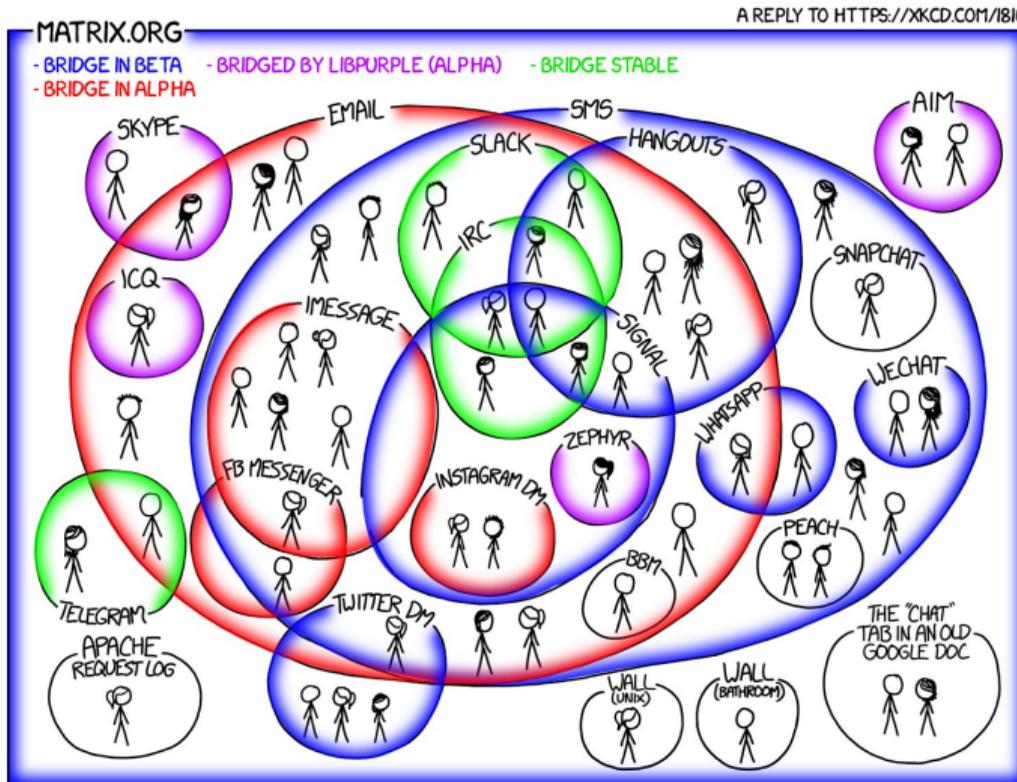


MATRIX | OLEG FIKSEL | FROSCON 2020



A REPLY TO [HTTPS://XKCD.COM/1810](https://xkcd.com/1810)

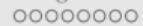
I HAVE A HARD TIME KEEPING TRACK OF WHICH CONTACTS USE WHICH CHAT SYSTEMS.
THIS IS ONE OF THE MAIN REASONS WE CREATED MATRIX.ORG :)

THANKS!

- ▶ Matthew Hodgson - Co-Founder
@matthew:matrix.org
- ▶ Ben Parsons - Developer Advocate
@benpa:matrix.org
- ▶ Will Hunt - The Bridge Master
@Half-Shot:half-shot.uk

OLEG FIKSEL

- ▶ DevOps Engineer
- ▶ Passionate about tech
- ▶ Like to automate everything



GOAL OF THIS TALK

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- ▶ Provide short introduction into Matrix
more detail: [Matrix talk @ FrOSCon 2019](#)

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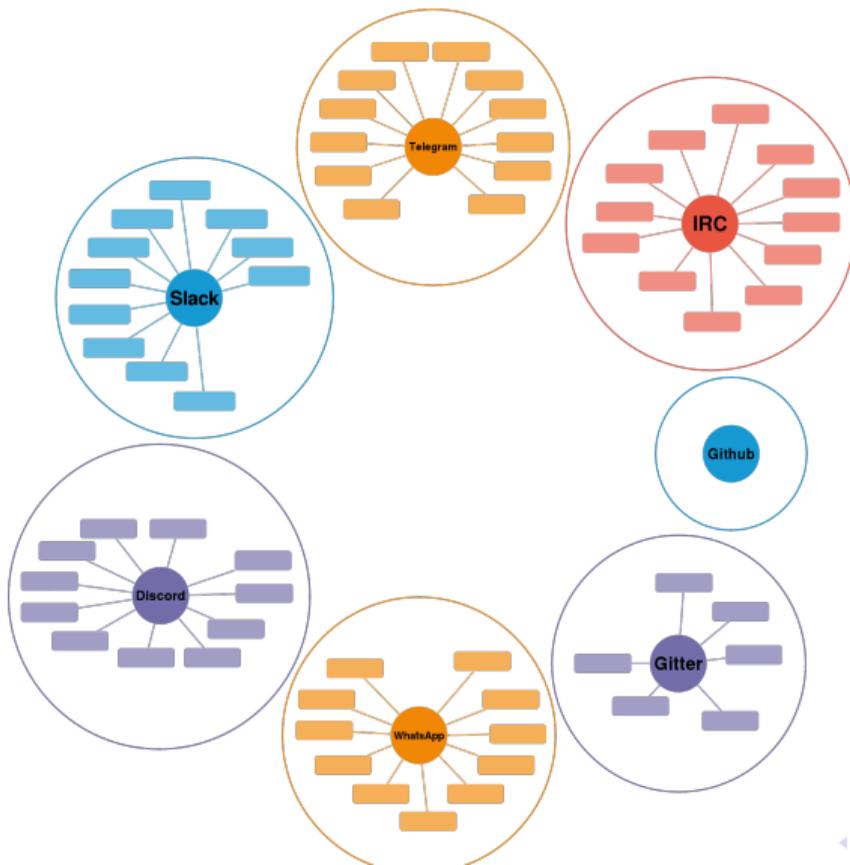
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- ▶ Explain what type of bridges are available
- ▶ Show bridges in action

WHAT IS MATRIX?

