No more silos, please.

What is **NetJSON**?

data interchange format
designed for networking software

Dynamic routing protocols

(eg: olsrd, batman-adv)

Network databases

(A.K.A. node-db)

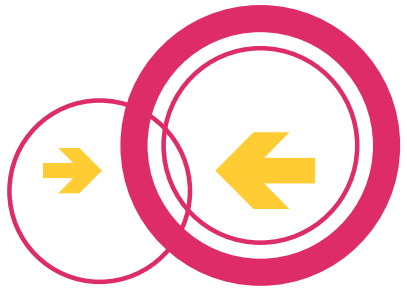
Monitoring tools

Firmwares / OS

(eg: OpenWRT, Raspbian)

What kind of networks?

Community networks!



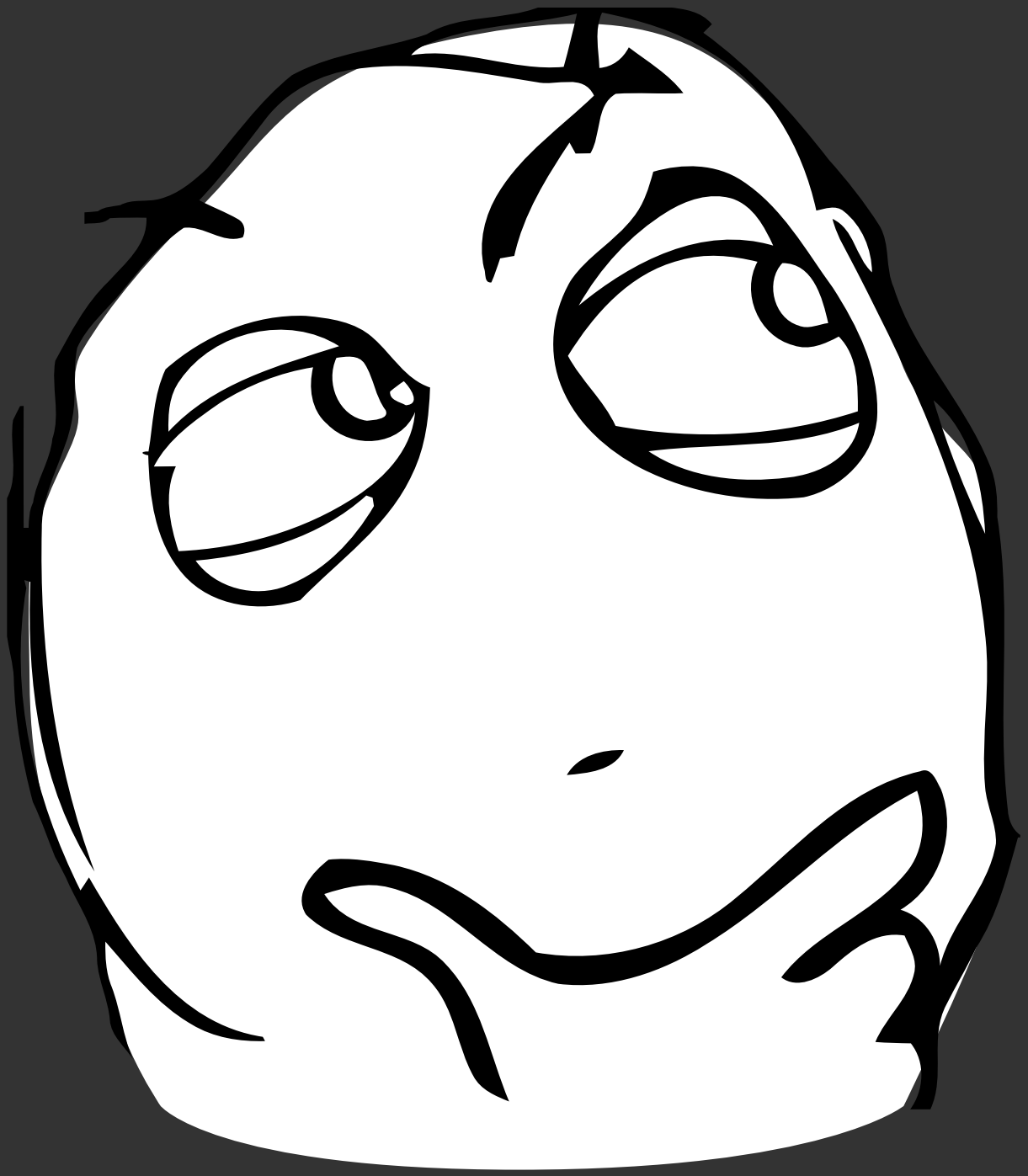
guifi·net

Also...

Municipal wifi

Research (eg: confine)

ISP (innovative ones)



WTF are you talking about?

