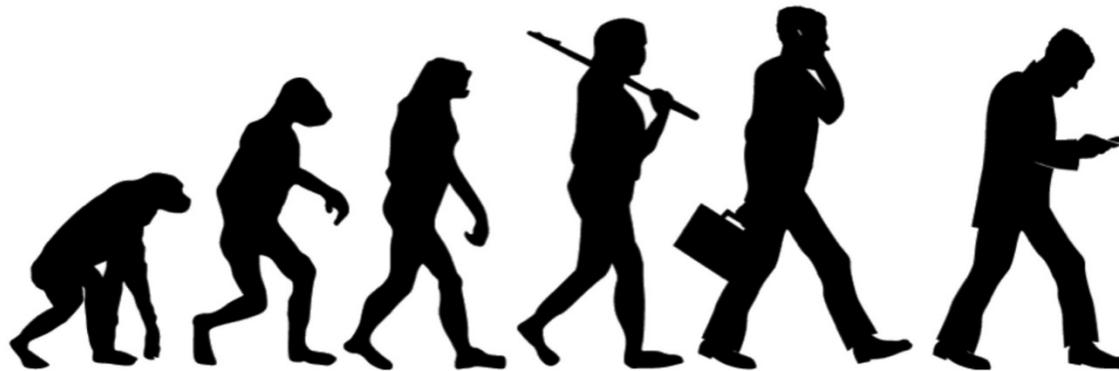




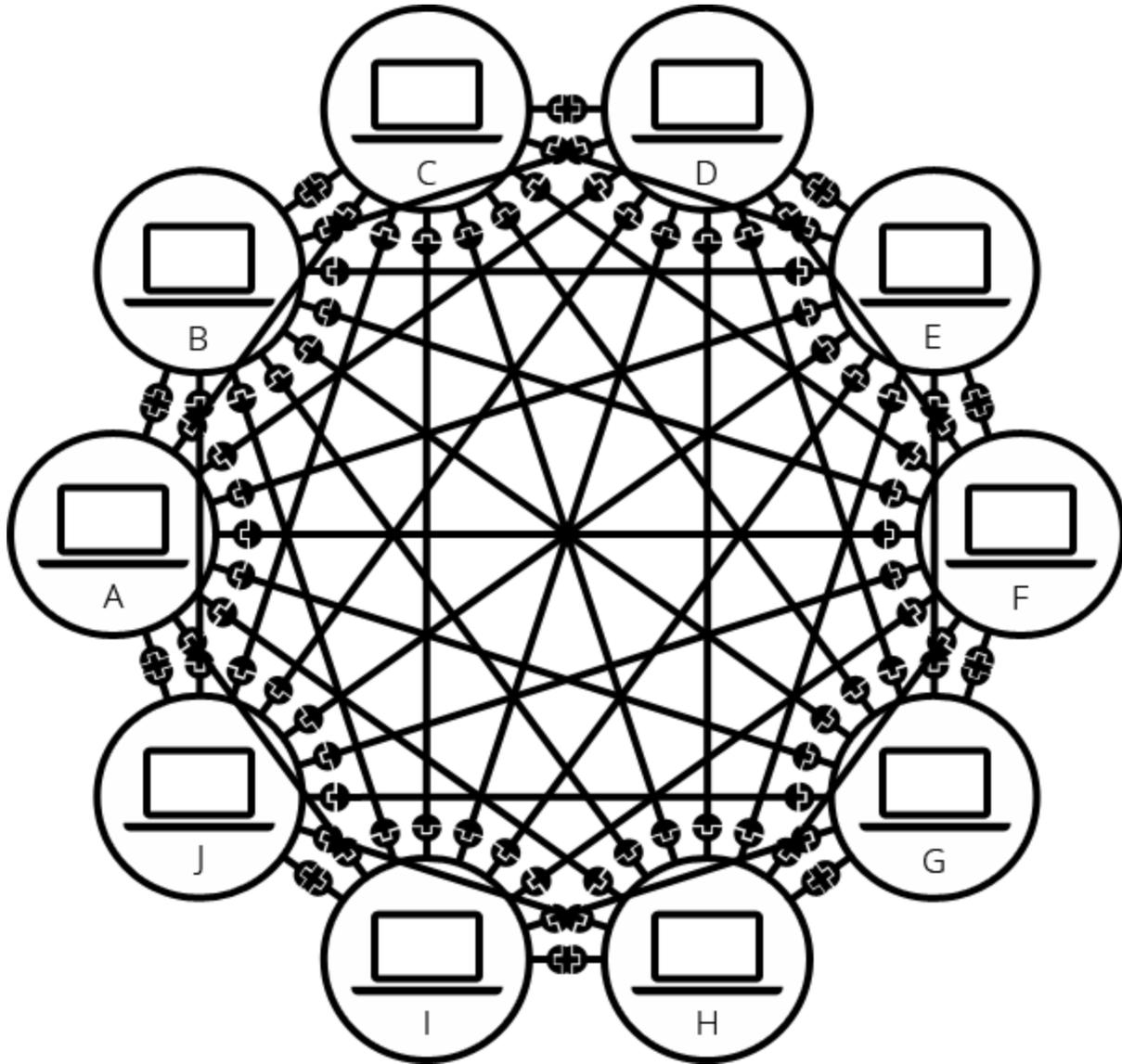
Defragmenting the Internet for fun and non-profit