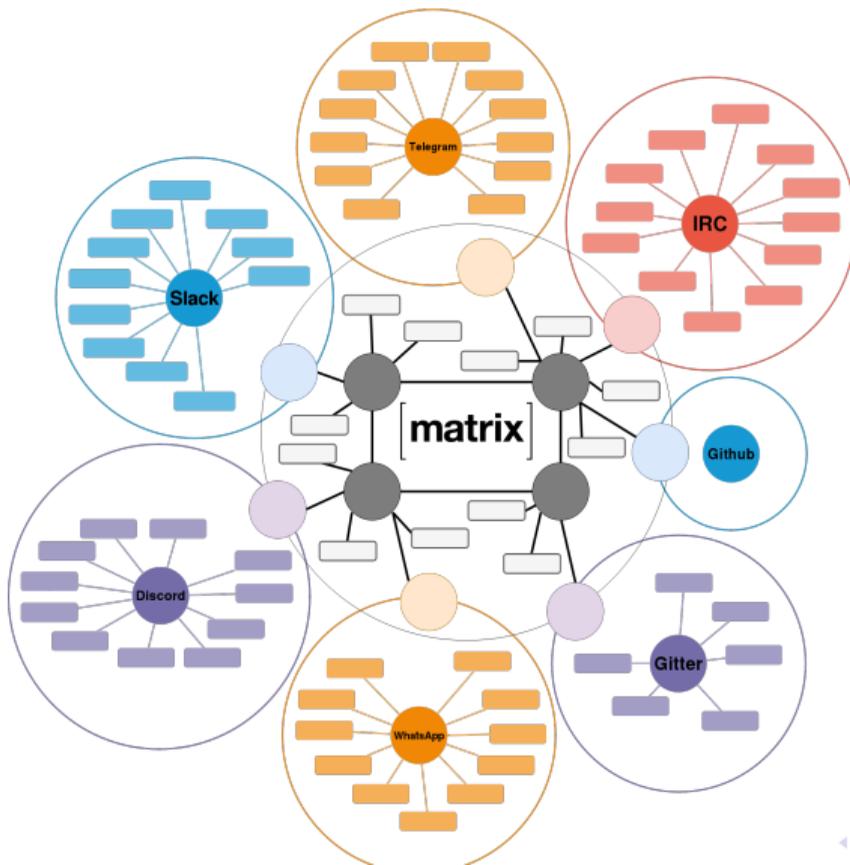
WHAT IS MATRIX?

Matrix is an open network for secure, decentralised real-time communication.

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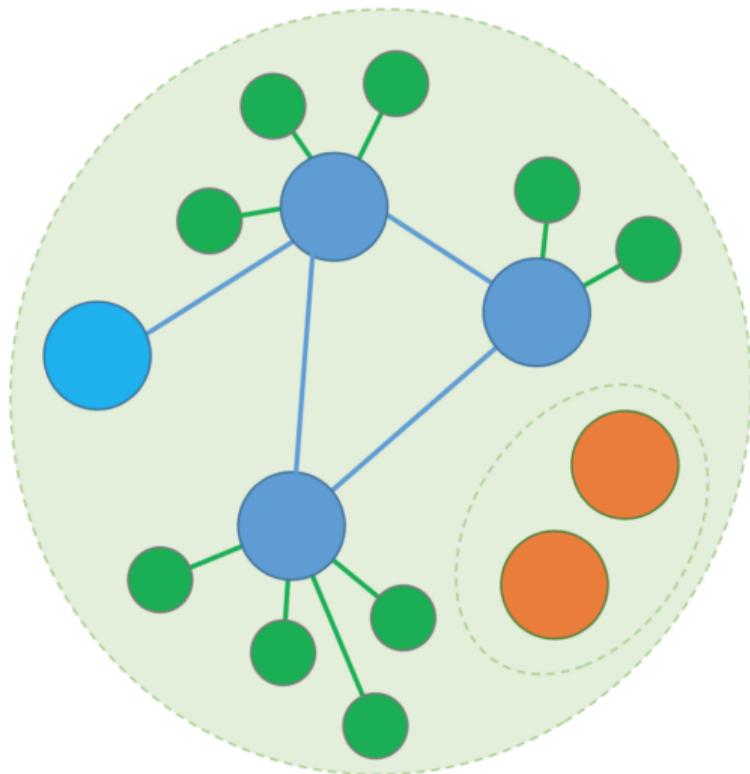
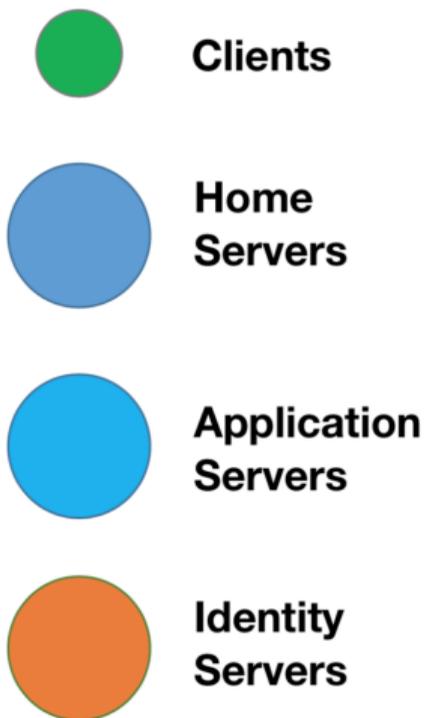


WHAT IS MATRIX?



MATRIX DISTRIBUTED ARCHITECTURE

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- ▶ **Healthy and friendly community**

Community update

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To run on smaller hardware.
- ▶ New device trust (cross signing devices)
Key step to enable E2EE by default.

