

CASP3R

Chapter 1

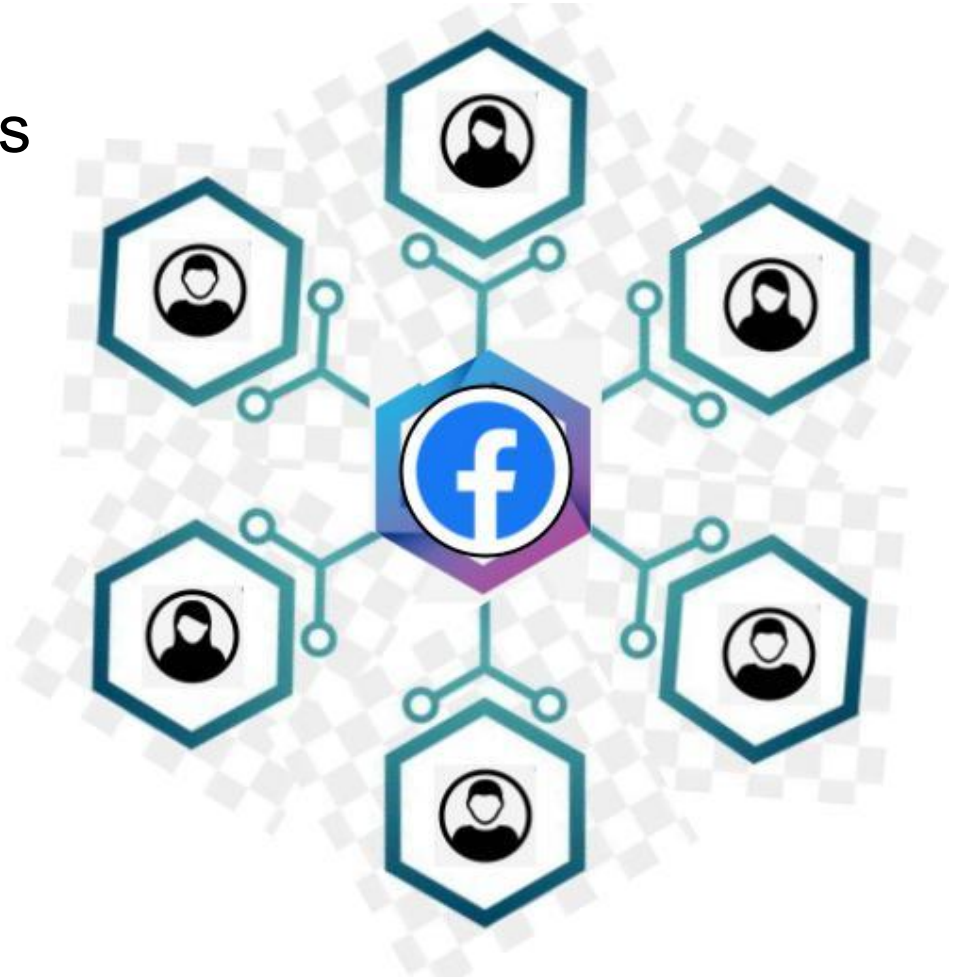
Centralized vs. Decentralized
Networks

Centralized Social Networks

The Current Paradigm

One centralized server means the power facilitating the discussion is centralized.

Big tech has complete control over the discourse between clients on their server/platform.

