

# WIRELESS NETWORK WITH AGRO-ECOLOGICAL FARMERS, NEAR BOLOGNA

Andrea

Battlemesh v14.0 Roma - 19 settembre 2022

# WHAT WE ARE DOING

A community mesh network in countryside.

Libremesh

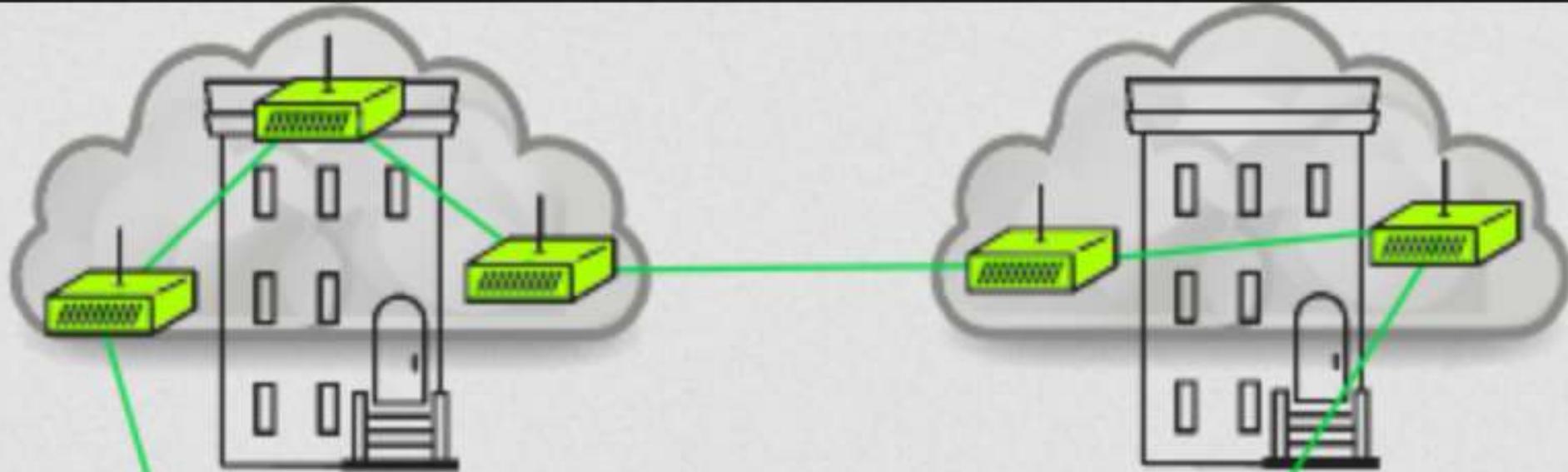
<https://libremesh>

LibreMesh is a modular framework for creating OpenWrt-based firmwares for wireless mesh nodes.

Mesh networks are such networks where all participants (nodes) are able to route traffic from other participants. So there are not central points and the physical topology can be completely random.

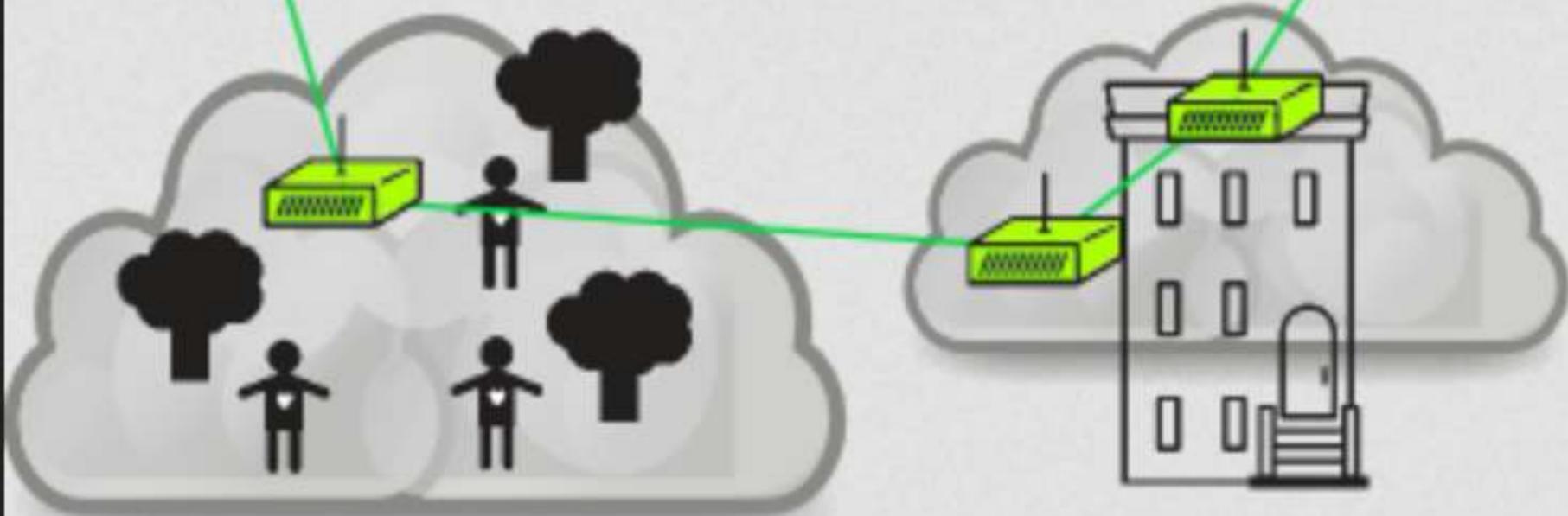
- Scalability;
- Network segmentation;
  - Easy to use;
  - Modularity;
- Compatibility of most of the existing scenarios;

A single firmware image for all of your devices in your network (for ground level, for backbone, for companies, for quick deployments, etc.) And NEWS: deploy configuration based on MAC address.