COMMUNITY UPDATE (1/2)

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- ▶ P2P Matrix (p2p.riot.im) ([FOSDEM Video](#))

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- ▶ Redesign of matrix.to

Bridges

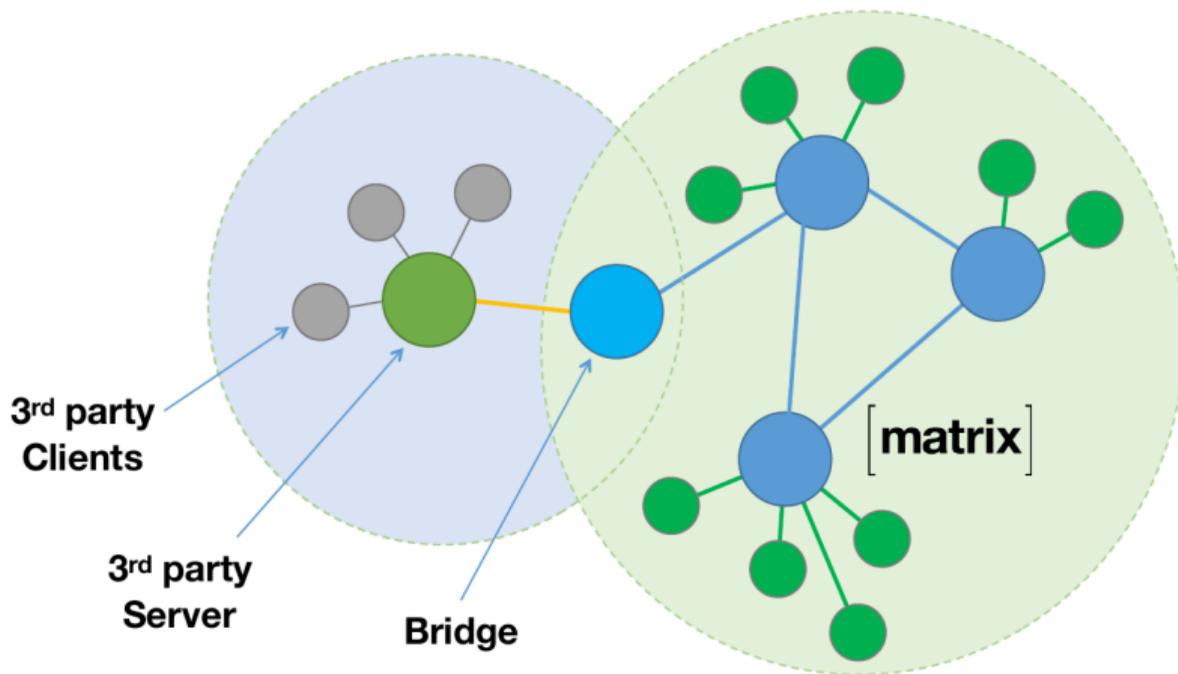
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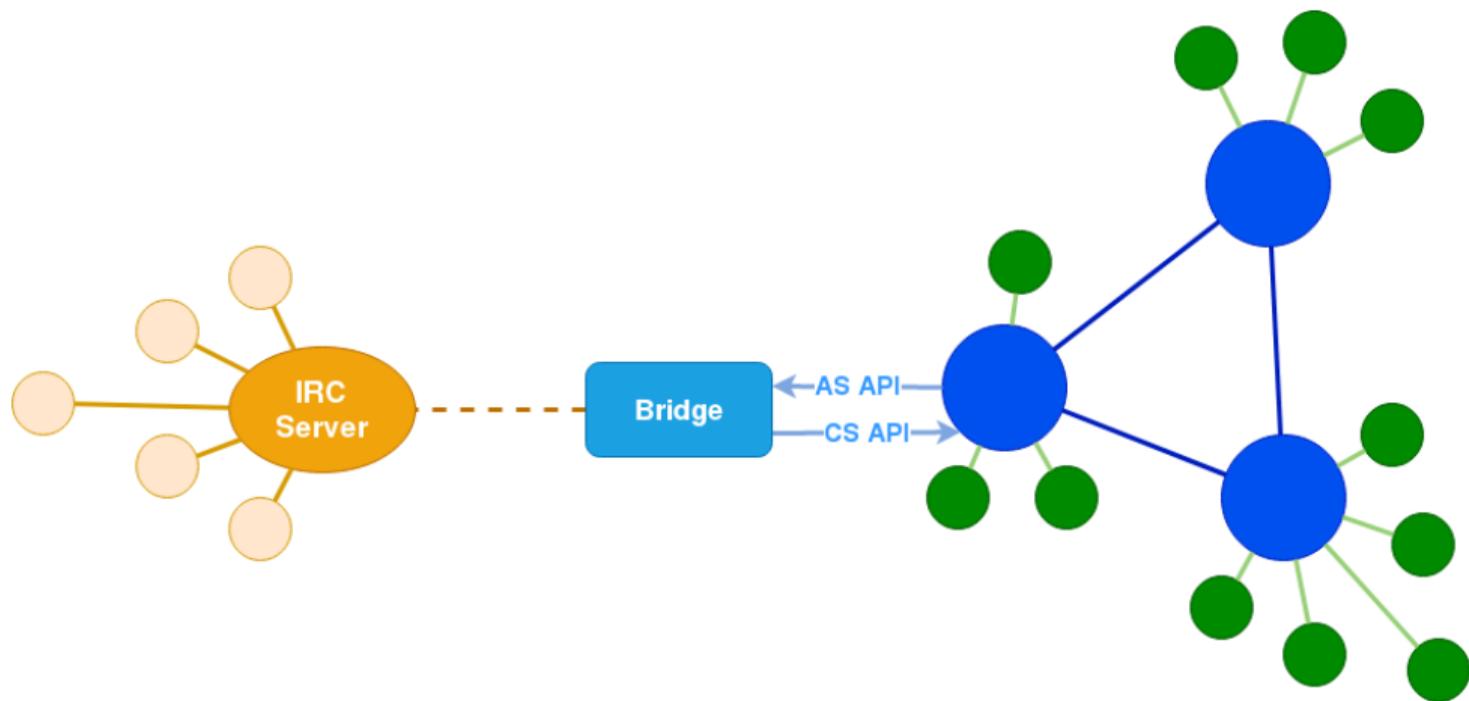
Bridges are application services, which unite networks.

