Agenda

- Kuliax Project
- Kuliax Development
- Challenges
- Journey summarized
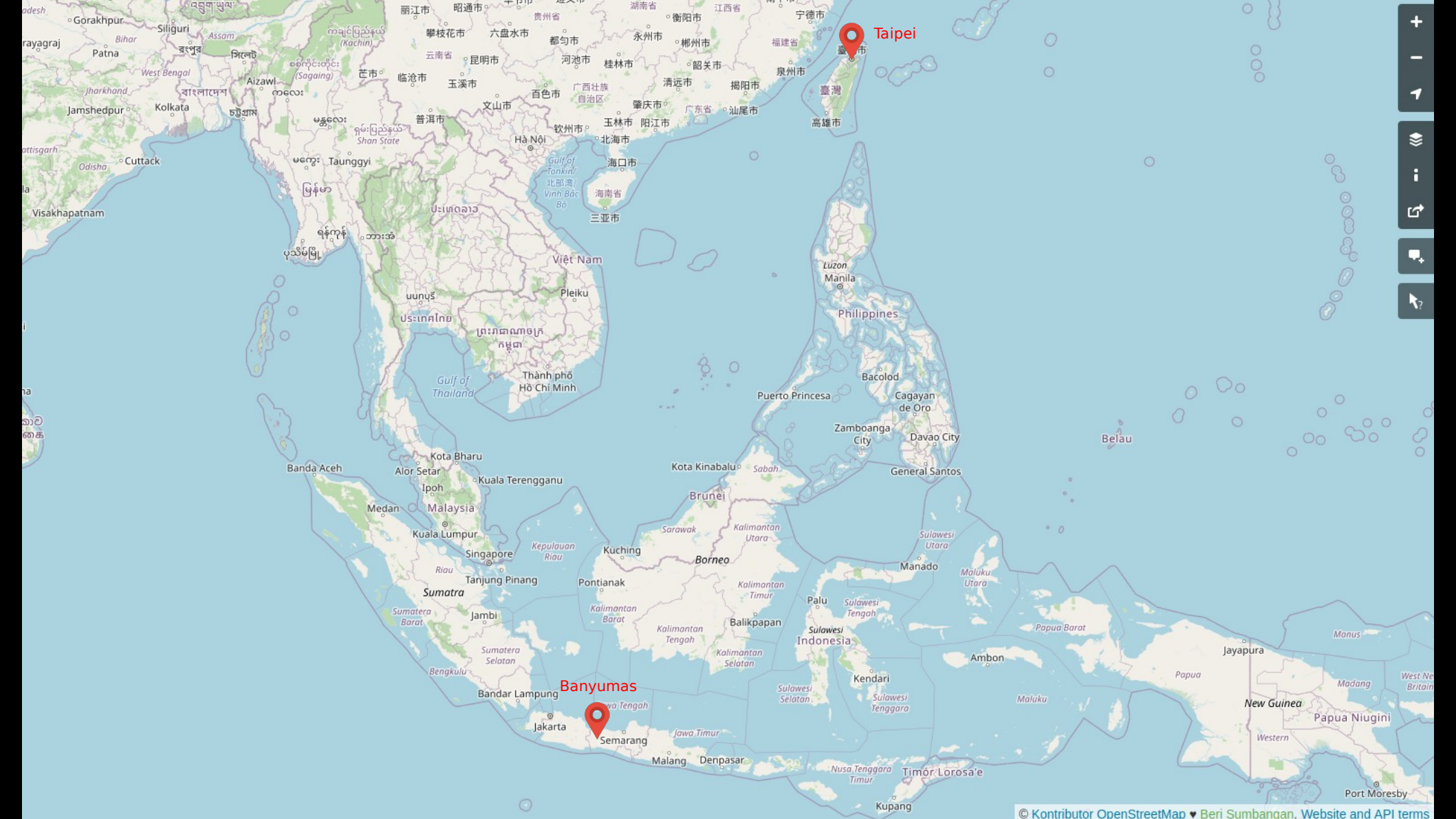
Iwan stwn