libremesh

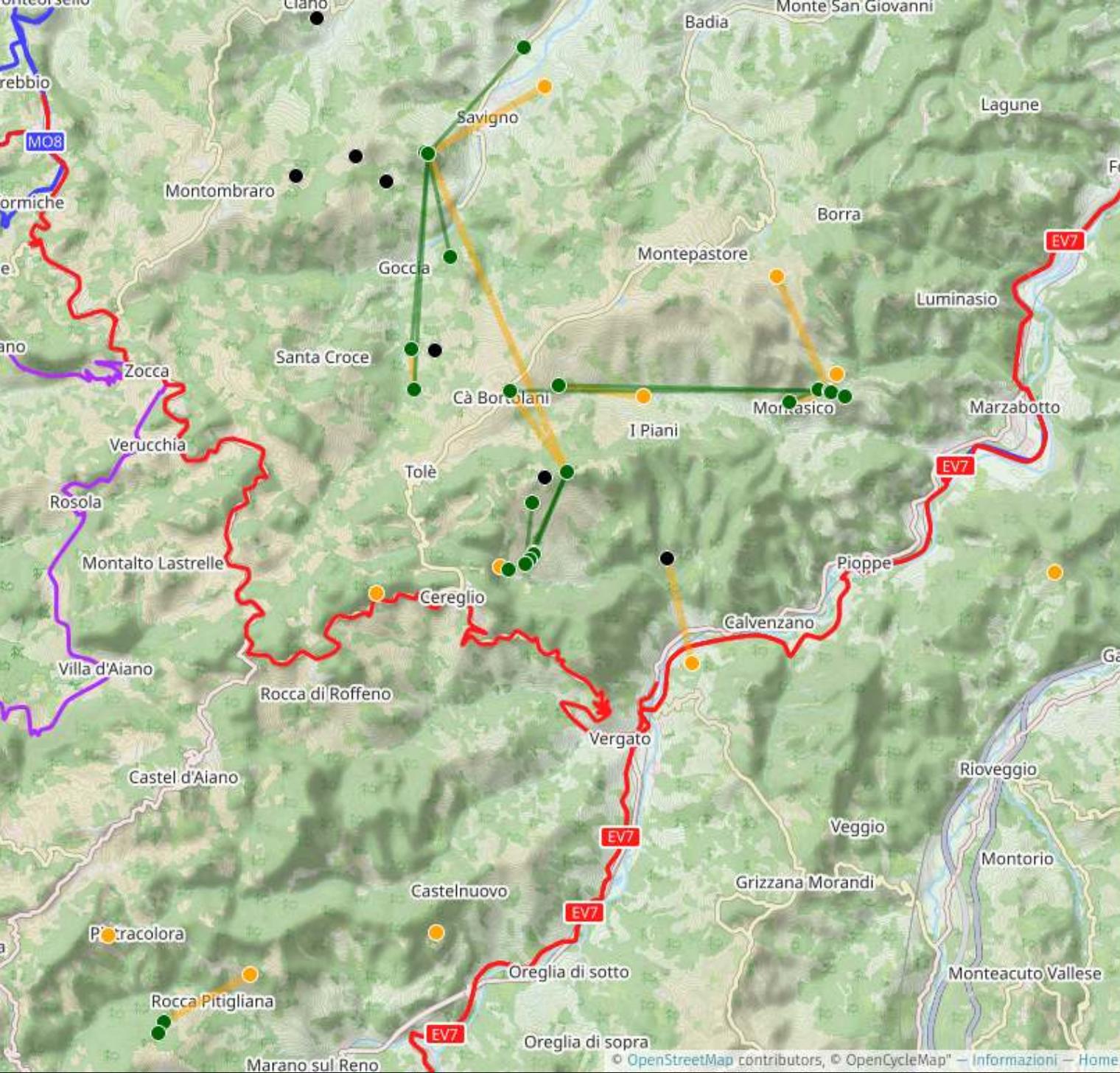
[https://libremesh.org/docs/en\\_quick\\_starting\\_guide.html](https://libremesh.org/docs/en_quick_starting_guide.html)



[HTTPS://NINUX.ORG](https://ninux.org)

# OUR MESH NETWORK

<https://antennine.noblogs.org>



### nodi

di croara

ultimo aggiornamento: 8 giugno 2022

aggiunto nodi attivi bisaboga - davide mo

[nodi-montati-attivi.gpx](#)

[nodi-via-cavo-attivi.gpx](#)

nodi via cavo  
o via ponti wireless piccoli

[collegamenti-attivi.gpx](#)

[nodi-montati-spenti.gpx](#)

il collegamento non si riesce a fare  
o la situazione è ferma  
ma c'è un dispositivo montato