BRIDGES ARCHITECTURE

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BRIDGE TYPES

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▶ **Bridgebot**

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BRIDGE TYPES - BRIDGEBOT

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- ▶ User experience is moderate
- ▶ Still better than nothing

BRIDGE TYPES - BRIDGEBOT



Micha

OK for 34m 17s
Service: k8s matterbridge

Jep, sieht icinga2 auch so



matterbridge-bot

[irc] <Berni>
:)

[irc] <Berni>
die VM war gecrasht ... danke fürs monitoring ;)

[irc] <Berni>
hÄtteste ich vermutlich aber auch in den nÄchsten Tagen bemerkt, wenn ich sie gebraucht hÄtteste

[irc] <Berni>
kommen meine Umlauts ordentlich an? in der chat-line schauts hier bÄtse aus

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aber im chat-history selbst gehts wieder

BRIDGE TYPES - SIMPLE-PUPPETED

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- ▶ On the other network the messages look native
- ▶ Example: Facebook bridge
- ▶ Messages written in other network's native client will not be synced to Matrix

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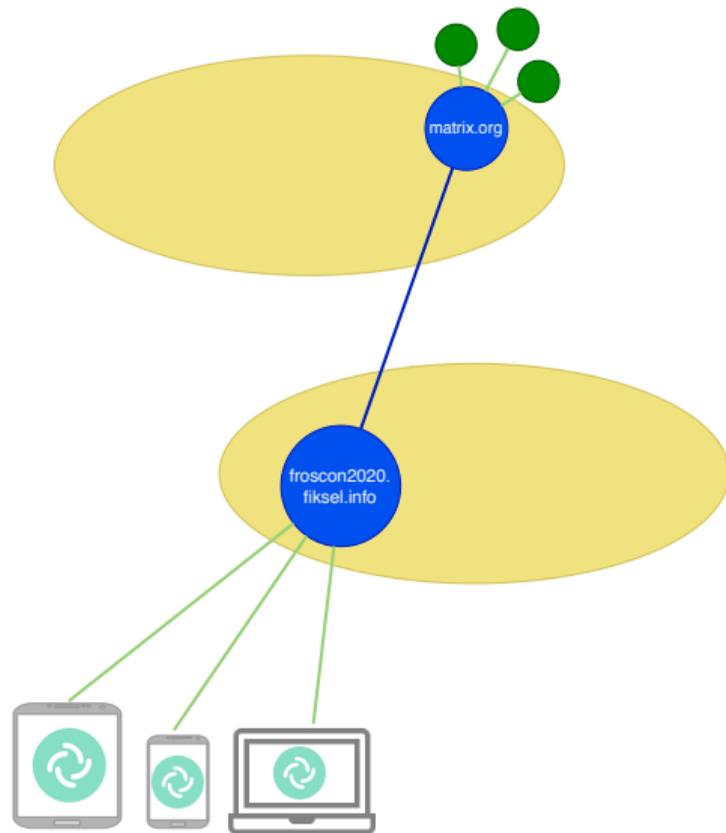
BRIDGE TYPES - DOUBLE-PUPPETED

- ▶ Matrix ⇔ other network
- ▶ Messages on both sides look native
- ▶ Examples: Slack, IRC, Telegram, WhatsApp

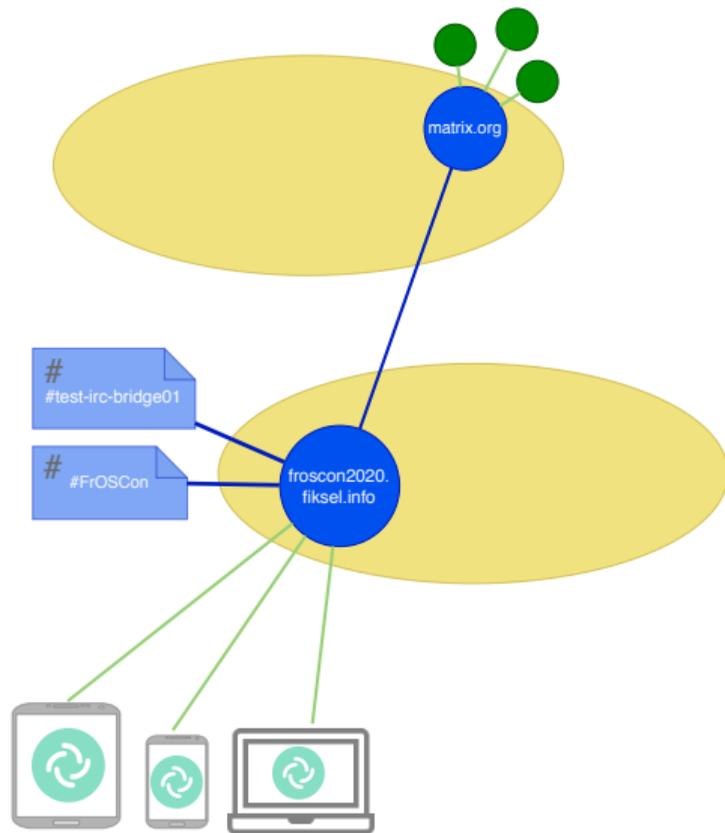
Demo time!