**First, let's consider our
origins...**



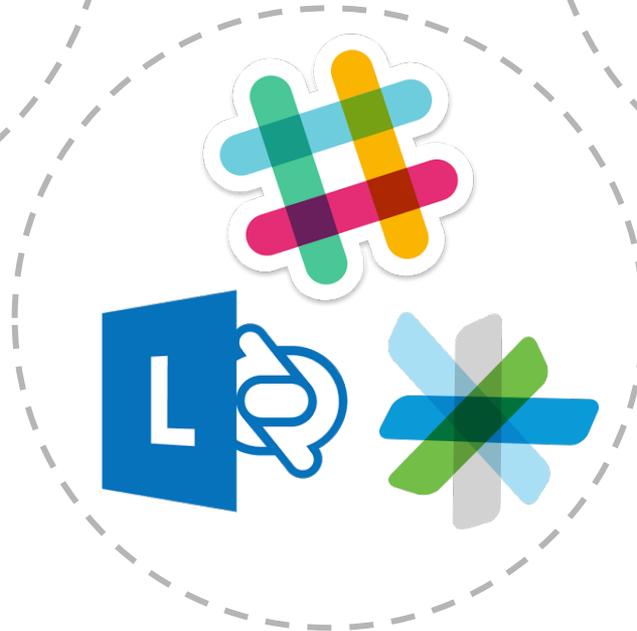
**What was the original
promise of the Internet?**

**An interoperable platform for
sharing data.**



What is the reality today?

User data is trapped in vendors.



Services are getting more and more fragmented...

**The user experience is
broken...**

For example:

**What does it mean to
"call someone via WebRTC"?**

Invitation: Kranky Geek @ Thu Apr 9, 2015 3:30pm - 3:55pm (tsahi.leventlevi@gmail.com)

Get Messages | Write | Chat | Address Book | Tag

 **This message contains an invitation to an event.** Accept Tentative Decline

From Tsahi Levent-Levi  Reply Forward Redirect Archive Junk Delete

Subject Invitation: Kranky Geek @ Thu Apr 9, 2015 3:30pm - 3:55pm (tsahi.leventlevi@gmail.com) 09/04/2015 12:23

To Me <matthew@matrix.org>  Other Actions

Tsahi Levent-Levi has invited you to Kranky Geek

Title: Kranky Geek

Location: <https://beta.talky.io/tsahil>

When: 9 April 2015 13:30 - 13:55

Organiser:  Tsahi Levent-Levi <tsahi.leventlevi@gmail.com>

Description: View your event at <https://www.google.com/calendar/event?action=VIEW&eid=Z2c2b3BmbGxtNzUxcTRkb25qZDBvZGEyZTggbWF0dGhld0BtYXRyaXgub3Jn&tok=MjYjdHNhaGkubGV2ZW50bGV2aUBnbWFpbC5jb204NTdlNGE2NjBhNmM2ZGU1NGUzZDActz=Asia/Jerusalem&hl=en>.