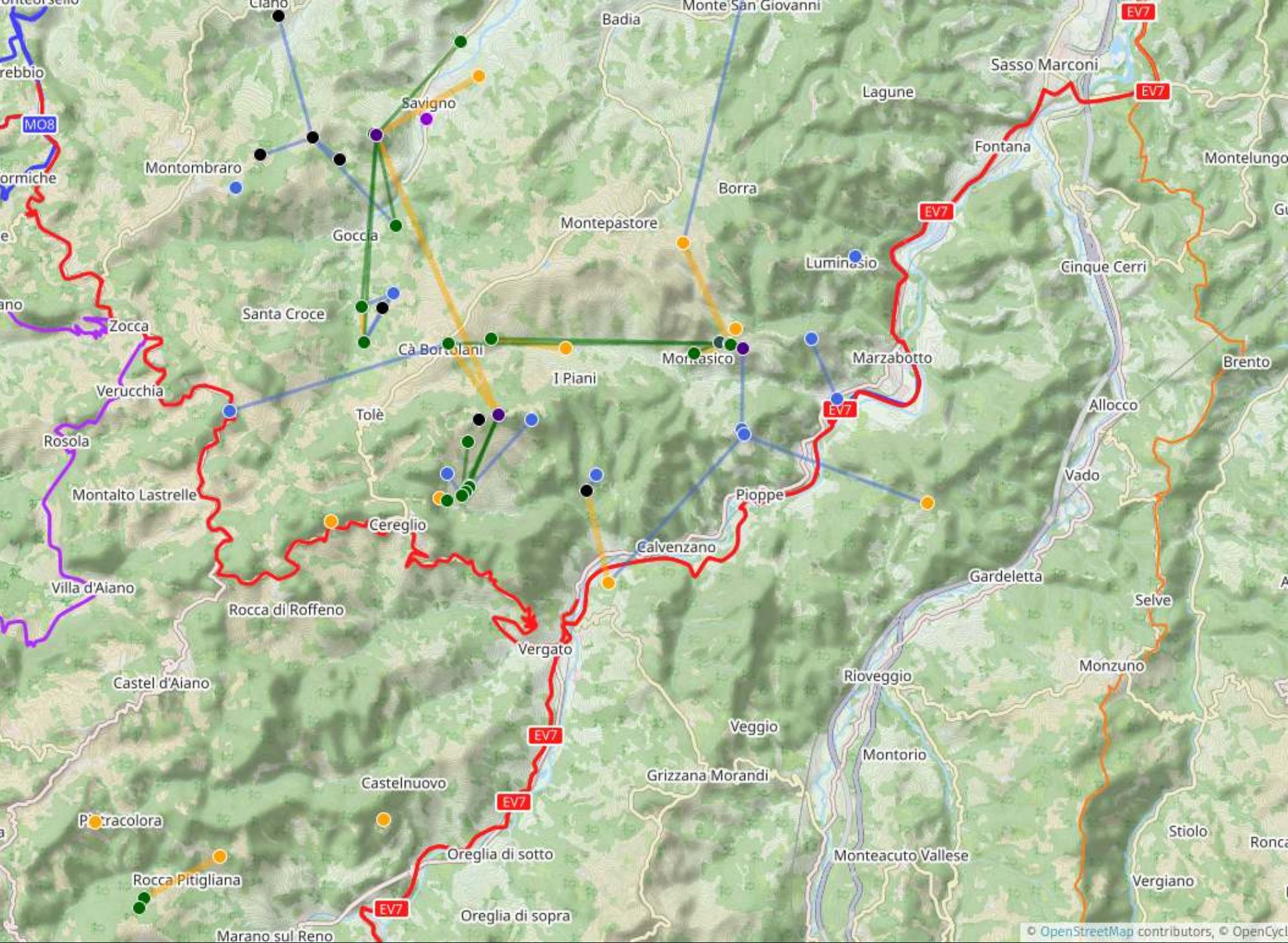
[nodi-potenziali.gpx](#)

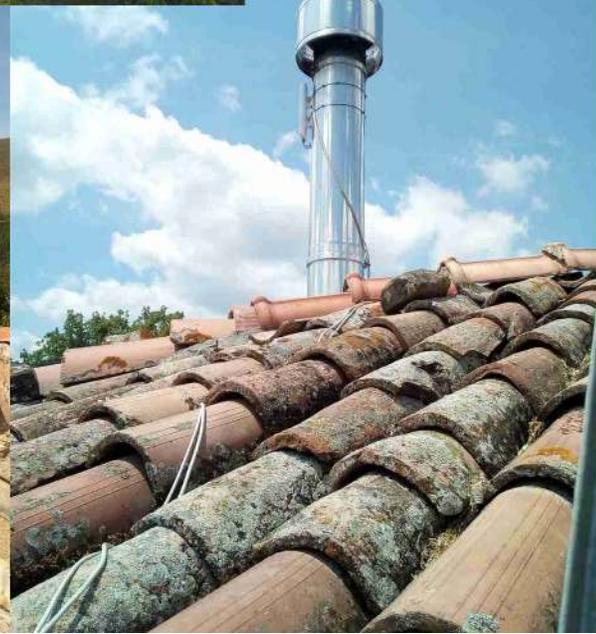
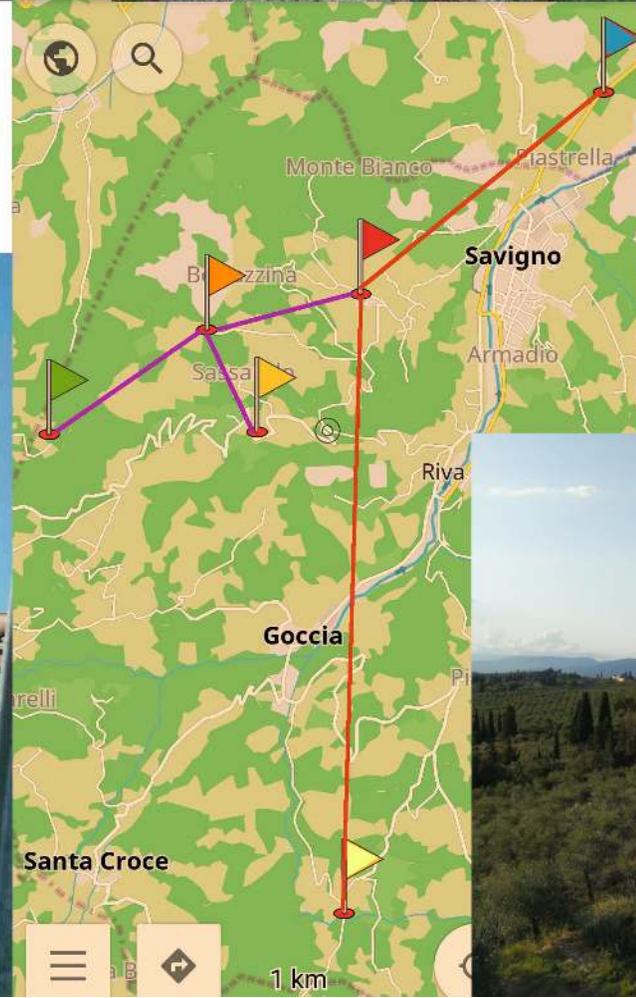
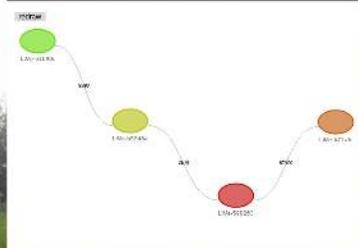
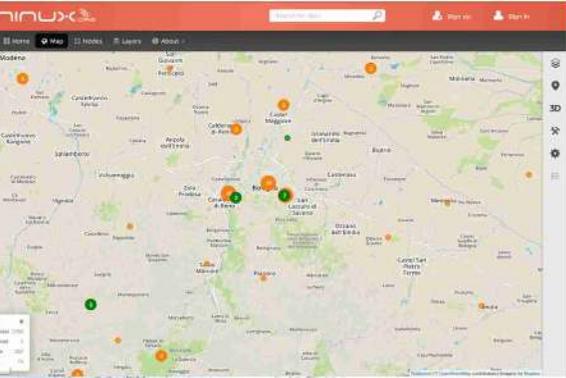
persone interessate a entrare nella rete,  
e che ci hanno contattato