Show us some examples!

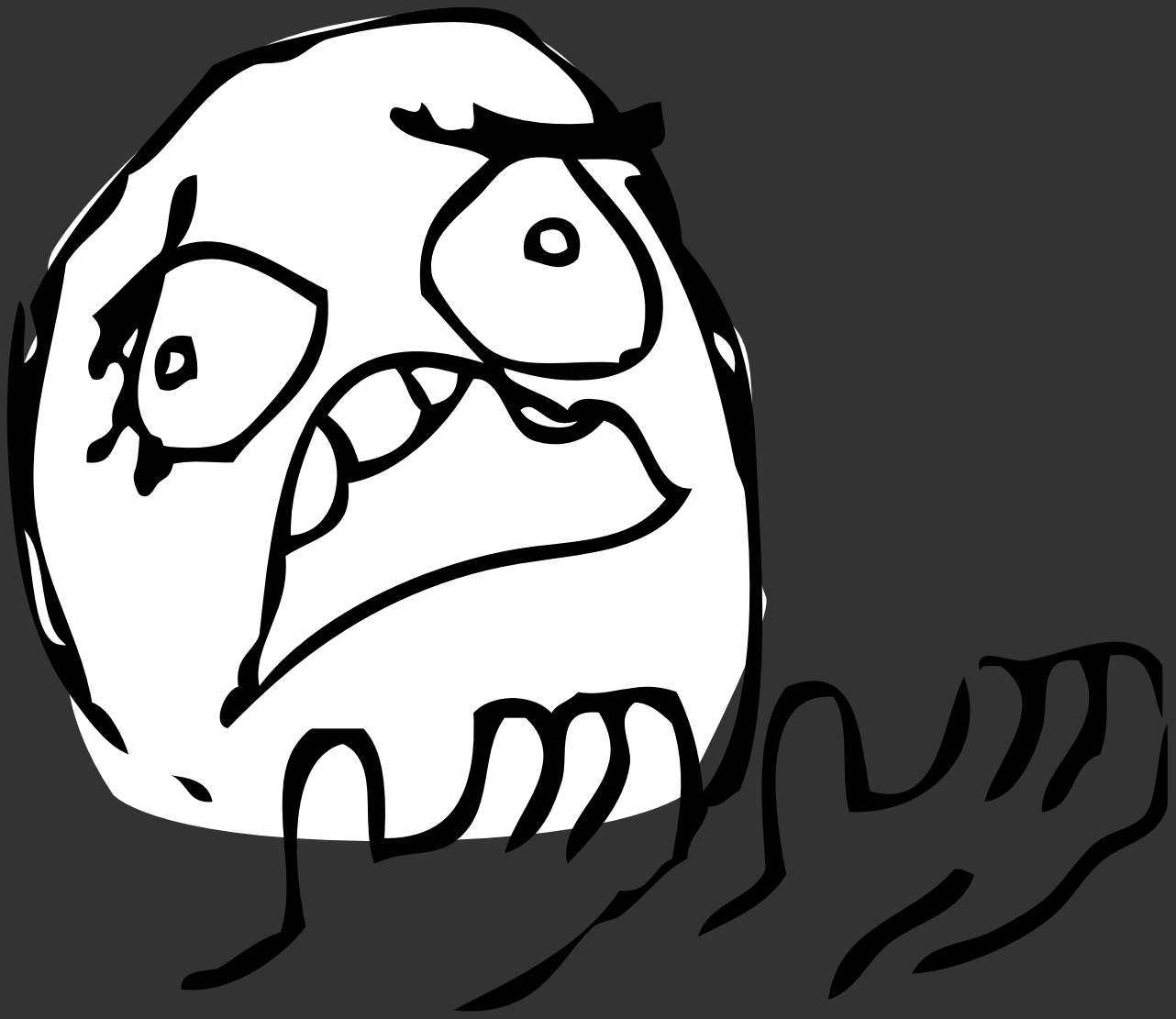
“NetworkGraph”

https://github.com/interop-dev/json-for-networks/blob/master/examples/network-graph.json