Attendees:  Tsahi Levent-Levi <tsahi.leventlevi@gmail.com>
 matthew@matrix.org <matthew@matrix.org>

1 attachment: invite.ics 1.1 kB Save

invite.ics 1.1 kB

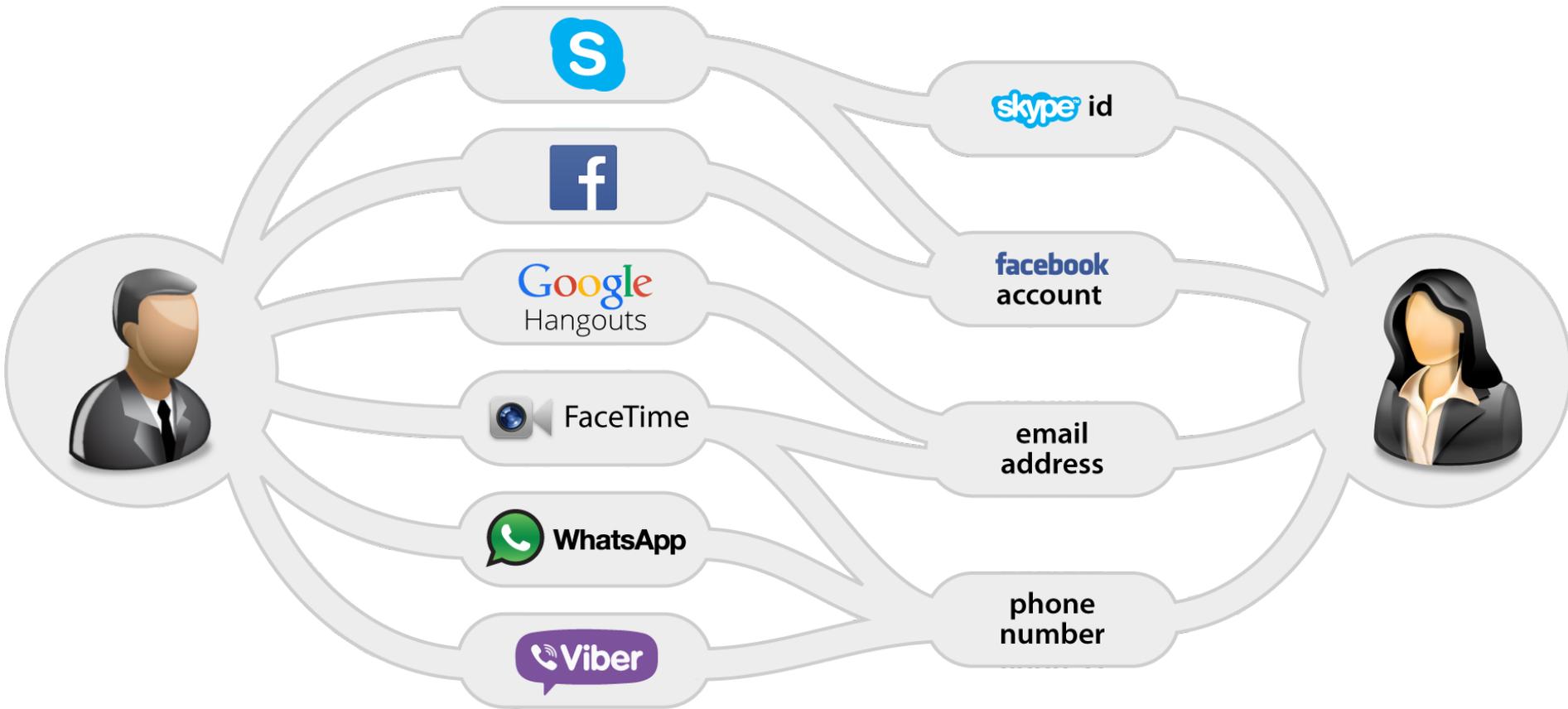
Title: Kranky Geek
Location: <https://beta.talky.io/tsahil>
When: 9 April 2015 13:30 – 13:55
Organiser: ○ Tsahi Levent-Levi

**Why should I have to use
Tsahi's app?**

**Why should I trust
Tsahi's app?**

**Why should the data for this
call get trapped in Tsahi's
app?**

**How do I know how to
contact Tsahi in future?**



**And similar situations exist
for IoT, IM, and any type of
data!**

The background of the slide is a close-up photograph of parched, cracked earth. The soil is a light tan or beige color, and the cracks are deep and dark, forming a complex, irregular pattern of polygonal shapes across the entire surface. The lighting is even, highlighting the texture and depth of the fissures.

