



EarthOS

- ◆ **A systematic collection of open source projects to cover everything in life.**
- ◆ Credits go to the original projects. I just integrate them ... think a Wikipedia for everything free & open.
- ◆ It's unfinished ... as it's just me so far and I do this in my spare time ;-)
- ◆ **web:** <http://ma.juii.net/blog/category/earthos>



EarthOS



What is this EarthOS? (1)

“A story told in code and CAD.”

“A utopian exploration of what a free and open world would look like.”

“An effort into organizing and integrating all that's being produced in the Open Source movement.”

“Like all sci-fi, inspiring.”

“A collection of free & open tools for everything of daily life.”

“A PDF with 975 pages (v 0.12).”



EarthOS

What is this EarthOS? (2)

“An approach to resilience: preparing for the post-carbon age, The Collapse, or whatever.”

“The DIY ethos of hacker culture, applied to everything.”

“An experiment for autarkic & independent living without losing modern comforts.”

“A toolbox for self-sustained, low-footprint living, independent of big business and a profit-centric lifestyle.”

“A concentrated empowerment of those called consumers, in developed and developing areas alike.”



EarthOS

EarthOS Architecture

- ◆ Level **L1** (infrastructure, global)
- ◆ Level **L2** (individual, mobile)
- ◆ Level **L3** (group, mobile)
- ◆ Level **L4** (network, relocateable and resilient)
- ◆ Level **L5** (village, relocateable)
- ◆ Level **L6** (seastead, mobile) ← Well, it's an Utopia :-)

Every level physically contains its lower levels. A higher level offers more comfort and opportunities (“more stuff”) but also is less mobile and more of a burden.



i Inspiring !

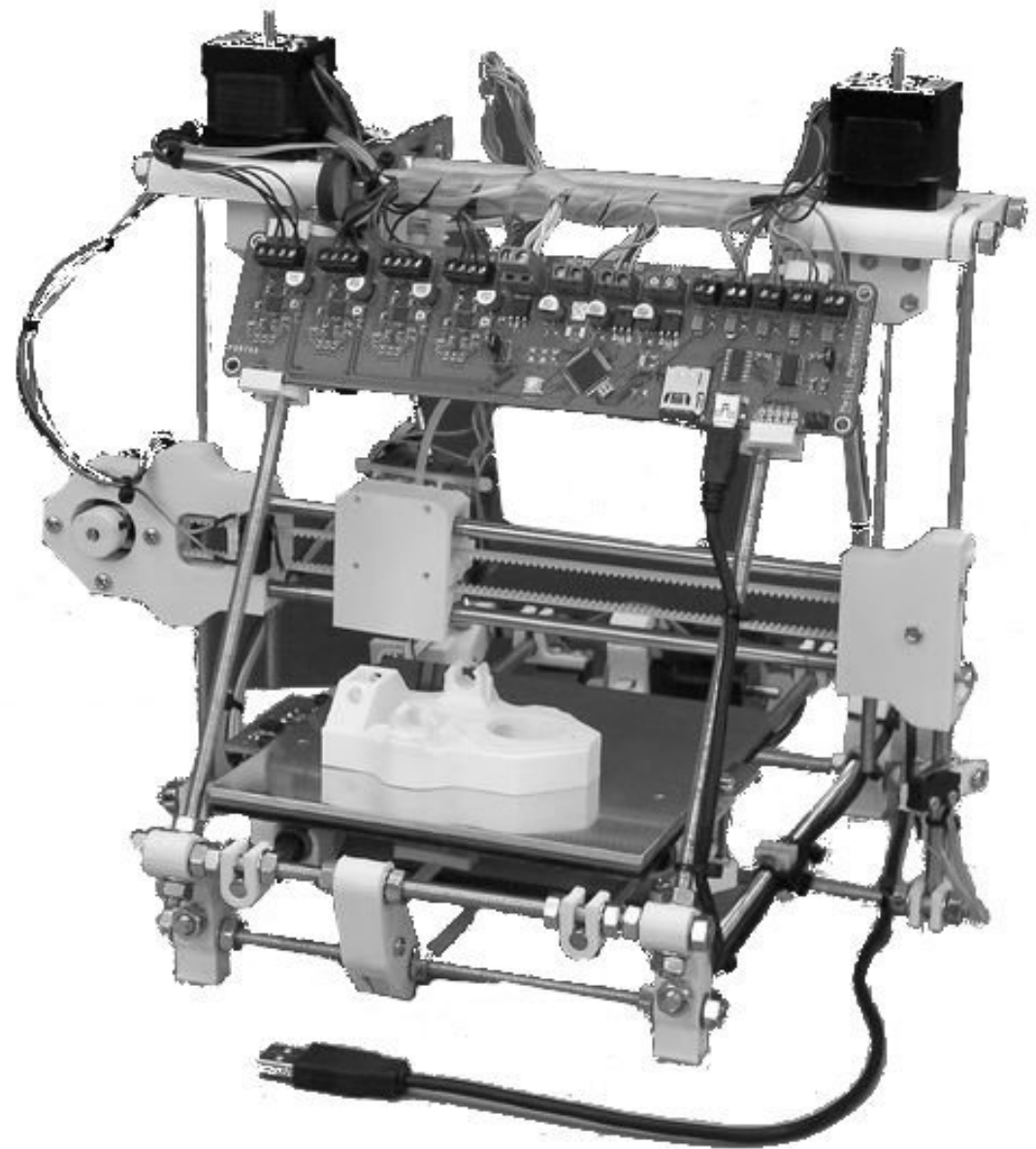
- ◆ **Now we'll look at some of the most inspiring open source projects collected in EarthOS.**
- ◆ **Imagine** what the world would look like when everybody uses these over their proprietary alternatives.
- ◆ (EarthOS contains hundreds more projects. Really. It's funny how there's something free and open for nearly everything already.)