[collegamenti-potenziali.gpx](#)

collegamenti testati con <https://link.ui.com>  
e/o con prova empirica della Line Of Sight

Ringraziamenti













EXTRAORDINARY CRAFTS

Hack (of) Wave

Hack (of) Wave

Hack (of) Wave



2











# SERVICES

- Nextcloud - cloud
- Transmission - torrent
- Umap - maps
- Prometheus - monitoring
- H5ai - Repository for firmwares
- Graphana - graphs
- Internal LibreSpeed



## Info Ada

Lista di strumenti e di informazioni

[Home](#) | [Documentazione](#)



### Ada

Installazione NextCloud per condividere i files.

Visita <https://ada/>



### Mappe Ada

Installazione Umap per avere una mappa comune.

Visita <https://mappe.ada/>



### Librespeed Ada

Installazione Librespeed per misurare la velocità di connessione fino ad Ada.

Visita <https://librespeed.ada/>



### Torrent Ada

Installazione Transmission per mettere una macchina sempre accesa a scaricare lei i torrent.

Visita <https://torrent.ada/>



Grafana

### Panorama Ada

Installazione Grafana per semplificare le attività di monitoraggio.

Visita <https://panorama.ada/>



### Nodi Ada

Indice delle foto dei nodi, editabile su Nextcloud da [qui](#).

Visita <https://nodi.ada/>



### Firmware Ada

Indice dei firmware scaricabili.

Visita <https://firmware.ada/>



### Firmware Test Ada

Indice dei firmware in fase di TEST.

Visita <https://firmware.test.ada/>



### Belvedere Croara

Installazione Prometheus Val di croara.

Visita <http://belvedere/>



### Belvedere Valsamoggia

Installazione Prometheus Valsamoggia.

Visita <http://belvedere-vs/>



# Good afternoon

 Set status

 16.2 °C Clear sky at 10:00 PM

## Recommended files

-  TP2\_LoadBalancing.pdf
-  2022-04-04-raspios-b... .xz
-  2022-08-10\_205448.jpg
-  traffic-control-amuza.webm
-  I\_Sette\_Samurai\_Versi... .avi
-  Animali Fantastici 3 I Se... .mkv
-  Fantastic.Beasts.The.S... .srt

## Audio Player



Selection 





6 kB/s 0 kB/s

che+Piangere+-+Roberto+Benigni+e+Massimo+Tro

0 kB/s

00%)

angiarsi

0 kB/s

00%)