The Internet is cracking up!

**Imagine a world where
data is owned by the user
and securely shared across
services**

What would it take?

**A federated open standard
like Email and the Web...**

...but for data exchange.

A federated open standard for data exchange...

- Backed by a strong community
- Endorsed by various industries
- As pragmatic as SMTP
- As open as HTTP

Digging a bit further:

Data replicated across systems

Distributed architecture

Easy to deploy

Data owned
by the user

Federated architecture

**A federated open
standard for data
exchange**

Strong identity system

Strong security via
E2E crypto

Data securely shared
across services

Easy to implement
(pragmatic, open)

Ability to be used over various
transport protocols

Agnostic to the type of
transmitted data

Enter Matrix:

**Aiming to provide the missing
federated open standard for
data exchange**



What is Matrix?

Non-profit Open Standard / Open Source (Apache Licensed) project



**Provide an
open global network
for securely exchanging
and storing real-time data.**

Could be WebRTC Signaling



WebRTC

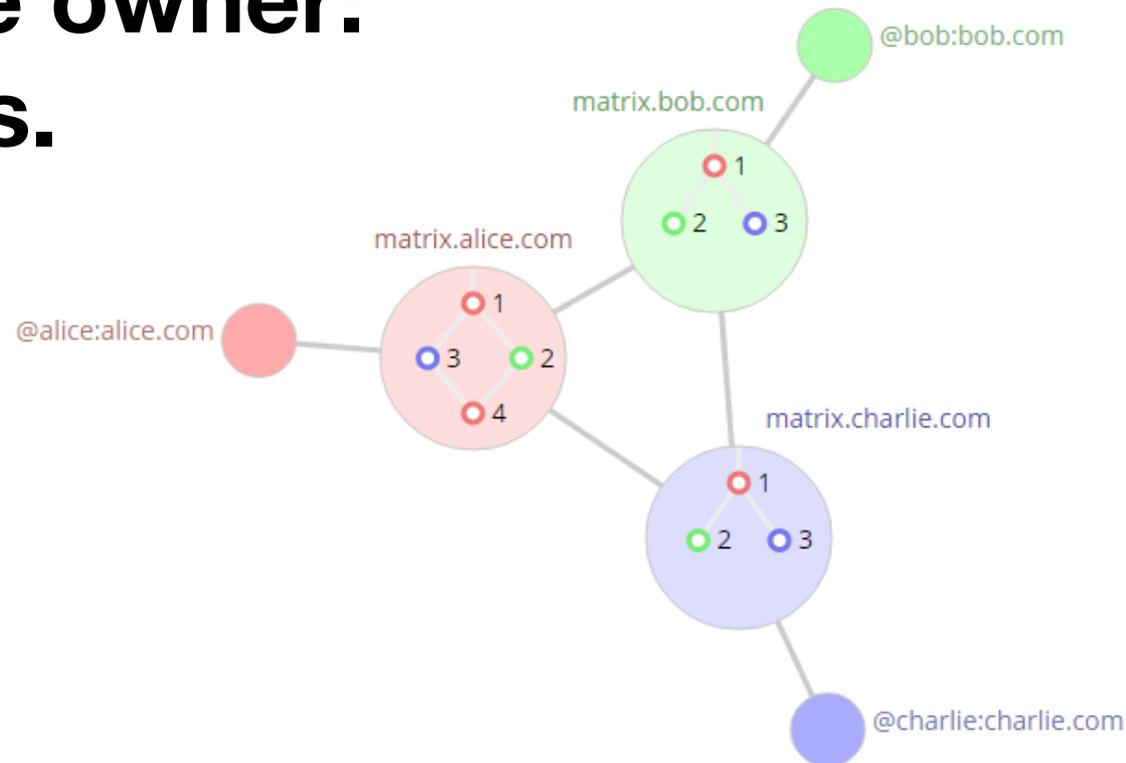
Or Group Messaging



**A simple HTTP API layer
on top of the existing web,
that provides a consistent simple way
to publish and subscribe
to data in realtime.**