EarthOS

- ◆ Open Source Hardware 3D printer using filament deposition
- ◆ Aiming for self-replication.
- ◆ **status:** operational
- ◆ **web:** <http://www.reprap.org/wiki/Huxley>

RepRap Huxley

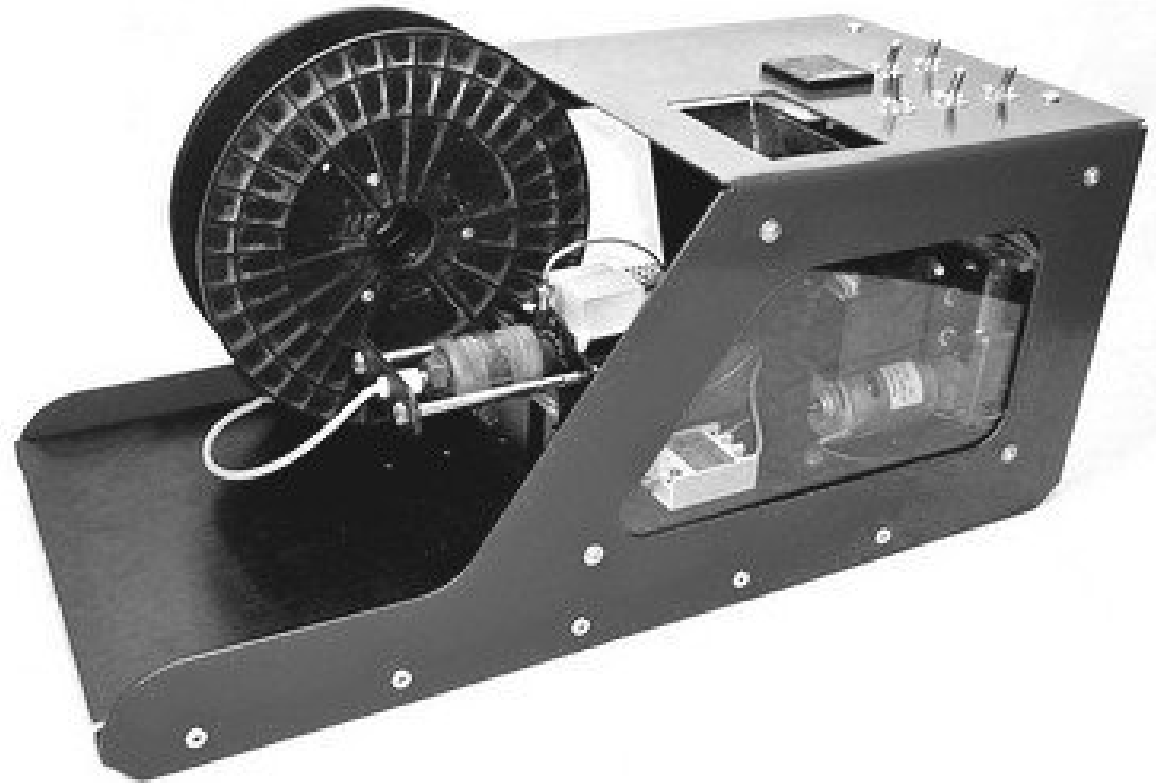




EarthOS

Filabot

- ◆ open source filament maker for 3D printers: print from recycled plastics
- ◆ **status:** product development nearly, done, shipping in 2013
- ◆ **web:** <http://filabot.com/>





EarthOS

Open Source Ecology LifeTrac

- ◆ Open source tractor and other farmtech.
- ◆ Tractor is hydraulically powered, with all parts modular and interchangeable.