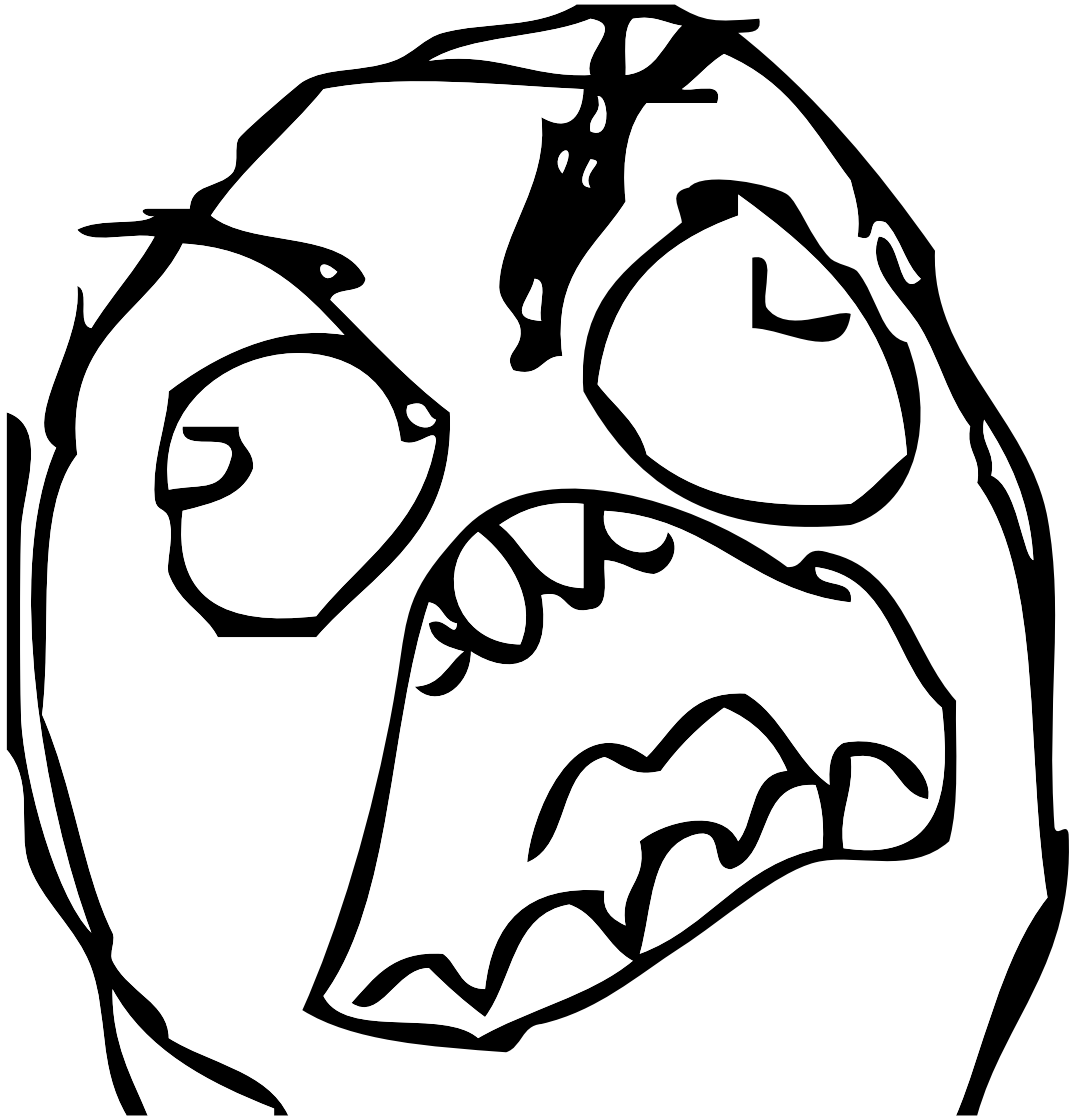
“DeviceConfiguration”

https://github.com/interop-dev/json-for-networks/blob/master/examples/device-configuration.json

But... why?



ever tried to develop software for **heterogeneous** networks?