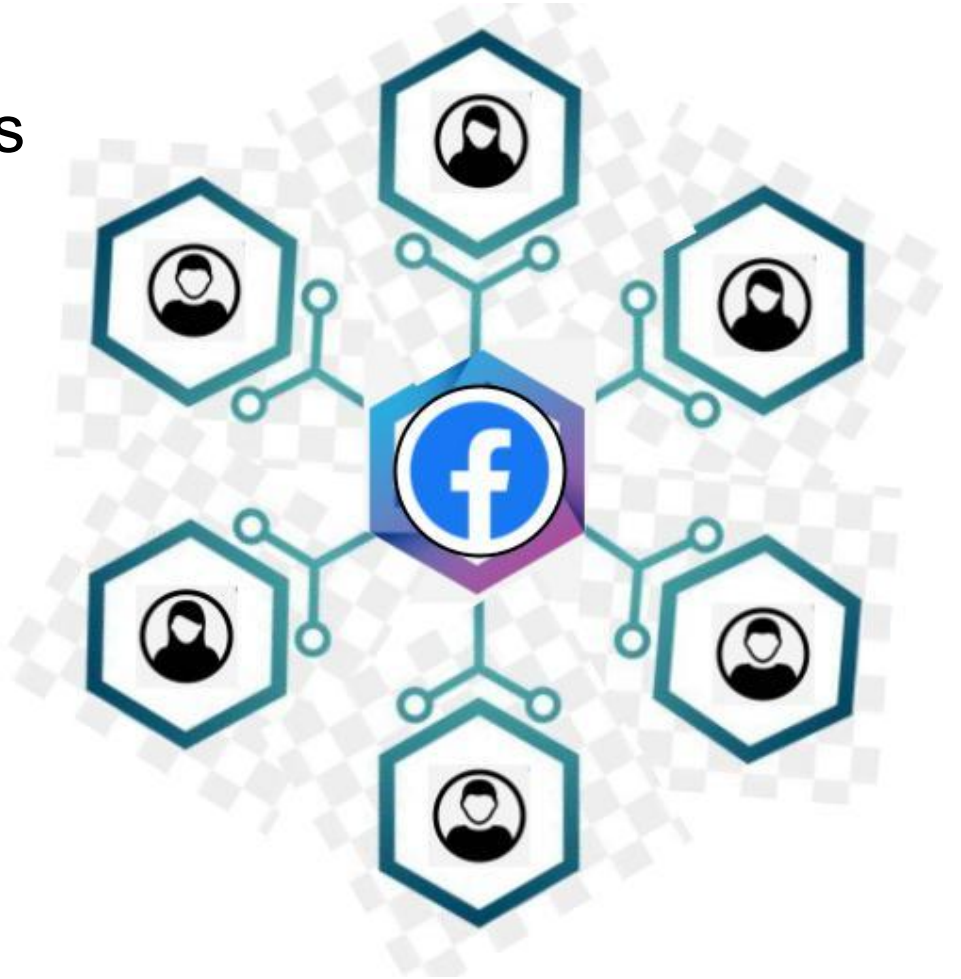


Centralized Social Networks

The Current Paradigm

If an individual wants to participate in the community they must agree to the terms of service dictated by the central authority.

This is a huge problem when this central authority facilitates the majority of discussion for an entire country.