15

ni

0 kB/s

s remaining

13

Sub.Eng.Rus.MIRCrew

0 kB/s

unknown

0

Eng x265-NAHOM

aining time unknown

0

g.BDrip.x264.SD-Fratposa.mkv

0 kB/s

unknown

0 kB/s

te unknown

eros - I Compagni



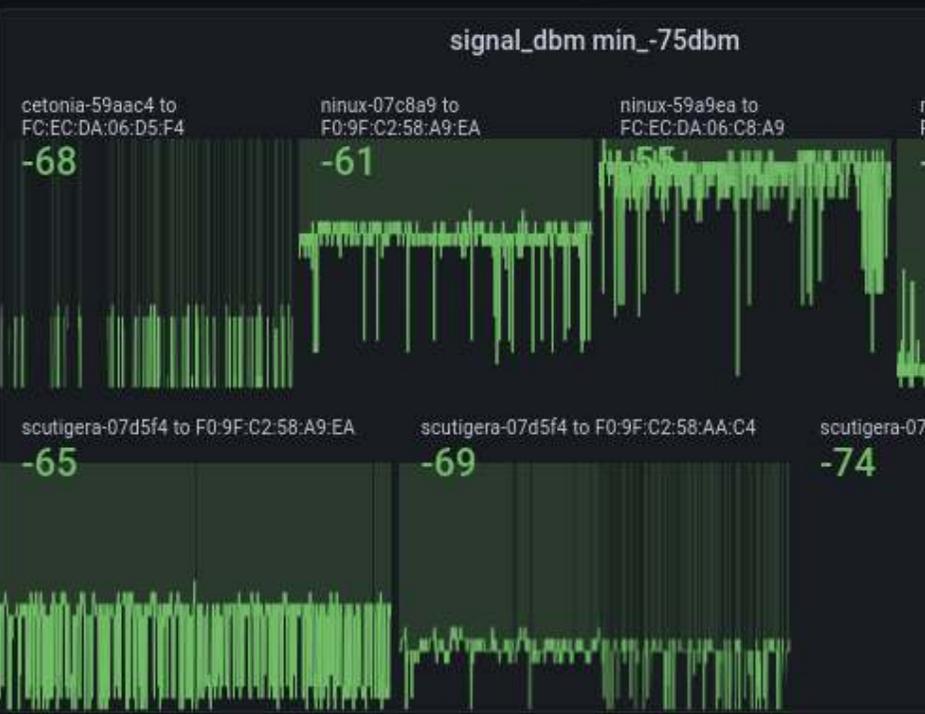
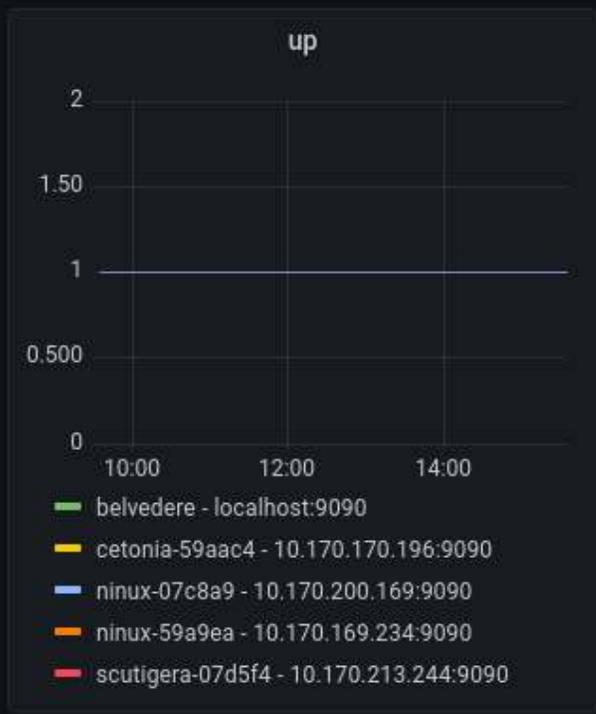
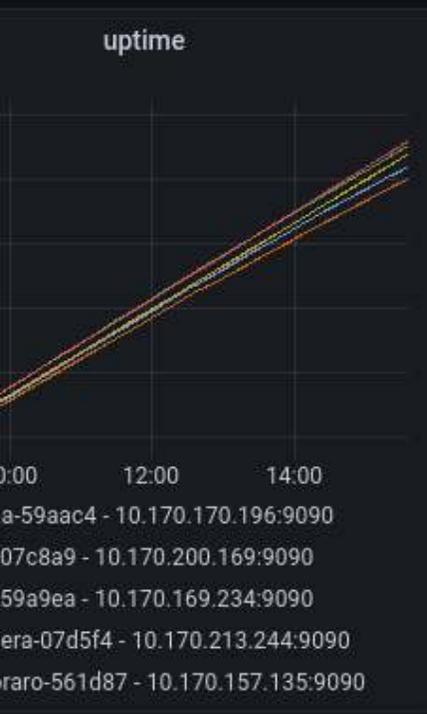
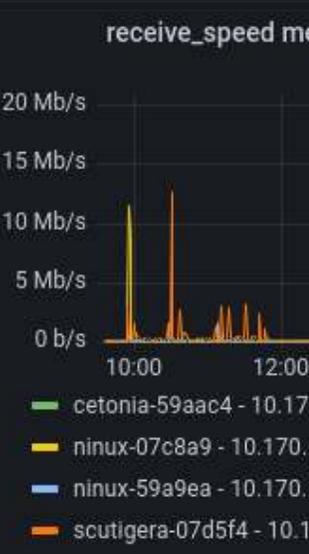
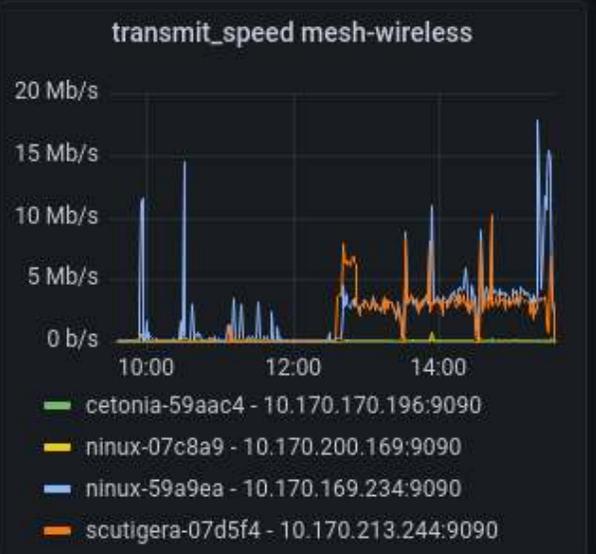
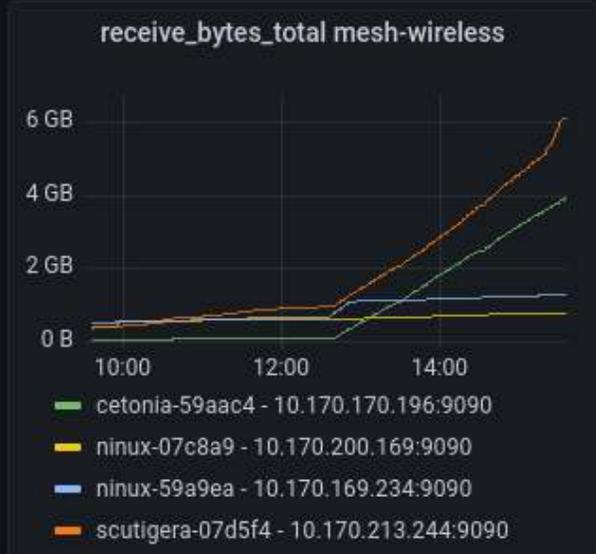
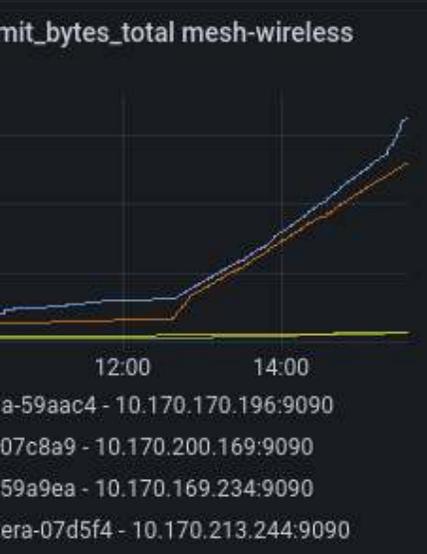


```

wifi_station_signal_dbm{group="camaleonte", ifname="wlan0-mesh", instance="10.170.208.91:9090", job="prometheus", mac="00:27:22:3E:B4:D7"}
wifi_station_signal_dbm{group="camaleonte", ifname="wlan0-mesh", instance="10.170.208.91:9090", job="prometheus", mac="00:27:22:68:5B:2A"}
wifi_station_signal_dbm{group="camaleonte", ifname="wlan0-mesh", instance="10.170.208.91:9090", job="prometheus", mac="00:27:22:BE:5D:FC"}
wifi_station_signal_dbm{group="camaleonte", ifname="wlan0-mesh", instance="10.170.208.91:9090", job="prometheus", mac="DC:9F:DB:84:B8:18"}
wifi_station_signal_dbm{group="ninux-3fb4d7", ifname="wlan0-mesh", instance="10.170.180.215:9090", job="prometheus", mac="00:27:22:68:5B:2A"}
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wifi_station_signal_dbm{group="ninux-85b818", ifname="wlan0-mesh", instance="10.170.184.24:9090", job="prometheus", mac="DC:9F:DB:0A:D0:5B"}