- Free Software supporter
  - EE Lecturer at Unsoed   Computing+Networking
  - CSIE Student at NTUST   Cloud Computing and Networking Lab
- Using GNU/Linux since 2000
  - Started with Red Hat ~~6.0~~ 6.2
  - Slackware, then Debian user
- Contributions related to distro   GNU/Linux Distribution
  - Rimbalinux, a community project
  - DukuFlash, a research project
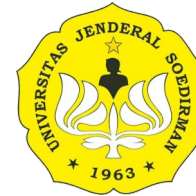
Join as an FSF associate member: https://my.fsf.org/join?referrer=341589

Iwan stwn: Timeline

A research project related to low-cost,
education, portable computer/apps.
Supported by a ministry

DukuFlash

Indonesia LUG Yogyakarta

Kuliax   6.0   7.0

KPLI Jogja

Rimbalinux   *rimbalinux.sourceforge.net*

2001   2002   2003   2004   2005   2006   2007   2008   2009   2010

■ Distro   ■ Community
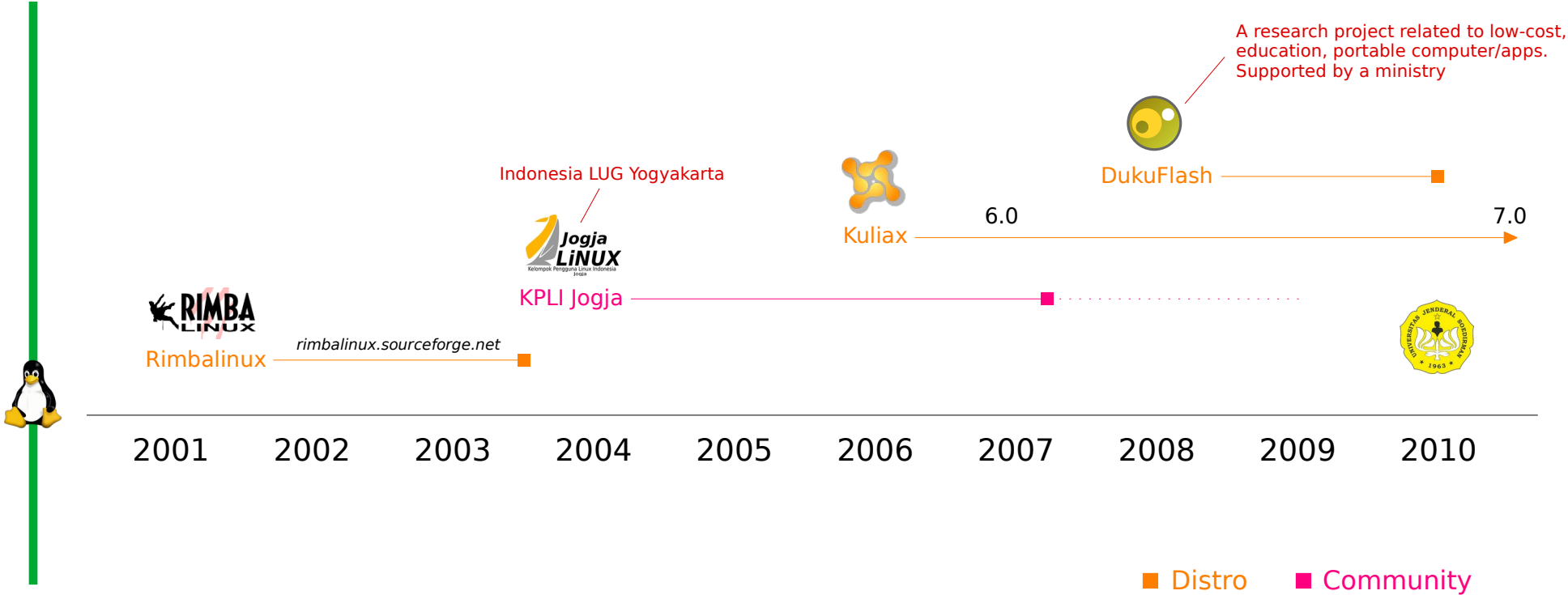
Kuliax Project

- Formed when the founder was a student
  - Lucky enough to be supported by local community
  - At first, it was just a developer and a graphic designer
- Kuliax is "Kuliah dengan Linux"
- Bringing Free Software/Open Source to higher education
  - *Free*/stable GNU/Linux desktop for higher education
  - Distro development, community education and supports
 - Licenses: GPLv3, CC By-SA 3.0