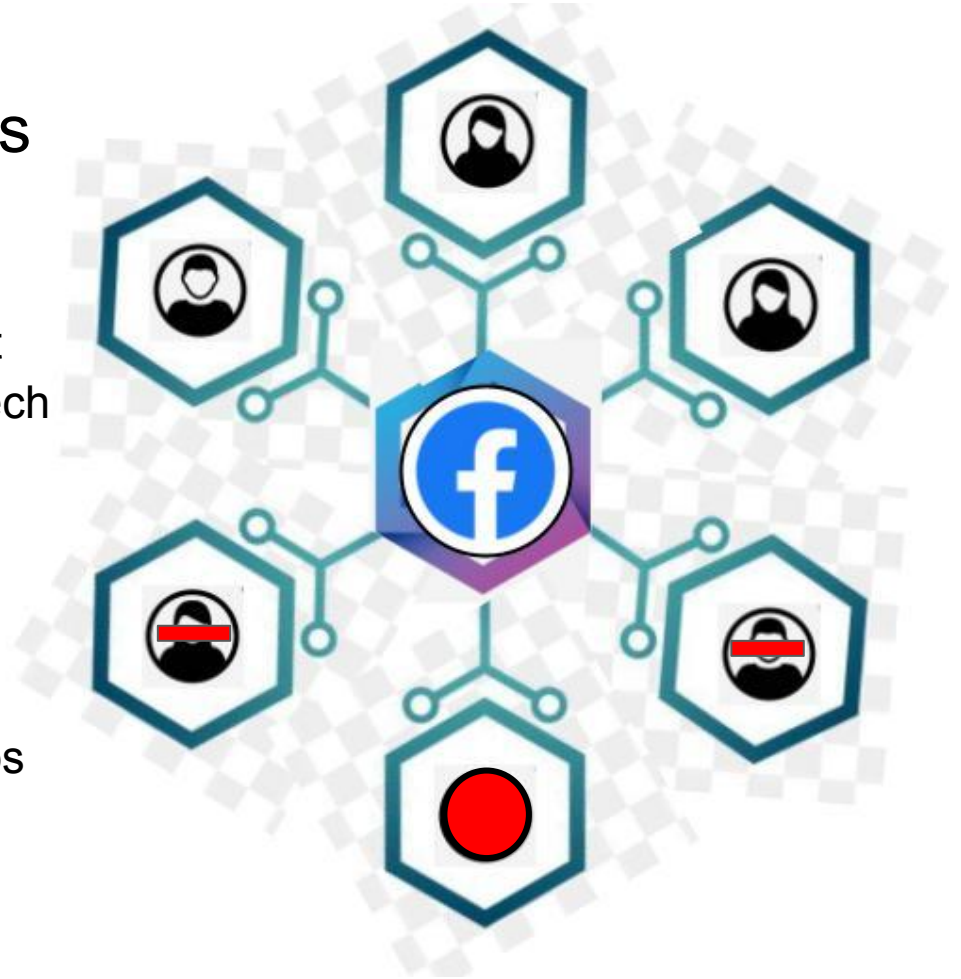


Centralized Social Networks

The Current Paradigm

This central authority can make unilateral and arbitrary rule changes that restrict the boundaries of allowable speech on the platform.

If the client does not abide by the new standard they can be censored or removed from the server completely, along with all access to their relationships photos & shared memories