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```

	Nome 	Ultima modifica
18.06.5	 openwrt18.06.5	16-12-2021 12:50
18.06.9_lime2020.1	 openwrt18.06.9_lime2020.1	13-08-2021 17:24
19.07.7_lime2020.1	 openwrt19.07.7_lime2020.1	17-09-2021 23:03



# FEMINIST TECHNOLOGIES

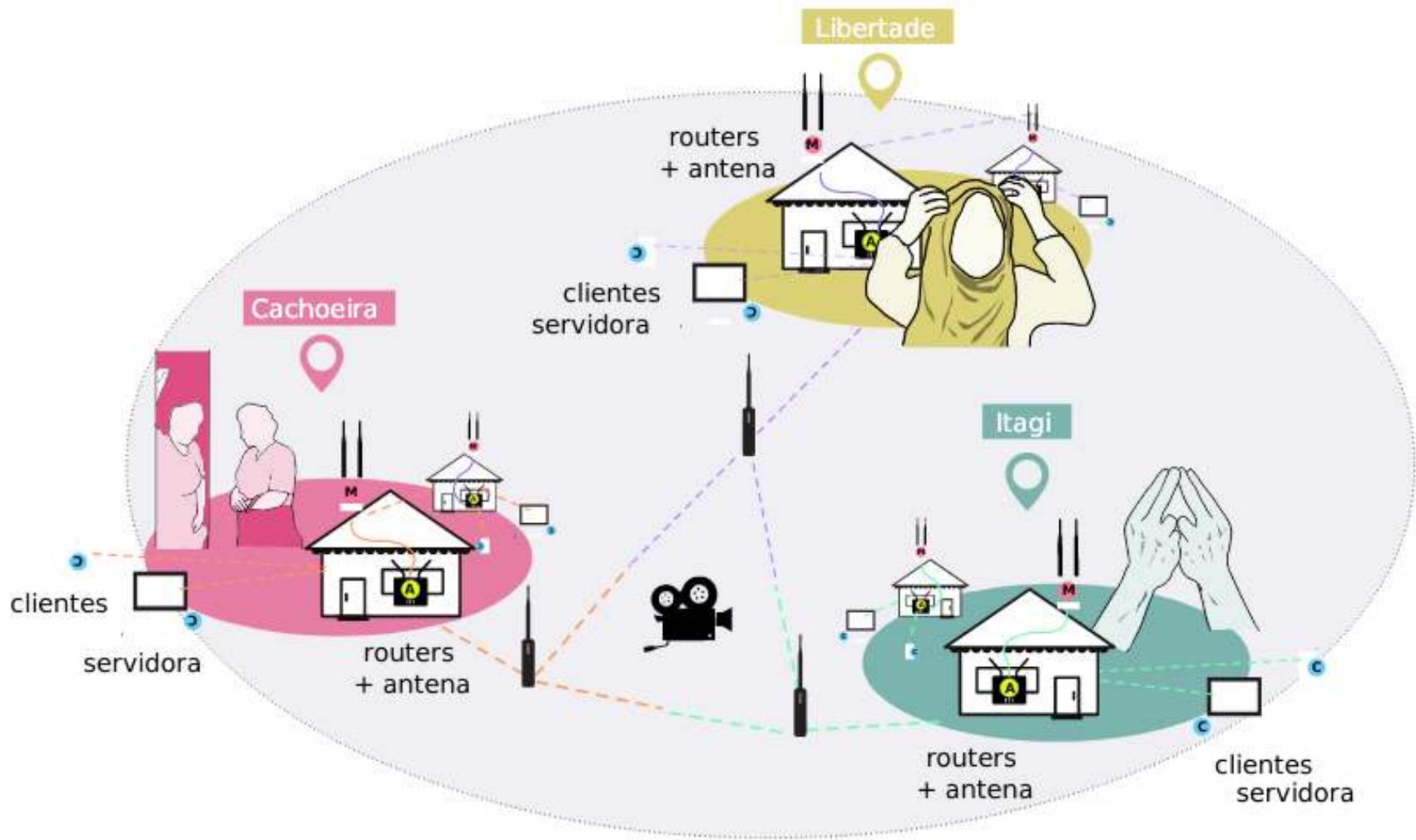
technology is a proportion of skills and dependencies

- do not do things alone
- testing environment
- document everything and explain the choice (most why not something)
- give yourself (and others) the time to study
- not be too much specialized/not lost the community scope

# PERIFERICAS - KEFIR - VEDEETAS

OFICINA REDES AUTÔNOMAS  
Introdução a redes autônomas

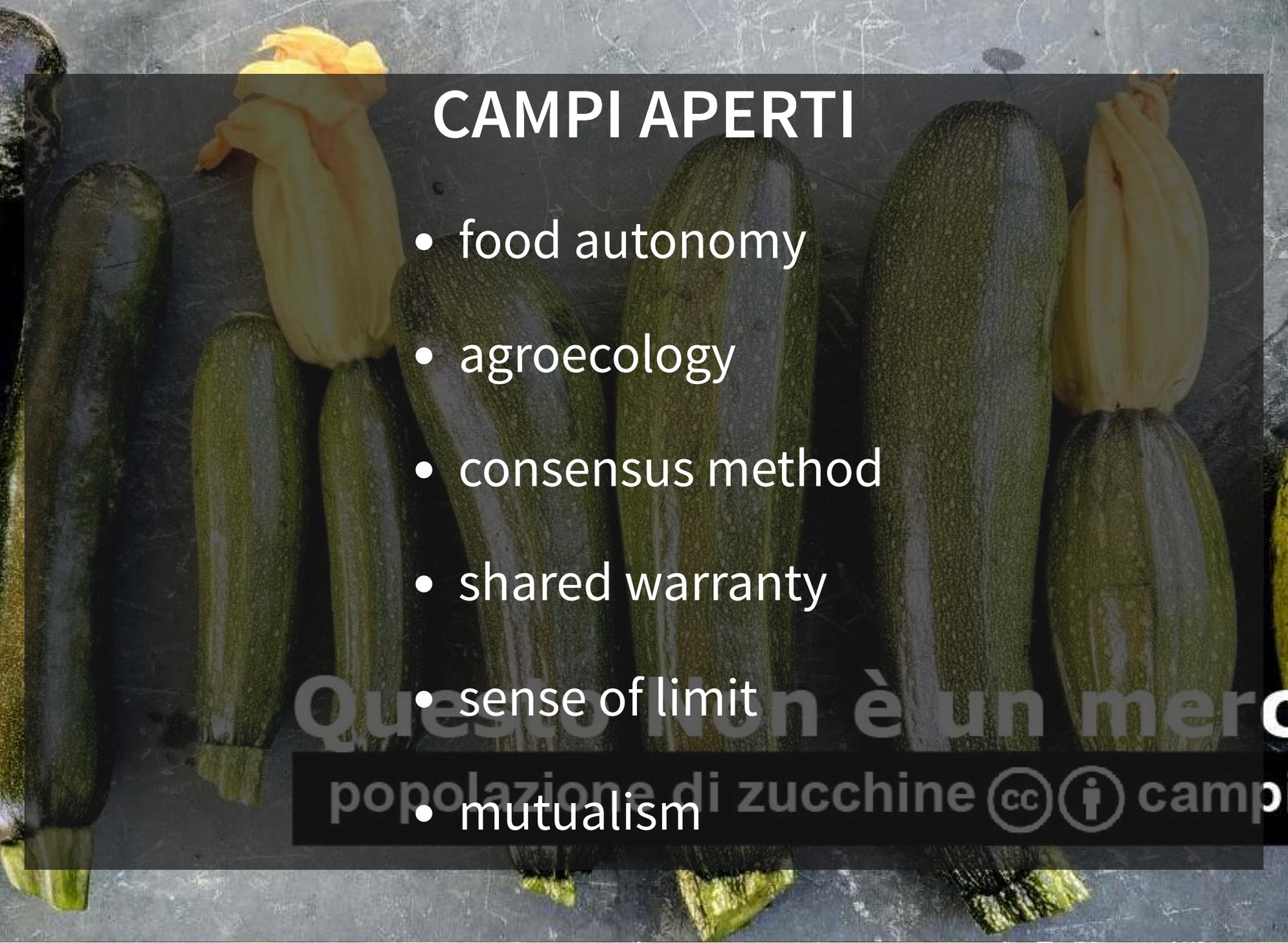
[https://vedetas.org/wp-content/uploads/2017/06/Introdu%C3%A7%C3%A3o-a-redes-aut%C3%B4nomas-VEDEETAS\\_v4.pdf](https://vedetas.org/wp-content/uploads/2017/06/Introdu%C3%A7%C3%A3o-a-redes-aut%C3%B4nomas-VEDEETAS_v4.pdf)



- intimacy and consensus
- memory and narrations
- interconnection seeds
- self-management

**A NETWORK OVER ANOTHER NETWORK**

Quote from Moxie Marlinspike



# CAMPI APERTI

- food autonomy
- agroecology
- consensus method
- shared warranty