BUT FIRST - DEMO SETUP

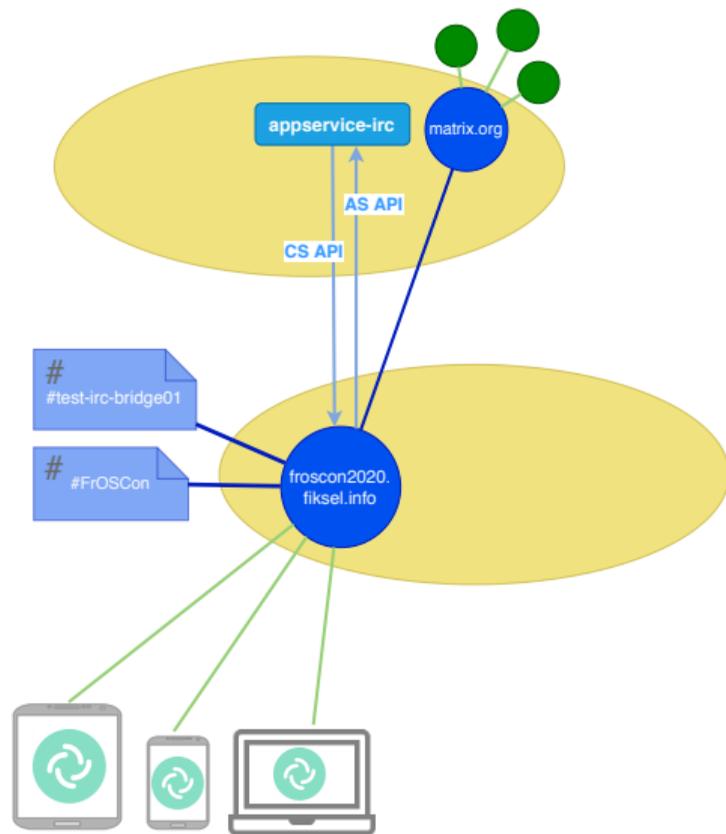
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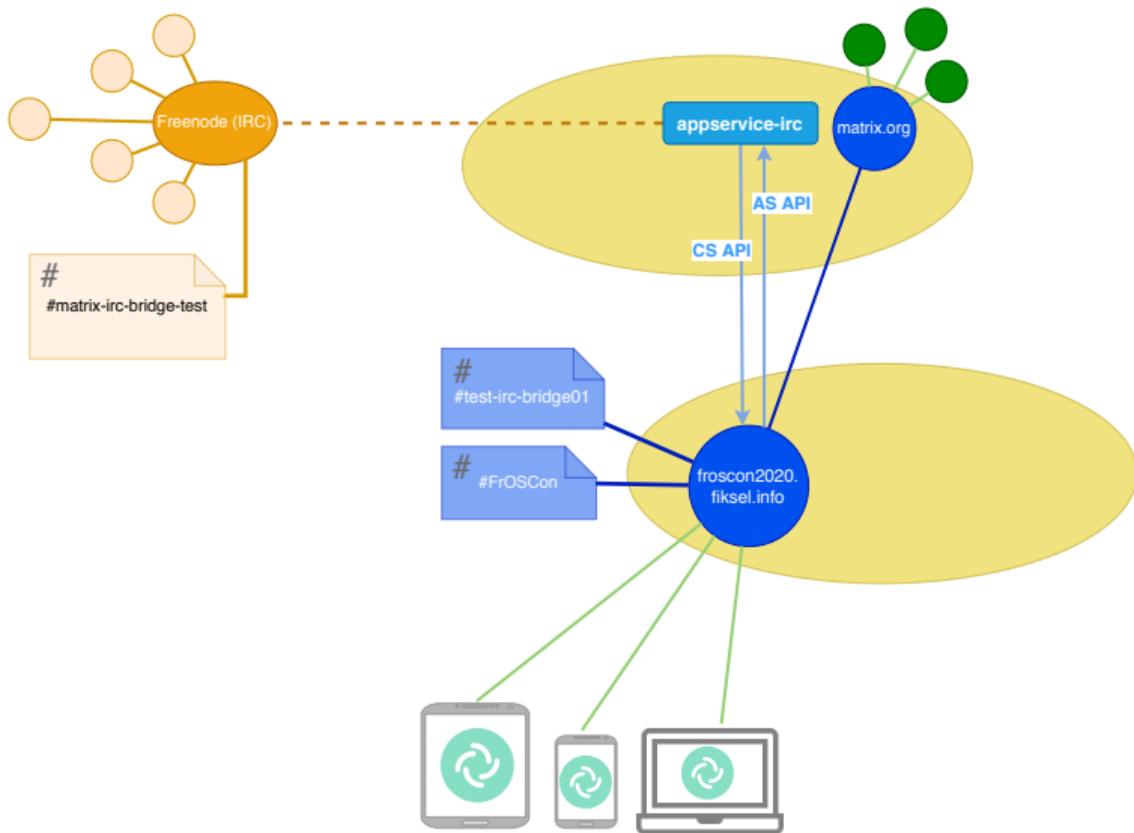
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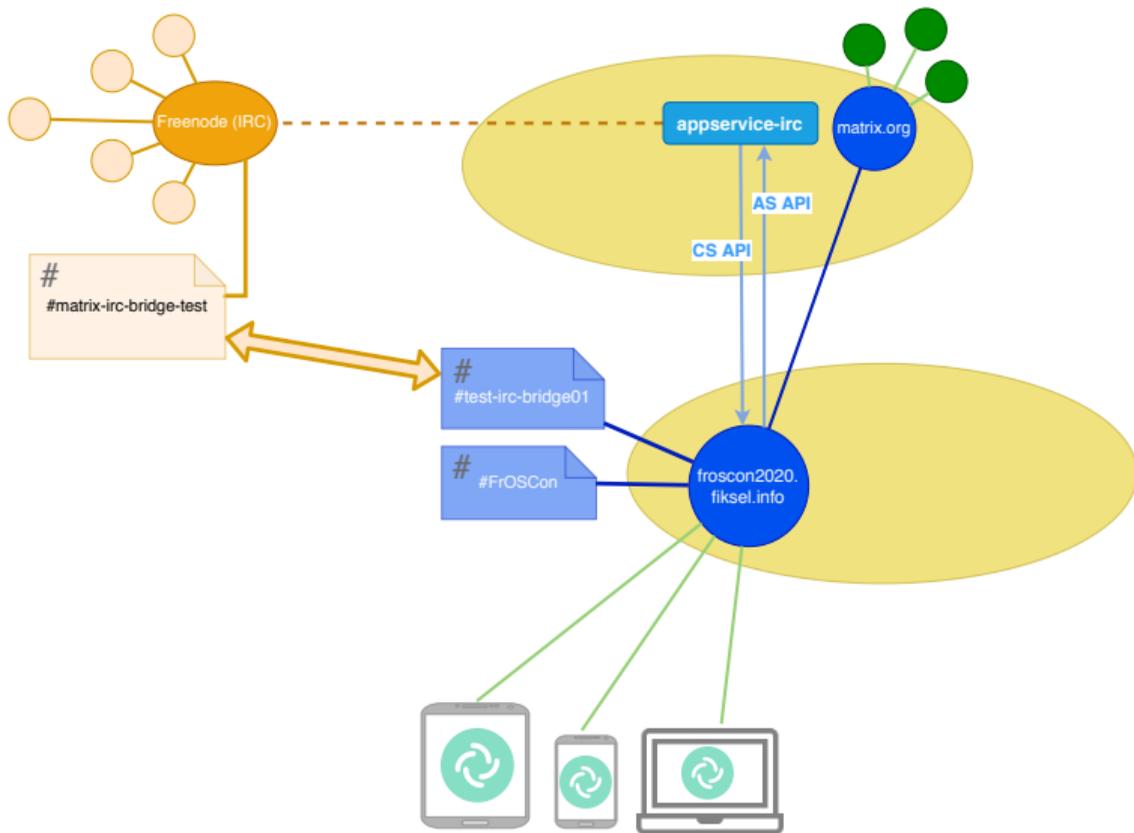