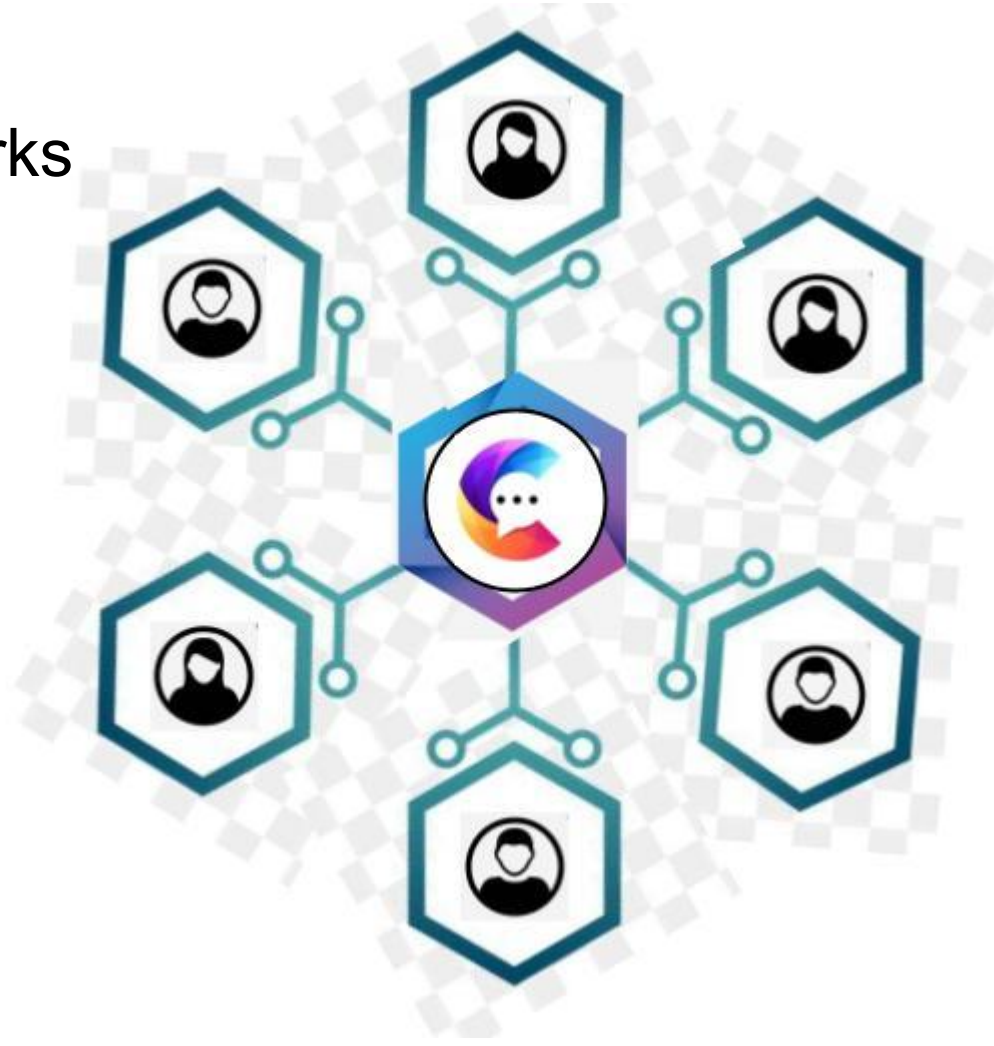
CASP3R

A decentralized network
a new paradigm

Decentralized Social Networks

A New Paradigm

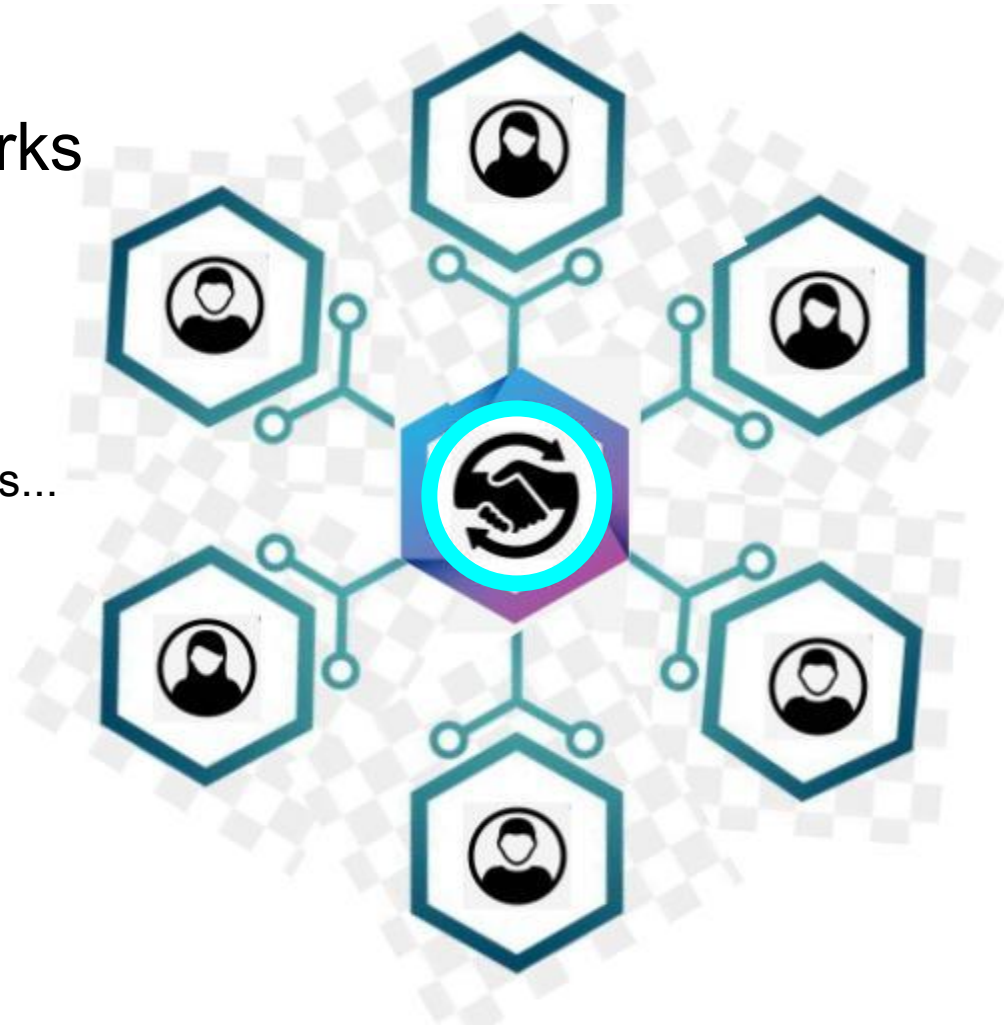
In this system we have a familiar client - server relationship, but the power dynamic here is completely different.