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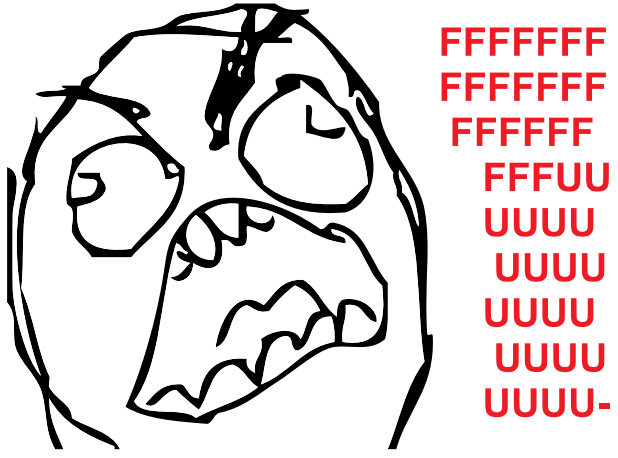
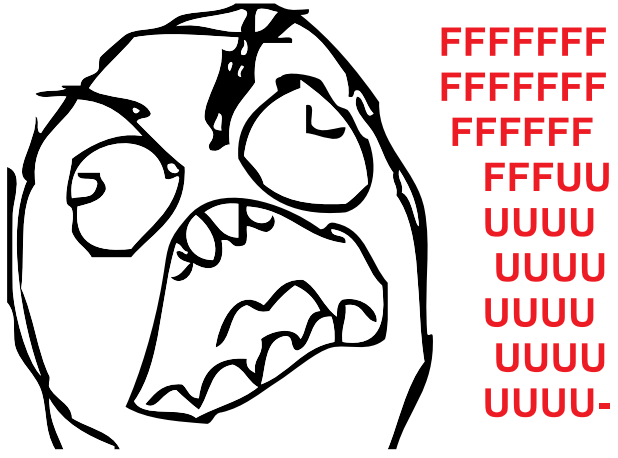
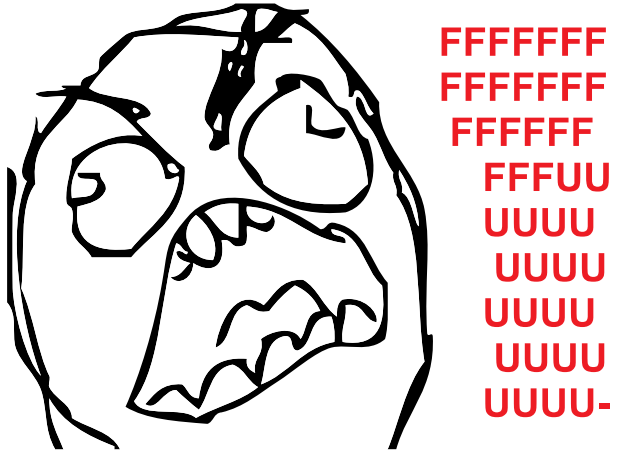
Vendors don't care about interoperability



FOSS projects
seem too busy to care either



No standard way to extract and parse data



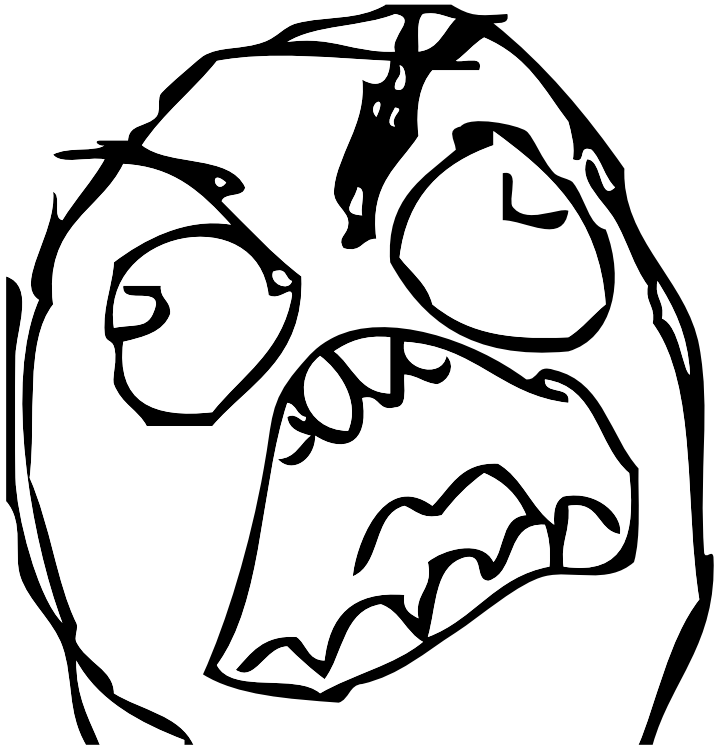
SILOS

+

VENDOR LOCK-IN

=

VERY SLOW INNOVATION



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We can do better than this.