Kuliax, the Distro

- Target: IT-related study programs/other programs that use computer as the tool for learning, research, development
  - Includes apps considered as useful in higher edu
  - Also some resources like e-books, etc.
- The first version is based on the starting year
  - Codenames taken from traditional food names
  - Bakpia for 6.0, and Lumpia for 7.0
- Different versions, different team members
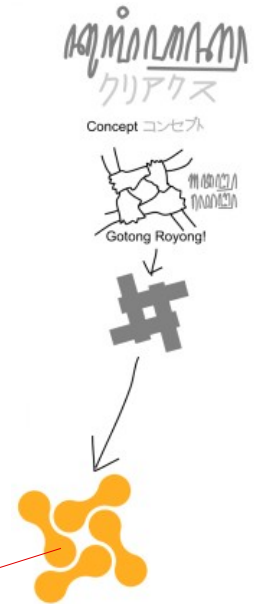
* https://en.wikipedia.org/wiki/Sodipodi

Created using Sodipodi

Fahrezal Effendi, @exavolt

Kuliax 6.0

- Based on Debian/KNOPPIX, developed for IT study program
  - Curriculum and syllabuses as the guidelines considered carefully
  - The founder's final project at a university
  - More than 10 mirror sites for the ISO image —— Community supports
- Developed for desktop with KDE3
  - Linux kernel with *-ck patches*, optimized config, drivers, filesystems, etc.
  - Relatively lightweight, ready for learning and development, e.g. programming, OS, netw.
  - Curated application list for the target program
    Results from research and considerations
- ShipIt-like program with private funding
  - Requesters only need to send email +agree to be a "mirror" person
  - Sending CDs to places in Indonesia
  - Enjoyed at first, but apparently felt time consuming :D

* Con Kolivas' patchsets: http://kernel.kolivas.org/ (Still alive and rocking)

Kuliax 6.0

Storage

Kuliax

Kuliax
Installer

Kuliax 6.0

Bringing Linux to Campus

All Applications	
Development	▶
Graphics	▶
Internet	▶
Multimedia	▶
Office	▶
System	▶
Utilities	▶
Kuliax	▶
Find Files/Folders	
Home Personal Files	
Actions	
Run Command...	
Switch User	▶
Lock Session	
Log Out...	

Courses	▶
Documentation	▶
Utilities	▶

Database	▶
Digital and Multiprocessor	▶
English	▶
Mathematics and Modelling	▶
Multimedia and Graphics	▶
Network and Data Communication	▶
Operating System	▶
Programming	▶
Software Engineering	▶
Statistics and Data Mining	▶

Kuliax

1	2
3	4

22:28
14/12/2006

Kuliax 7.0

- Based on Debian GNU/Linux stable and Debian Live
  - Newer packages from Debian Backports +Maintainers
  - Can be updated/upgraded using Debian repository
- Optimized system for desktop —— Similar to Kuliax 6.0, generalized
- Custom packages *following Debian packaging*
  - Kuliax-specific packages with repository
  - Kuliax backport packages from Debian testing/Maintainers/Ubuntu
  - Other packages built from upstream and Debian unstable

Location Edit View Bookmarks Tools Settings Help

Location: /live/ima   Google Search

Selamat datang di Kuliax 7.0 (lumpia)

CD-ROM ini adalah LiveCD sekaligus *installer*/pemasang Kuliax 7.0 untuk mesin 686.

Kuliax

Kuliax adalah sebuah distribusi GNU/Linux yang dioptimasi ke penggunaan komputer desktop untuk pembelajaran, penelitian, dan pengembangan di pendidikan tinggi.

Kuliax menyertakan program-program standar komputer desktop dan juga yang spesifik ke pendidikan tinggi khususnya pada bidang-bidang yang banyak menggunakan komputer sebagai alat bantu/penunjang atau bahkan sebagai intinya.