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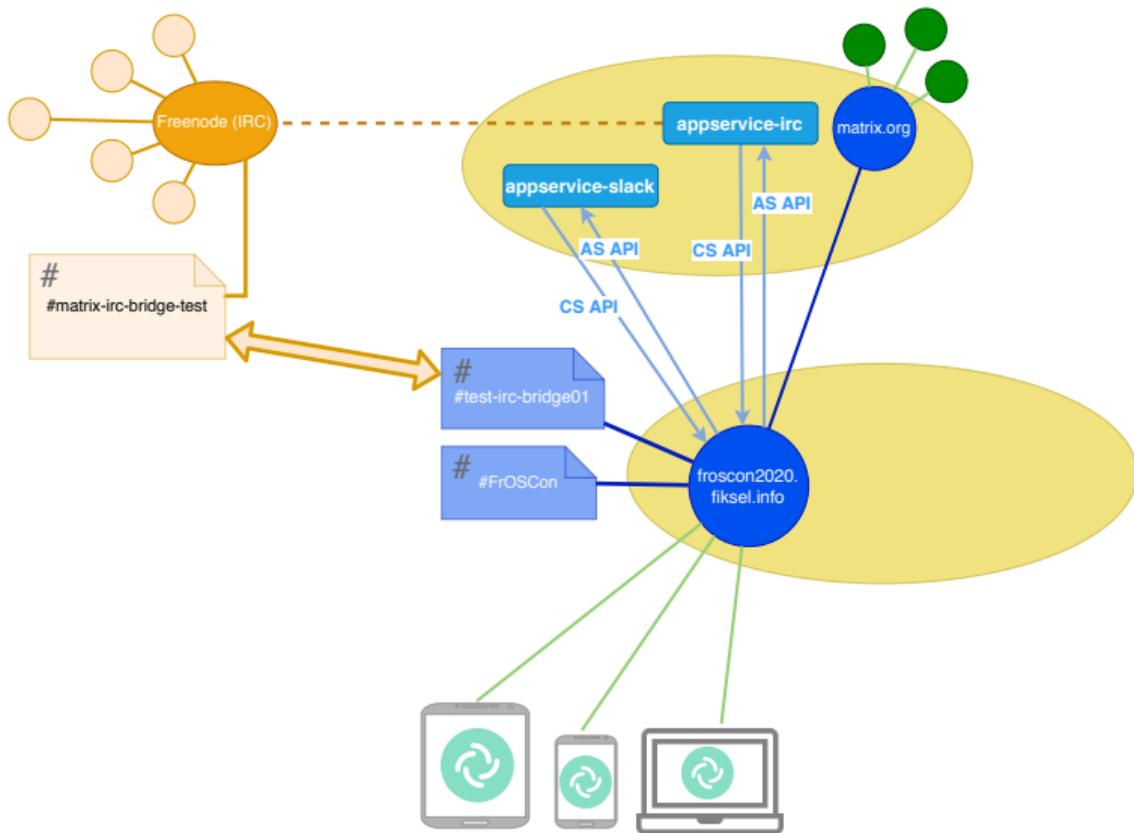
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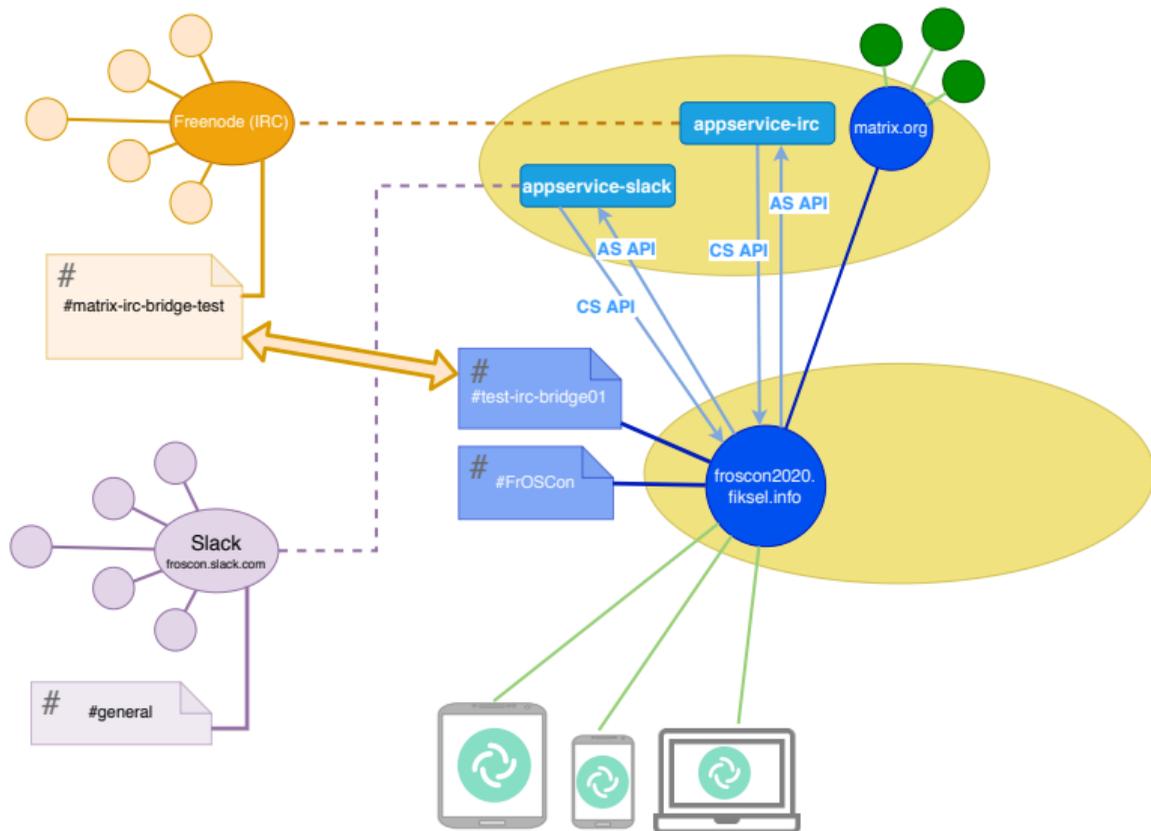
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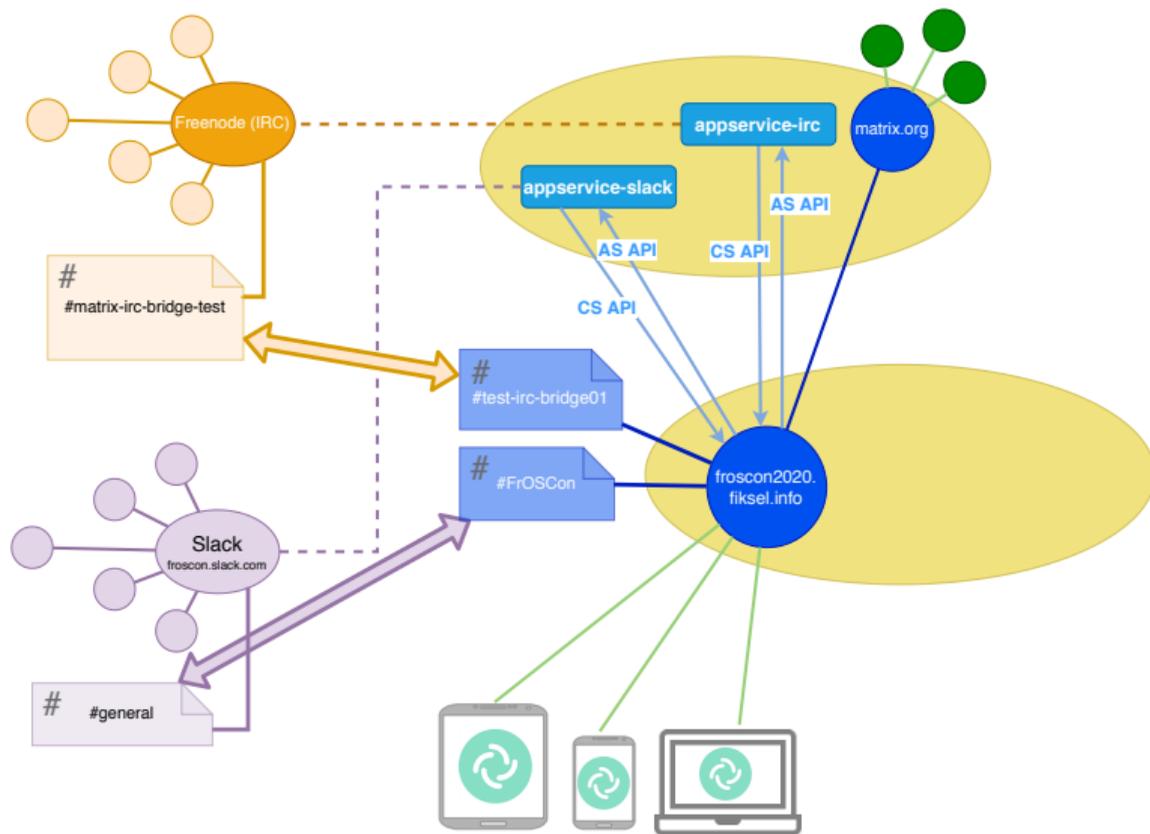