We can achieve

interoperability

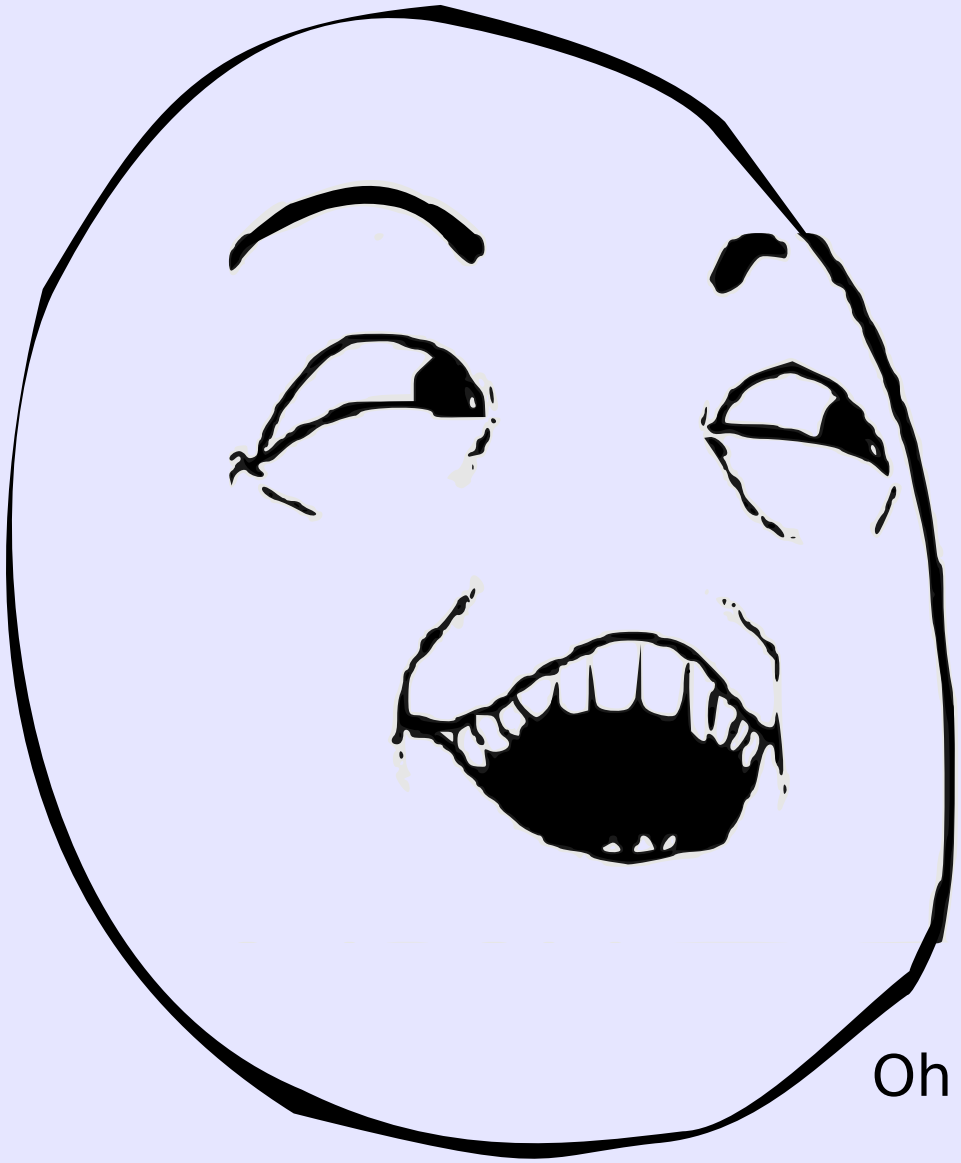
We can create an

ecosystem

We can foster

innovation

AHAH, innovation … but how?