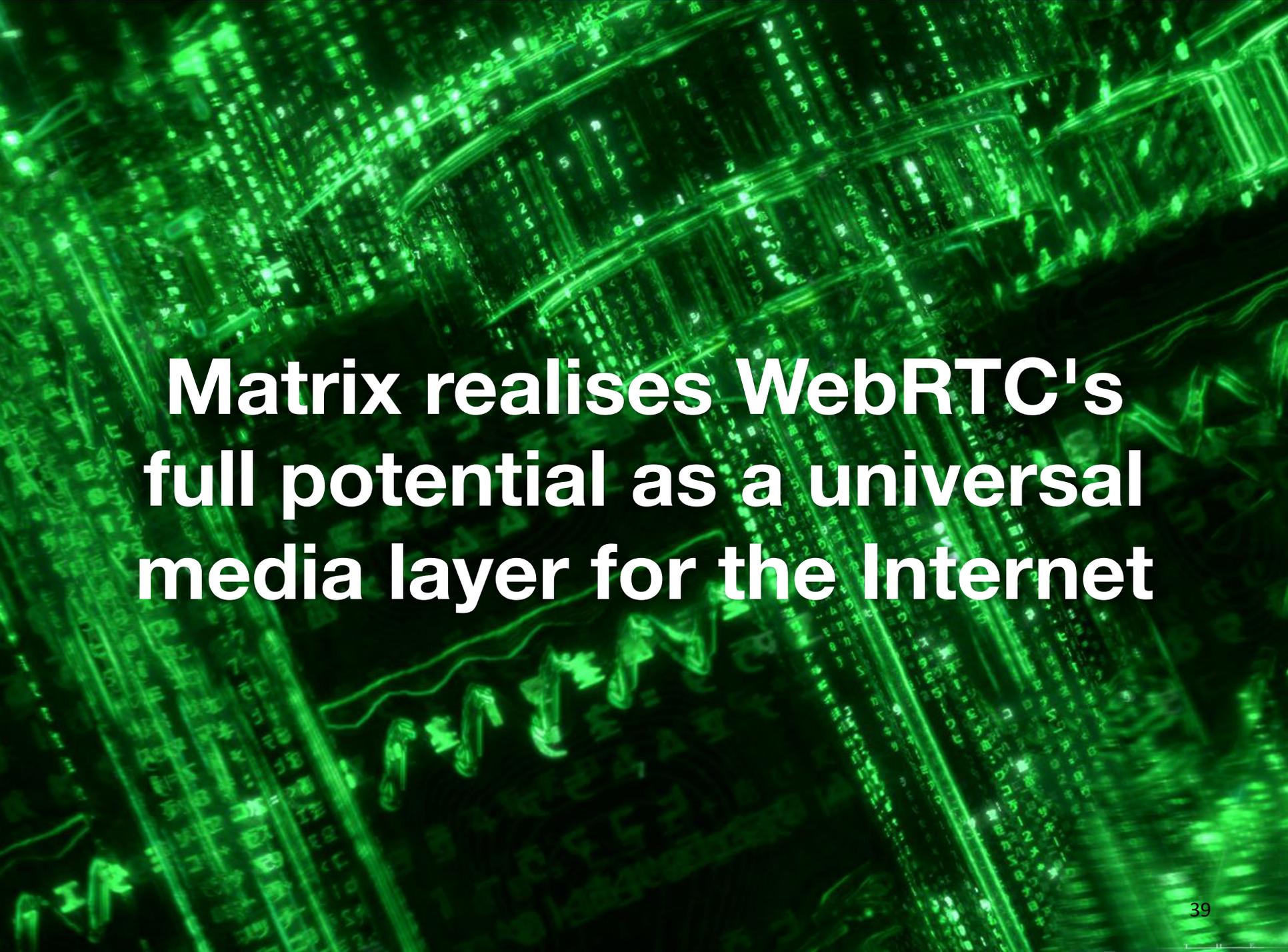


**All data is securely decentralised
using a blockchain-style system
- not stored in any single place,
under any single owner:
no SPOF/SPOCs.**



Everything is group communication, and all communication has persistent history.





**Matrix realises WebRTC's
full potential as a universal
media layer for the Internet**

We have a choice: create new islands or create interoperable services.

