz**

I think we should use our talents to hack something new.

**[00:28:31.730] - Zeno Davatz**

Hacking is about changing the world, and hacking is about hobbyists.

**[00:28:37.400] - Zeno Davatz**

That's how you start stuff in your basement or whatever, in the Badi or in your Starbucks or wherever, and you just have your autistic or whatever idea, and you follow that idea.

**[00:28:49.640] - Zeno Davatz**

This is what I really think, actually Switzerland, with four languages, we are predestined to have great hackers and a friendly environment for great hackers.

**[00:28:58.900] - Zeno Davatz**

Also, Google has a very big office here.

**[00:29:01.120] - Zeno Davatz**

We have a lot of Fortune 500 companies opening their offices in Zurich.

**[00:29:05.680] - Zeno Davatz**

But hackers are also individual thinkers.

**[00:29:08.120] - Zeno Davatz**

They're people who somehow see the thing a little bit different.

**[00:29:15.440] - Zeno Davatz**

This is basically my world.

**[00:29:21.420] - Zeno Davatz**

Any other questions?

**[00:29:27.760] - Zeno Davatz**

Okay. Let me see if I have anything else.

**[00:29:31.070] - Zeno Davatz**

Otherwise, I will be done.

**[00:29:41.570] - Zeno Davatz**

No, that's it. Thank you very much.