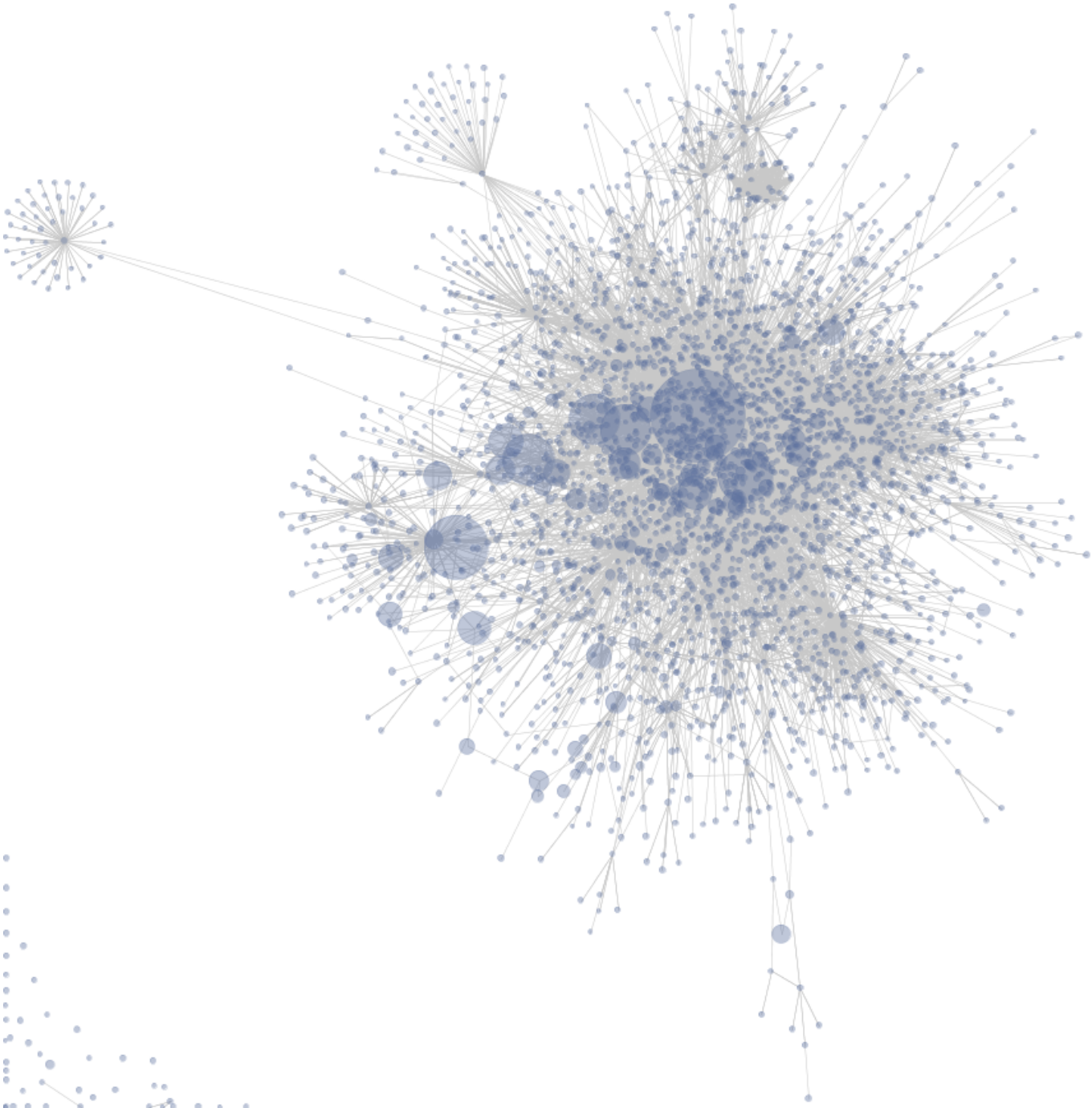


Oh yeah...