- ◆ **status:** mature prototypes, in daily use
- ◆ **web:** <http://opensourceecology.org/>





EarthOS

- ◆ Fully open source after-market firmware for “rooted” Android phones and tablets
- ◆ 150 phone models supported, nearly 150 developers.
- ◆ 2.6 million devices use it
- ◆ **status:** mature
- ◆ **web:**
<http://cyanogenmod.org>

Wanna try? I have it on my phone.

CyanogenMod



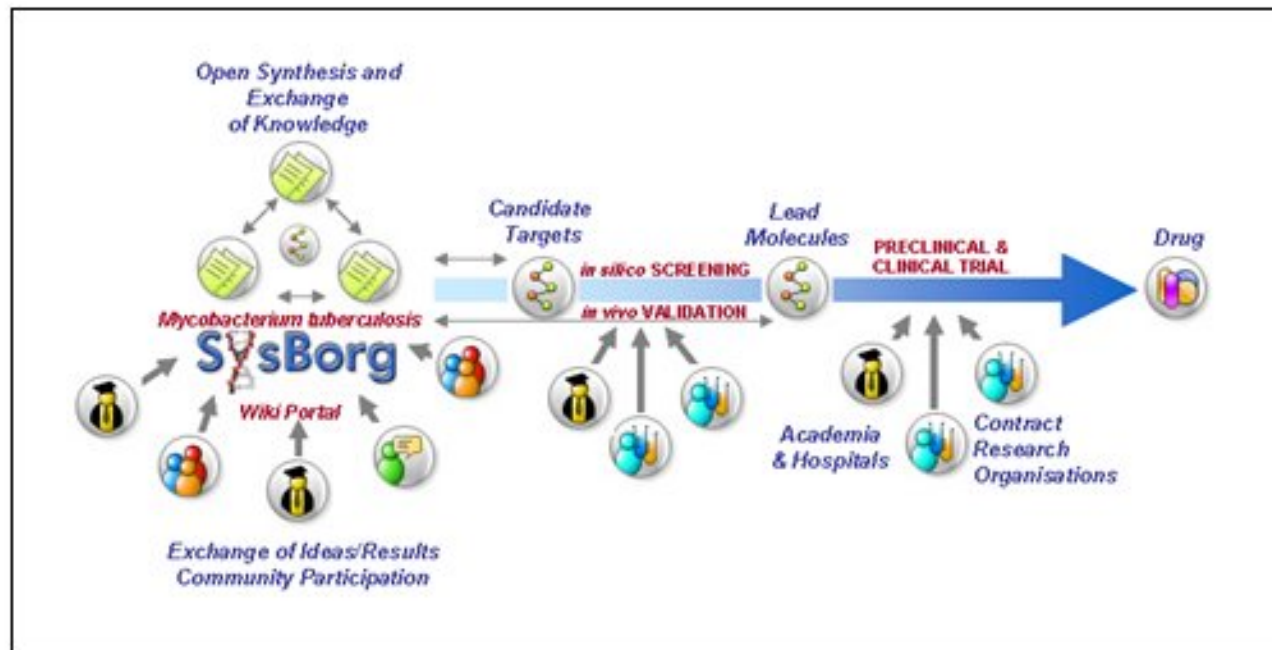


EarthOS

- ▶ **status:** operational, but lots of work to do :)
- ▶ **web:** <http://osdd.net>