Sometimes islands make sense



**But sometimes
interoperability and federation
makes sense too!**

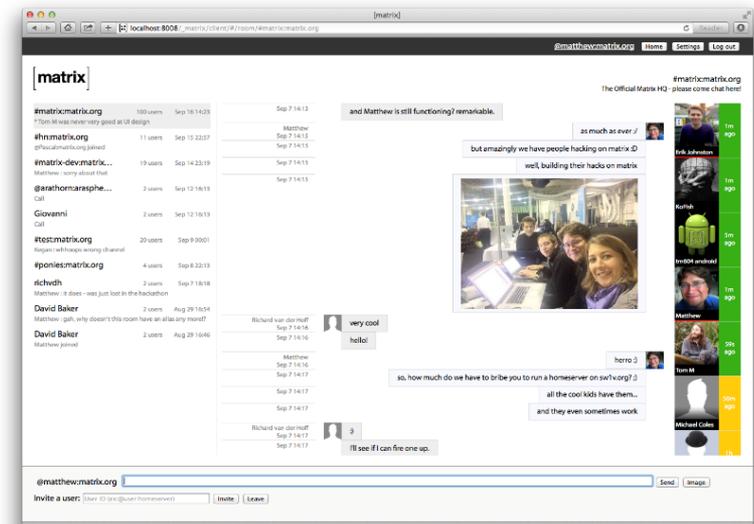


Where are we at?

September 2014 - Disrupt SF

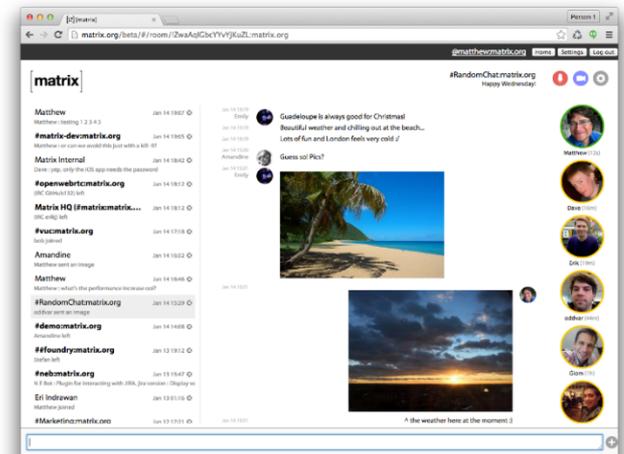
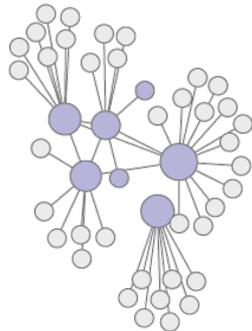
Launched Alpha (v0.2)

- Initial draft of v1 Spec and APIs
- Apache-Licensed Python reference implementation (Synapse)
- Basic Angular web client implementation for group chat and VoIP.
- Client SDKs for Perl