Sebagian besar program yang disertakan di Kuliax di bawah GNU General Public License (GPL), silakan periksa masing-masing paket program untuk mengetahui lisensinya secara rinci.

Informasi tentang Kuliax 7.0 dapat dilihat pada **Catatan Rilis**.
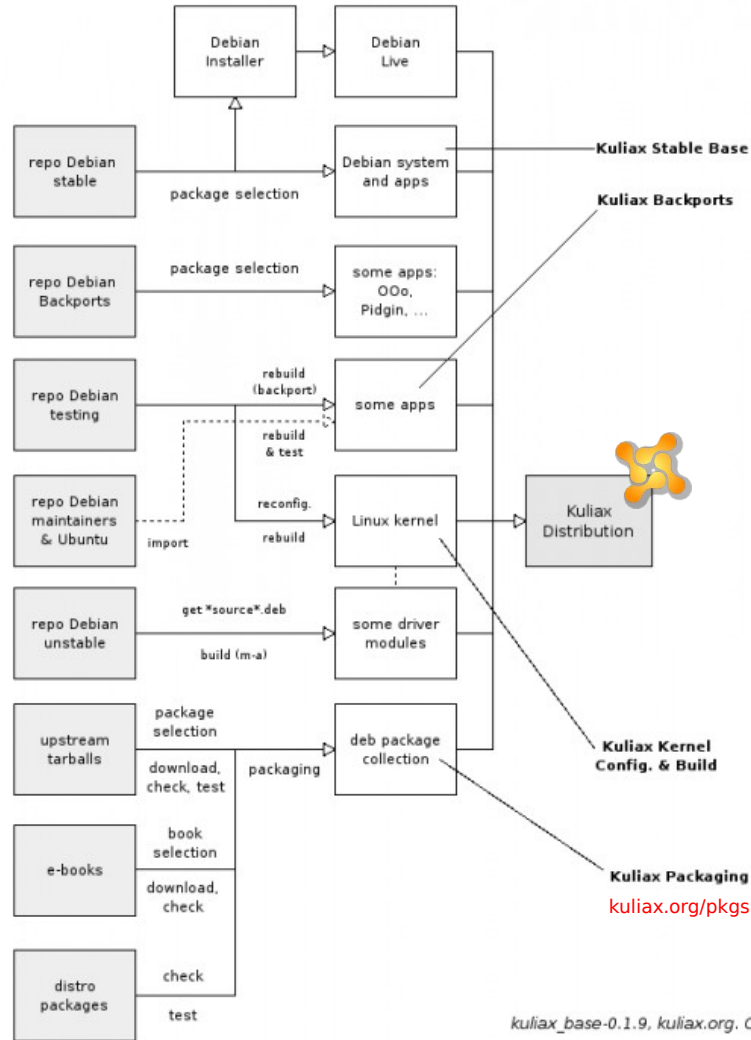
Pemasangan

Kuliax dapat dipasang mandiri atau berdampingan dengan sistem operasi lainnya.

Untuk memasang Kuliax 7.0 dan mendapatkan kinerja yang cukup bagus pengguna membutuhkan spesifikasi komputer:

- Prosesor i686 800 MHz atau lebih tinggi
- RAM 192 MB atau lebih besar

Kuliax

Selamat datang di Kulia

2

22:48

http://kuliax.org/ss/7.0/

Debian Installer

Debian Live

repo Debian stable → package selection → Debian system and apps

repo Debian Backports → package selection → some apps: OOo, Pidgin, ...

repo Debian testing → rebuild (backport) / rebuild & test → some apps

repo Debian maintainers & Ubuntu → reconfig. / rebuild → Linux kernel

import

repo Debian unstable → get *source*.deb / build (m-a) → some driver modules

upstream tarballs → package selection / download, check, test → packaging → deb package collection

e-books → book selection / download, check

distro packages → check / test

Kuliax Stable Base

Kuliax Backports

Kuliax Distribution

Kuliax Kernel Config. & Build

Kuliax Packaging
kuliax.org/pkgs

Development documentation:
kuliax.org/devel

Relatively complete, but rather old

kuliax_base-0.1.9, kuliax.org. CC-BY-SA.