OSDD

OPEN SOURCE DRUG DISCOVERY

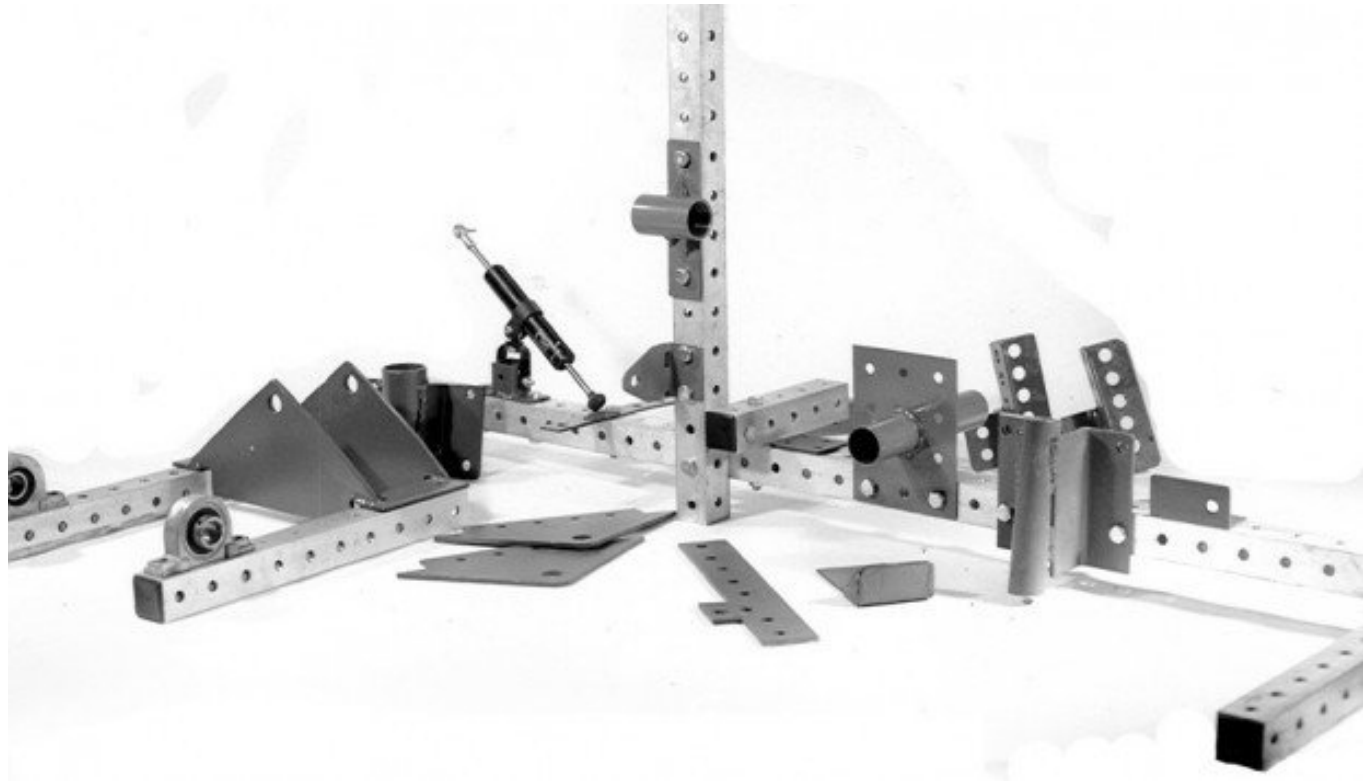




EarthOS

- ◆ “open source building system for a post-carbon future” :-)
- ◆ very DIY
- ◆ **status:** operational
- ◆ **web:** <http://gridbeamers.com/>

Gridbeam





EarthOS

- ◆ Free and open source software for crowdfunding.
- ◆ A crowdfunding platform only for projects with a “collective return”.
- ◆ Originating from Barcelona.
- ◆ **status:** in operation
- ◆ **web:** <http://goteo.org/>