• sense of limit

• mutualism

Questo Non è un mercato  
popolazione di zucchine © i campi



# SOME NUMBERS..

- Campi Aperti started in 2003
- 165 farms
- 8 organic-markets in the city of Bologna

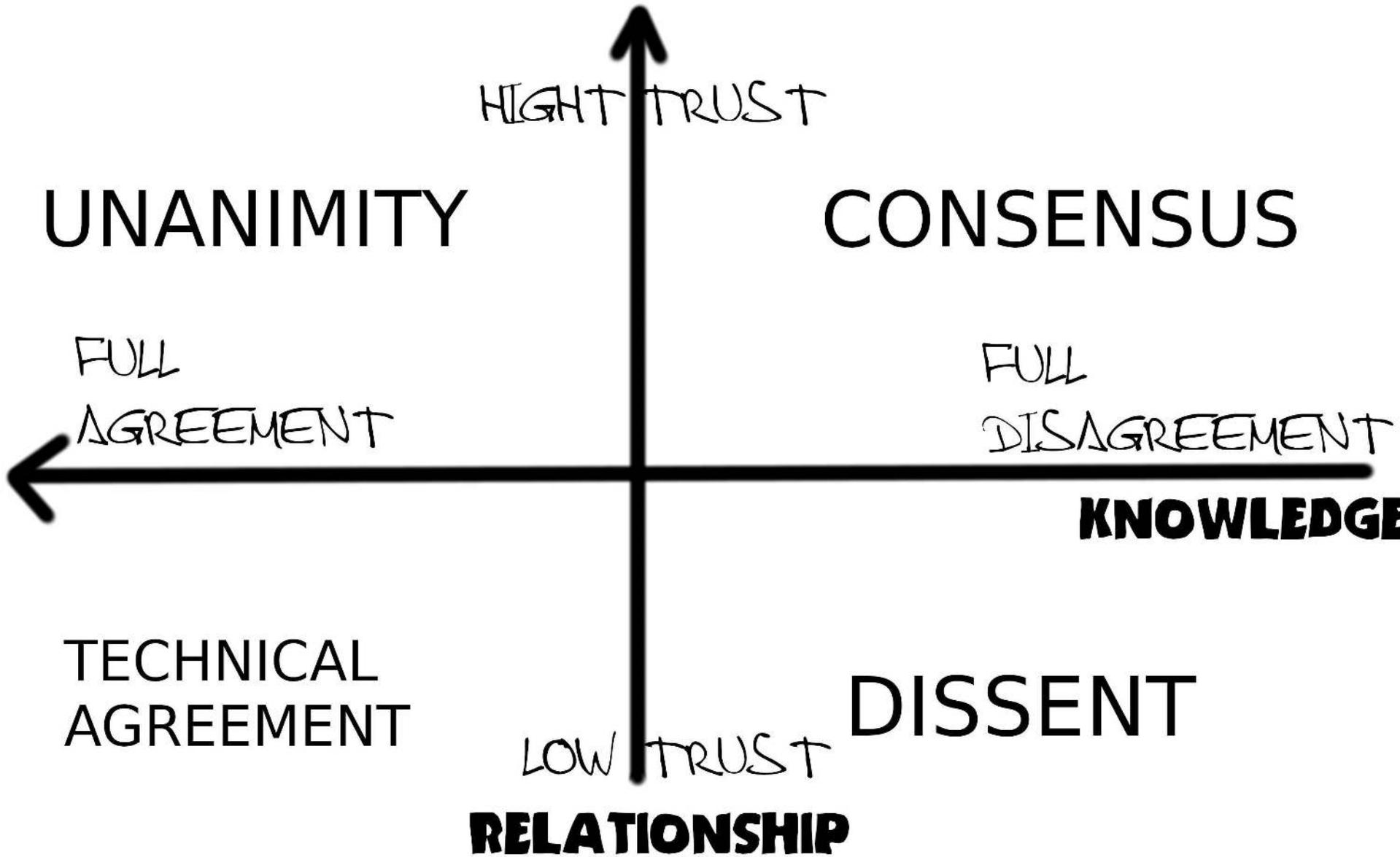
La nostra produzione è rigorosamente biologica e locale, legata alla territorialità e alla stagionalità del prodotto, e controllata attraverso un **Sistema di Garanzia Partecipata**.



L'associazione **Campi Aperti per la Sovranità Alimentare** offre alla città sette mercati biologici contadini indipendenti e autogestiti.

Nei banchi dei nostri mercati trovate il frutto di un'agricoltura sostenibile e dietro i banchi i volti di coloro che lavorano nel rispetto della terra.

**Non ammettiamo la compravendita e promuoviamo una relazione diretta tra produttori e consumatori** (coproduttori) che assieme contribuiscono a sostenere un diverso modello di produzione agricola.



# ORIENTATION

not ask: "we are all agree?", but better: "someone have more doubts?"

- active consent
- consent and doubt
- active dissent

# SHARED AGREEMENTS

- reports
- time keeper
- right to listen/ to be listen
- everyone talks for herselfes (no meta discussion)

# NEEDS

- **PEOPLE THAT TAKE CARE OF THE PROCESS**
- **TAKE LESSONS TOGETHER ABOUT CONSENSUS**
- **ASK EXTERNAL HELP**