Developers and Contributors

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Fahrezal Effendi (exavolt)   Nur Agus Suryoko (shadowdancer)
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Iwan Setiawan (stwn)   Yuda Nugrahadi (nugrahadi)

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Baim (aimsfree)   *Narpati Wisjnu Ari Pradana (kunderemp)*
Darmawan Soenaryo (dasoen)   *Tyo Wahyu (etyo)*
François (oui)   *Zaki Akhmad (za)*

http://kuliax.org/release/7.0/notes
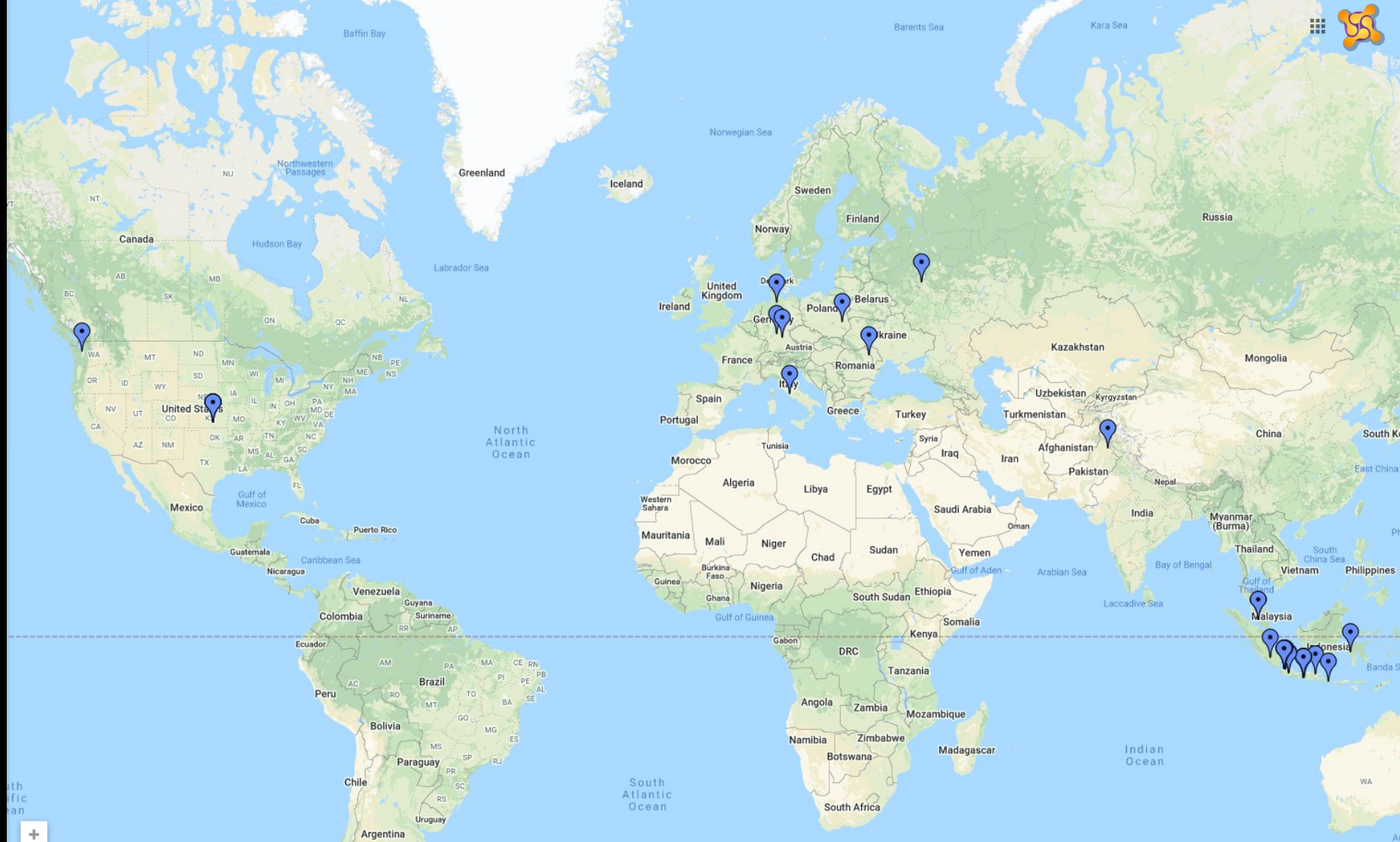
Contributions