Goteo





EarthOS

- ◆ First open source car.
- ◆ 2.5 l / 100 km
- ◆ selling at 25k USD
- ◆ **status:** operational, in production
- ◆ **web:**
<http://www.wikispeed.com/>

Wikispeed SGT01

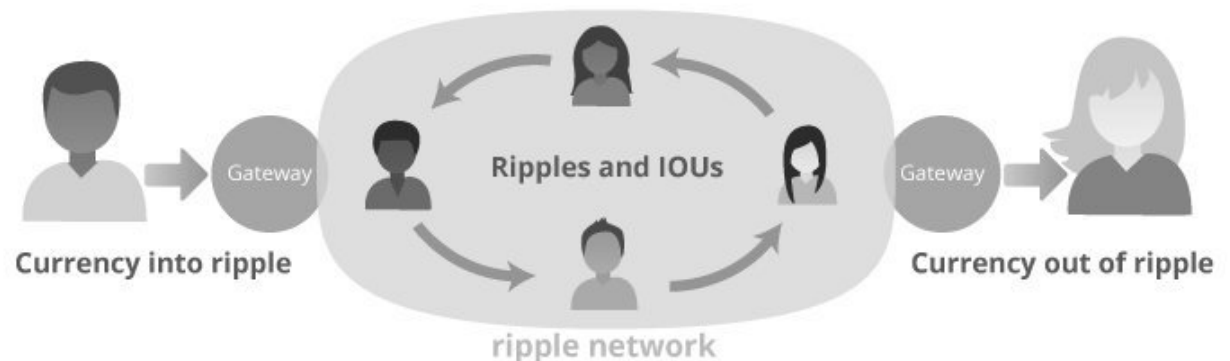




EarthOS

- ▶ An alternative currency where all financial capital is backed by social capital (trust among friends).
- ▶ Based on IOUs and Bitcoin-like cryptography and blockchain concepts.
- ▶ **status:** cutting edge, private beta
- ▶ **web:** <http://ripple.com/>

Ripple





EarthOS

- ◆ “OSLOOM is a project intent to build an affordable open source jaquard loom for studio weavers.”
- ◆ (That is, a loom for artists to weave any pattern into a fabric, as all threads are individually controlled.)
- ◆ **status:** working prototypes, documenting
- ◆ **web:** <http://www.osloom.org/>

OSLOOM





EarthOS

- ◆ First widespread open source cryptocurrency.
- ◆ Money as information (like on your bank account).
- ◆ Nearly no fees. Irreversible transactions. No central banking control.
- ◆ **status:** mature, growing community
- ◆ **web:** <http://bitcoin.org/>
<http://weusecoins.com/>

- ◆ 1 BTC
= 14.52 EUR
= 125.08 SEK
(as of 2013-01-30)

Bitcoin



Wanna try? Just install the open source Android app "Blockchain" and I'll send you 0.20 Bitcoins.



Missing pieces

Random ideas, just for the next steps.

- ▶ **Large-scale alternative economy system.** Something that works for millions, not just hundreds as in LETS. Using open source software of course.
- ▶ **Medical knowledge** as open content without a paywall, and **open access science** in general (→ Aaron Swartz).
- ▶ **Open hardware medical equipment.** Only the very beginnings are done.
- ▶ **Software distribution for phones**, all open source, similar to Debian / Ubuntu Linux for Desktops (but it's coming: <http://f-droid.org/>).
- ▶ **Packaging format** for open source hardware (“.deb for physical objects”). Tried but could not be finished, at oscomak.net/wiki/SKDB.
- ▶ **Central package repository**, collecting versioned, interdependent documentation of everything open source, open design etc..



Looking for a free & open alternative for something?

- ◆ EarthOS has selected literally hundreds of open source projects from nearly all areas. And still a long way from a complete ... and tidy :P ... document
- ◆ **Let's see if we can find something for you :)**
(Welcome to discuss together what you need.)
- ◆ **Welcome to discuss the potential of open source everything.**
(Want to make a guess about the state in 50 years?)

EarthOS URLs:

<http://ma.juii.net/blog/category/earthos>

<http://ma.juii.net/downloads/main>