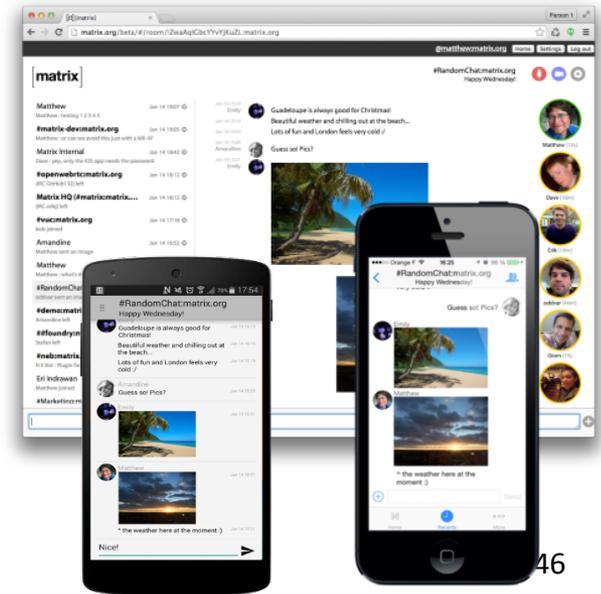
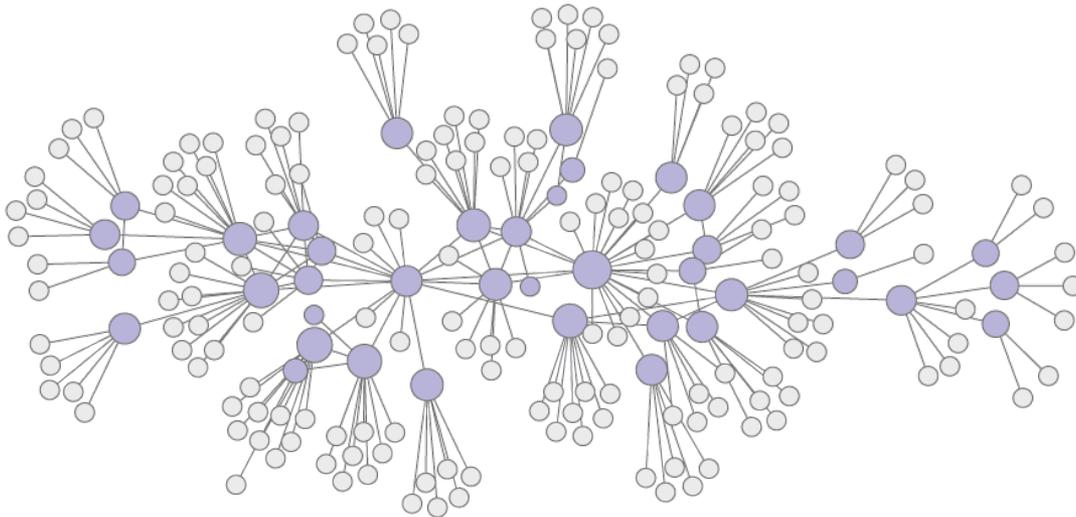
Nov. 2014 - WebRTC World San Jose Entered Beta (v0.5)

- Feature complete for core group chat & VoIP features
- Full TURN support for WebRTC
- Initial iOS and Android "Console" applications
- Strong crypto (encrypting and signing) all federated traffic
- Client SDKs for iOS (CocoaPods), Android, Python, JS, Angular



Since November:

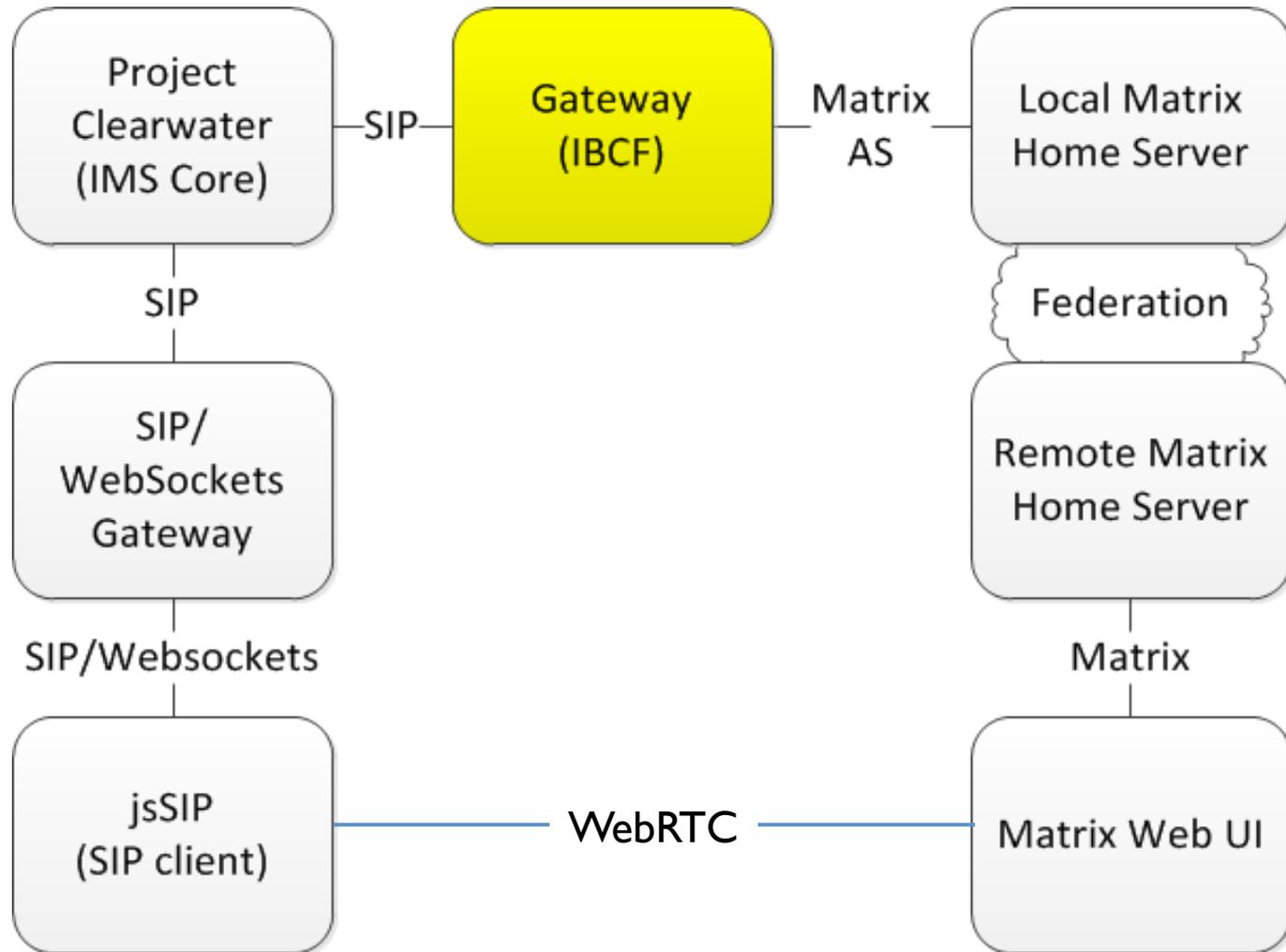
- Launched Application Services API: how you bridge other networks and functionality into Matrix.
- Published mobile apps in the app stores
- Reusable UI SDKs for iOS "MatrixKit" and Android
- Added Decentralised content repository (mxc:// URLs)
- Added Push notifications
- Added performance metrics
- Initial IoT examples
- V1 spec improvements
- Designed some V2 APIs to fix the uglier bits in V1
- Lots and lots of bug fixes



Most interestingly:

- Explosion of 3rd party clients, application services and even servers implementations.
- Clients
 - MatrixKit UI
 - Weechat
 - React
- Application Services
 - SIP: Clearwater (telco v. internet example)
 - IRC: gatewaying
- Servers
 - Pallium and jSynapse

Clearwater SIP GW Example



**Today we're proud to announce
a major stable beta
approaching 1.0 release (v0.9)**



Version 0.9

- **Lots** of performance work
- Supporting Postgres as well as SQLite
- All new configuration system
- Lots of long tail fixes (you can now reset your password!)
- Experimental support for mobile support for VoIP through OpenWebRTC

What's next?

- End-to-end encryption
- Reusable web UI components and improving the web client
- Multi-way VoIP
- Lots more Application Services
- Landing V2 APIs
- Use 3rd party IDs by default
- Yet more performance work
- Spec polishing
- New server implementations!

Why should you use Matrix?

**The more people who build on
Matrix, the more useful it is.**

This should be a no-brainer!

It's Free!

(both commercially and
philosophically)

Free reusable UI components and WebRTC support on Mobile!

**Free client applications for
you to use as a starting point
for your own apps!**

Free server implementations to power your messaging and VoIP

**Don't waste time inventing
your own HTTP signalling
protocol when we've done it
for you!**

**An ever-larger growing
community of users for you to
on-board into your app!**

**You can own and control your
own data!**

Pick interoperability as a differentiator for your app!

How to use & help Matrix?

Pick a client and try it now!



<http://matrix.org/blog/try-matrix-now>

Run a server!



<http://matrix.org/blog/try-matrix-now>

Build an application service to bridge in your existing apps



<http://matrix.org/blog/try-matrix-now>

Consider native Matrix support for new apps.

**Or just help us spread the
word (@matrixdotorg)!**



[**matrix**]

Thank you!

matthew@matrix.org

<http://matrix.org>

@matrixdotorg