- A GNU/Linux distribution for higher education
- Community education and campaigns
  - ~~Many~~ (invited) talks on FOSS for higher education
  - The farthest places are Pekanbaru and Bali
    - *Most were in Yogyakarta*
  - Publications in newspaper/magazines
- Community supports
  - FOSS translation into Indonesian
  - Helping, sponsoring and donation

How you think Open Source apps are maintained

How Open Source apps are really maintained

CommitStrip.com

Challenges

- Founding was fine, maintaining wasn't
- Community is needed for contributors
- Project management is challenging

Current Updates

- No development updates. Stalled, or stale?
  - There were attempts to join the force with other Indonesian distro, particularly *BlankOn*, but no real results

- It seems that.. (Based on googling)
  - Some people are still using Kuliax in *VMs*
  - At least a study program is still using Kuliax in the lab

Maybe the lab instructions used Kuliax at first, and haven't got updates yet

* BlankOn Linux: https://blankonlinux.or.id/

Other Linux 2.6.x kernel - VMware Workstation 14 Player (Non-commercial use only)

Player ▾

Shell - Konsole

Session   Edit   View   Bookmarks   Settings   Help

```
NPM: 14117910
Kelas: 2KA01
kuliax@kuliax:kuliax$ origin
MENU SEDERHANA
1. Biodata
2. Volume Kerucut
3. NIlai
4. Kelulusan
Input your Option (1 - 4): 2
Input Radius    : 10
Input Height    : 10
Your Cone Volume is 1047.197632
kuliax@kuliax:kuliax$ origin
MENU SEDERHANA
1. Biodata
2. Volume Kerucut
3. NIlai
4. Kelulusan
Input your Option (1 - 4): 3
Input NIlai     : 10
GRADE: E
kuliax@kuliax:kuliax$ origin
MENU SEDERHANA
1. Biodata
2. Volume Kerucut
3. NIlai
4. Kelulusan
Input your Option (1 - 4): 4
Input NIlai     : 100
ANDA LULUS!
kuliax@kuliax:kuliax$
```

Shell

SmartAudio

0:01 / 6:21

#Kuliax6 #CProgramming #Labsi

Cara Mengatasi Scanf() Error di OS KULIAX 6.0

161 x ditonton • 31 Mar 2019

👍 0   👎 0   ↱ BAGIKAN   ⊞ SIMPAN   •••

Raindeca DH
76 subscriber

SUBSCRIBE

Journey Summarized

- It's not easy maintaining free software project
- Good **community**, **management**, and **supports** are needed to make the project *sustained*
- Distro for higher education is still relevant*

Answering the question

- No, it's not relevant
- **Yes, it's still relevant**
  - Everyone has favorite distros
  - There would be ways to accommodate higher edu needs
  - Easier for the developers?

Virtualized Distros?

- Virtualized environments for learning, research, devel.

  Automate the development?
- Minimal customization, more on *ready-to-use*
- Could be started by targeting specific demands (Read: particular classes, use cases, or trends)
  - Classes that need supporting *instant* environments
  - DevOps, SDN, cloud computing, IoT, …
  - *Documentation and tutorials* are needed
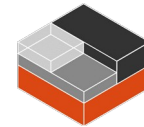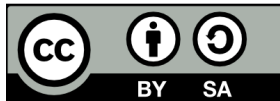
Ex: Download a VM image, load, and run it on VirtualBox

Acknowledgement

- Adi Indrayanto, Rusnoss team, Laboratorium Sistem dan Aplikasi Pusat Mikroelektronika ITB, Ristek, and Kominfo/Postel for the supports and cooperations
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- PPTIK UGM and Tim UGM Goes Open Source (UGOS) for development and testing infrastructure
- Providers and server administrators for mirroring Kuliax ISO images
- Yan Arief Purwanto for the hosting space
- Free Software/Open Source and Copyleft/CC communities

2020

Kuliax

kuliax.org

Terima kasih