# OUR MESH NETWORK COMMUNITY

# FREE SOFTWARE AND FREE PEOPLE?

- problem of informed consensus
- cultural responsibility
- shared management

# FREE SOFTWARE AND FREE PEOPLE?

- maintain
- optimise
- innovate

**BECAME AN ISP**

a huge step?

# LIST OF ISSUES

- design together
- have a testing infrastructure
- financial
- understand a common good
- policy of service and content

# NEWS SUMMER 2022

Our mesh network is inside the project of make near the movement of Genuino Clandestino with Hackmeeting of Italy. Also in hiberic area is happening a simila.

- design together
- share knowledge
- share funds of IT to the agroecological movement
- ...
- share solutions to similar issues :)

please email me if you have similar experience in your  
country

# THANKS

questions?

CC 4 - by-nc-sa ; slide in reveal.js

# thanks

- [ninux.org](http://ninux.org)
- [eclectictechcarnival.org](http://eclectictechcarnival.org)
- [campiaperti.org](http://campiaperti.org)
- [www.ecn.org/xm24](http://www.ecn.org/xm24)
- [autistici.org](http://autistici.org)
- [libremesh.org](http://libremesh.org)
- [librerouter.org](http://librerouter.org)
- [tetaneutral.net](http://tetaneutral.net)
- [genuinoclandestino.it](http://genuinoclandestino.it)
- [hackmeeting.org](http://hackmeeting.org)