Easily import or export **device configurations**

Understand & visualize
network topology

ANY ROUTING PROTOCOL



Small libraries developed by

different communities

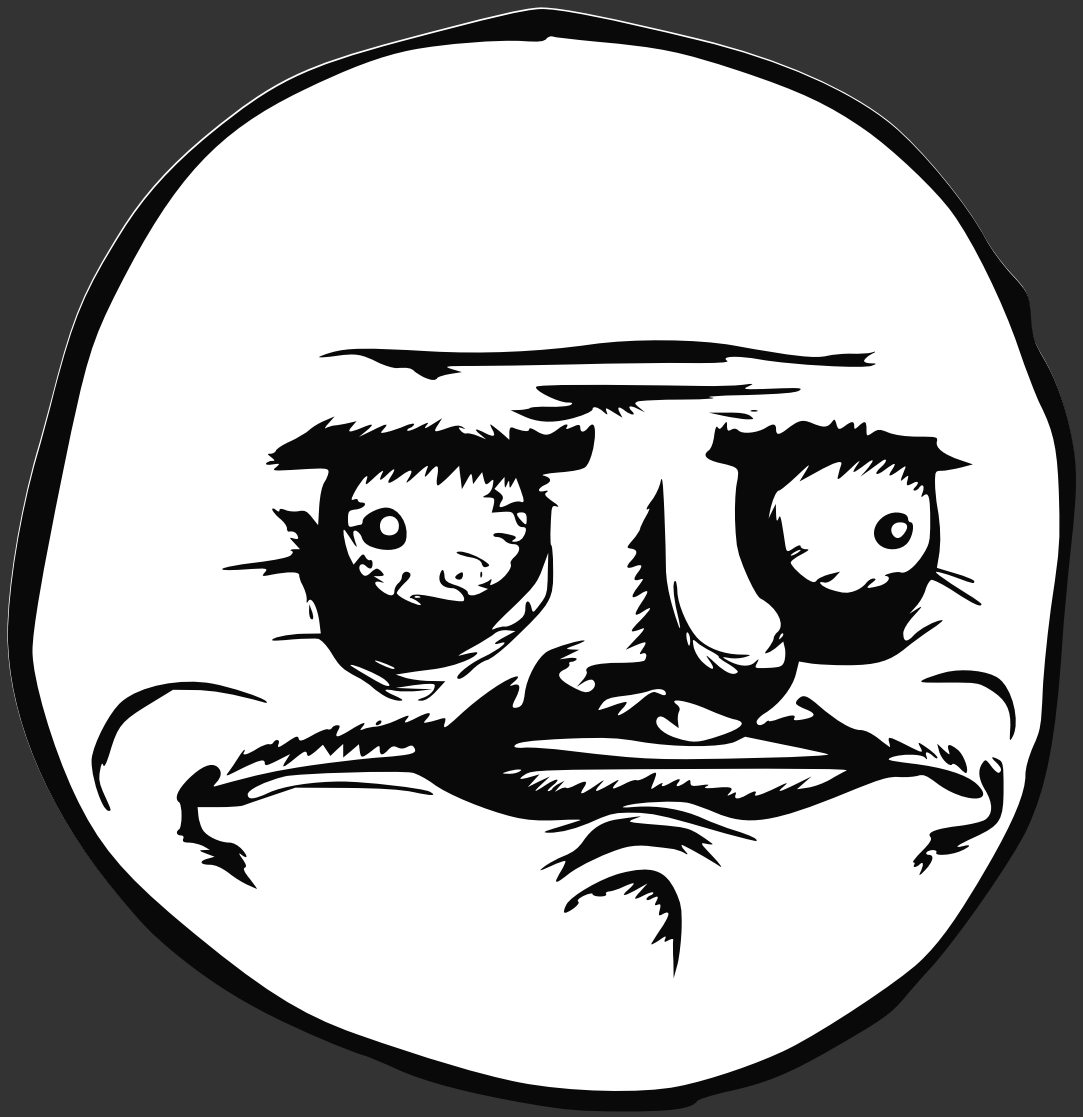
written in

different languages

will **interoperate**

Develop the new cool thing...

And anybody can start using it straightaway!



ME GUSTA

Current implementations?

netdiff

“utilities for parsing network topologies”

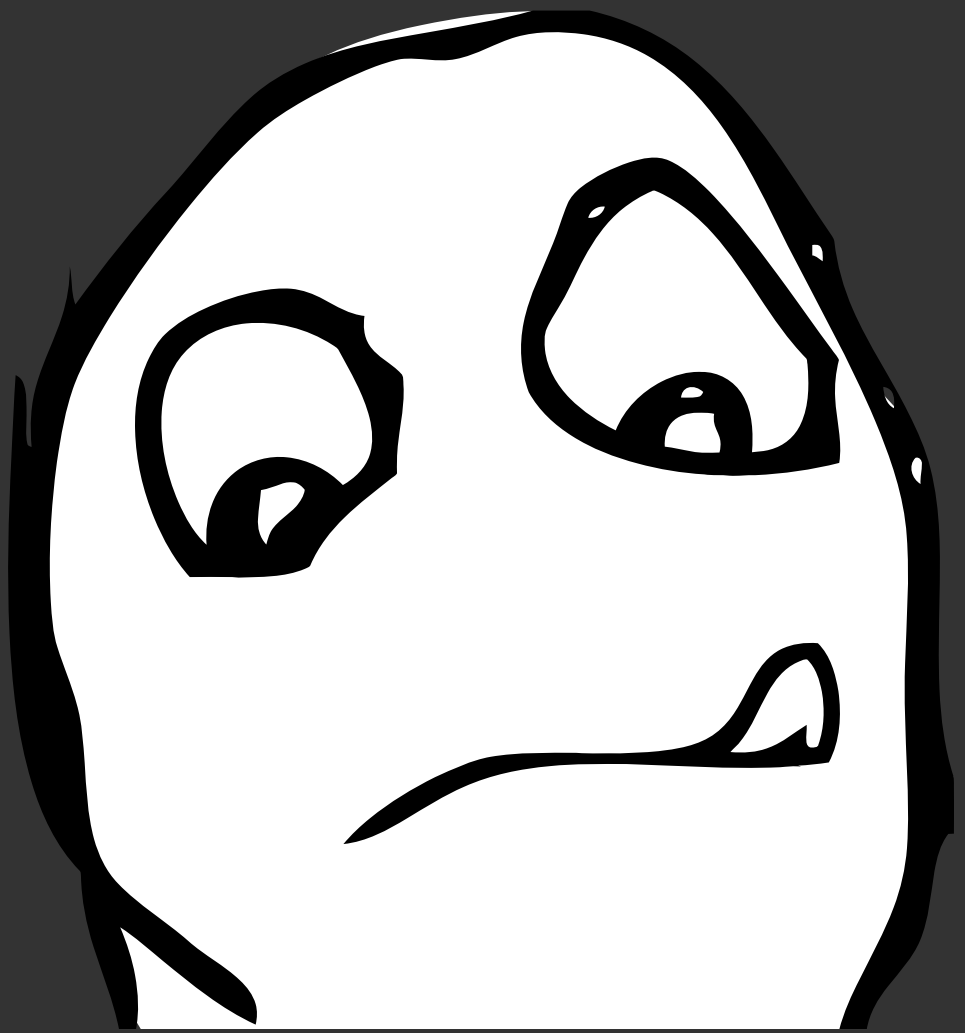
github.com/ninuxorg/netdiff

netengine-utils

“utilities for parsing output of common shell utilities like ifconfig and iwconfig”

github.com/ninuxorg/netengine

We are working on it...