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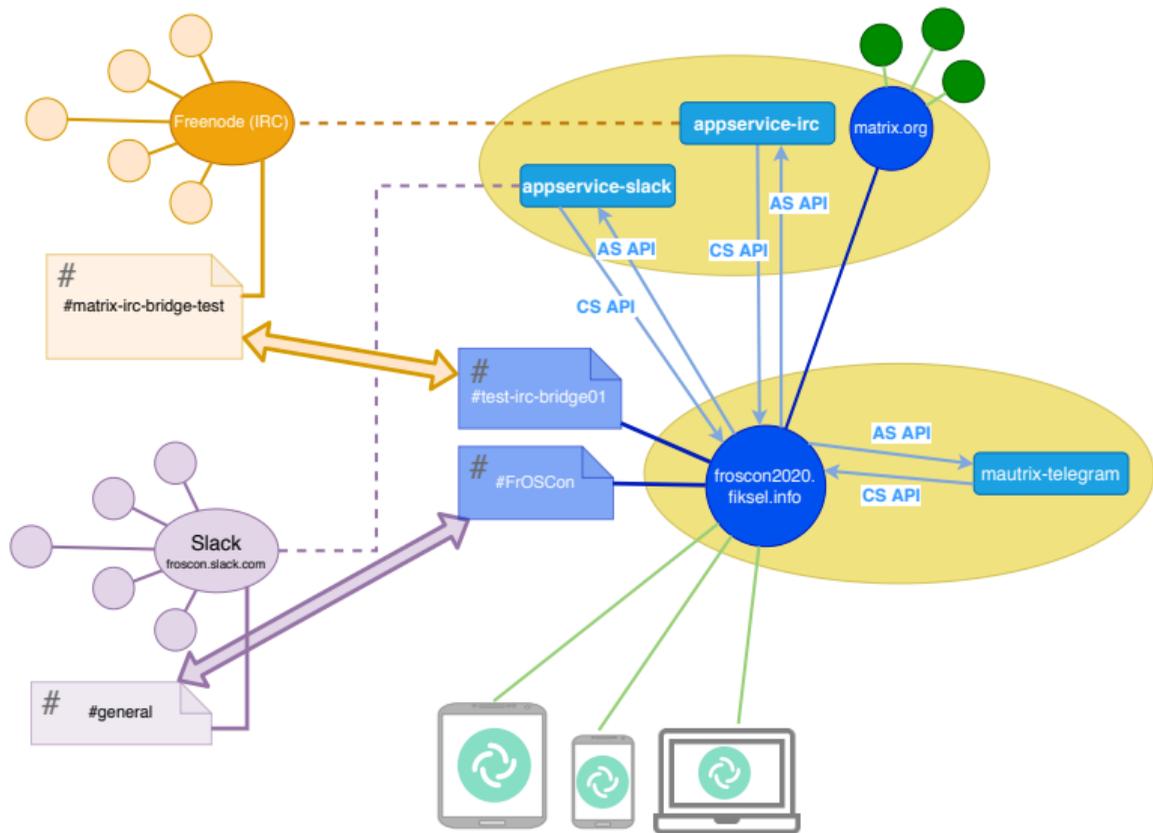
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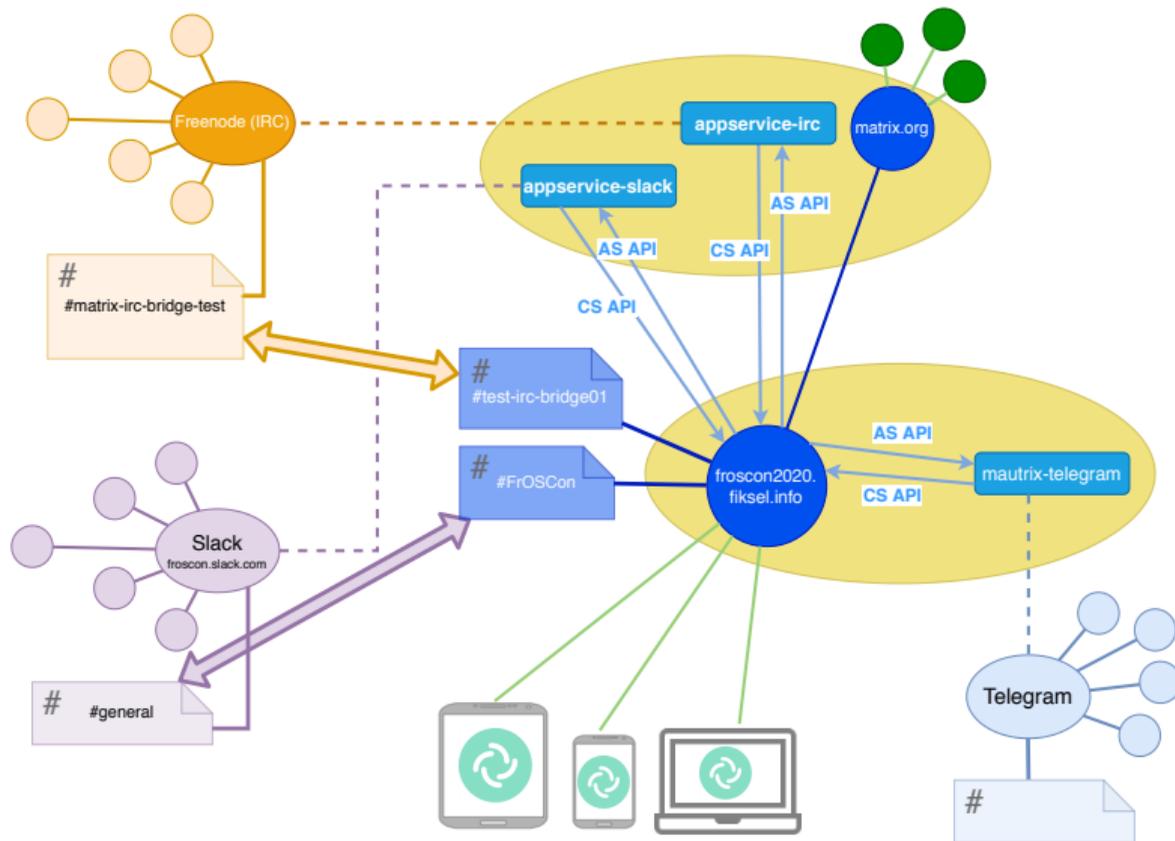
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Now it's really demo time!

Thanks!

Oleg Fiksel

Email: oleg@fiksel.info

Matrix: @oleg:fiksel.info

LINKS

- ▶ [FrOSCon Matrix Room: #FrOSCon:fiksel.info](#)
- ▶ [P2P Matrix talk @ FOSDEM 2020](#)
- ▶ [Matrix home-assistant bot](#)
- ▶ [Types of bridging](#)