Roadmap

1. Moaar implementations

nodeshot

“crowdmapping for community networks”

github.com/ninuxorg/nodeshot

Javascript d3 library

visualize “NetworkGraph” objects
(topology of any routing protocol)

2. Moaar feedback

3. Integrate feedback

4. Freeze specification

5. JSON Schema

6. Validator

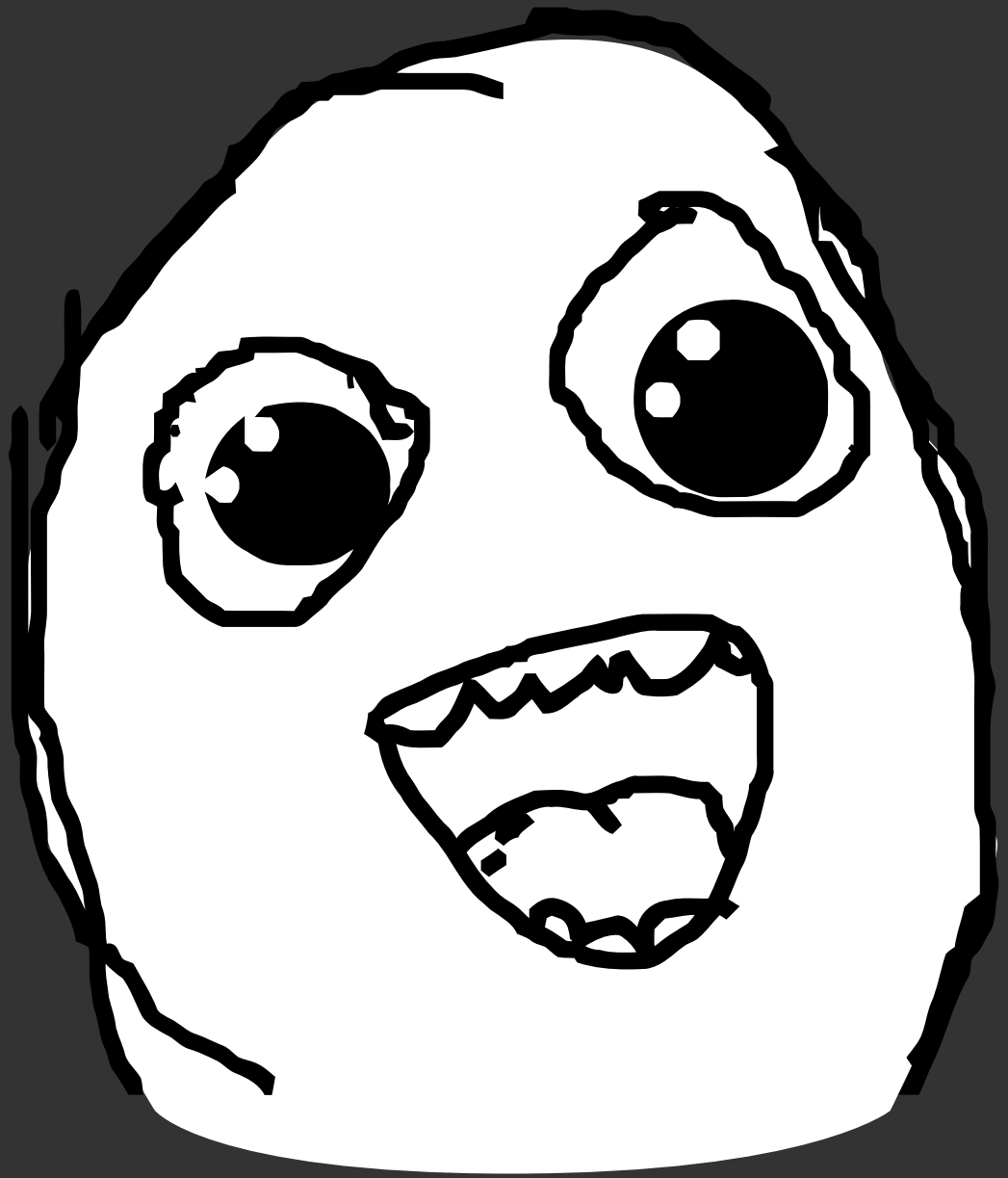
Want to help out?

1. read the spec

(10-15 mins max)

2. try to use netjson

3. send feedback



Reach us!

netjson.org

github.com/interop-dev/json-for-networks

mailing list **interop-dev**

@nemesisdesign (twitter)