Decentralized Social Networks

A New Paradigm

In this new structure, the servers primary function is to facilitate communication not only between the clients it directly serves...

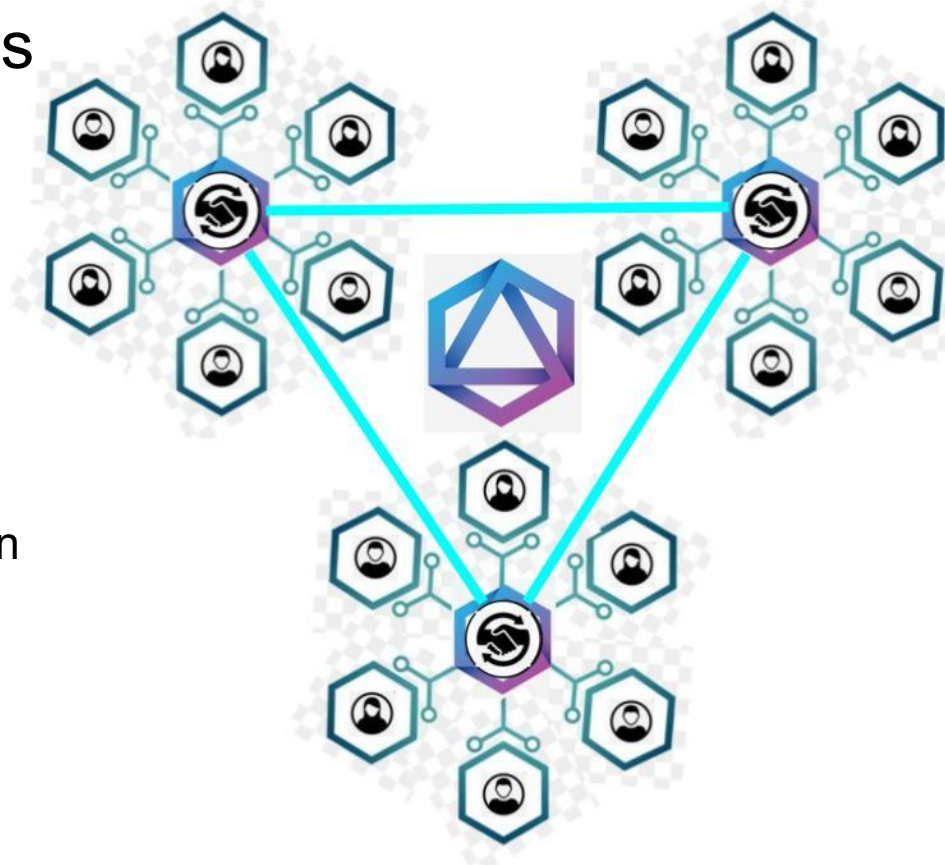


Decentralized Social Networks

A New Paradigm

...but between them, and the clients of other servers.

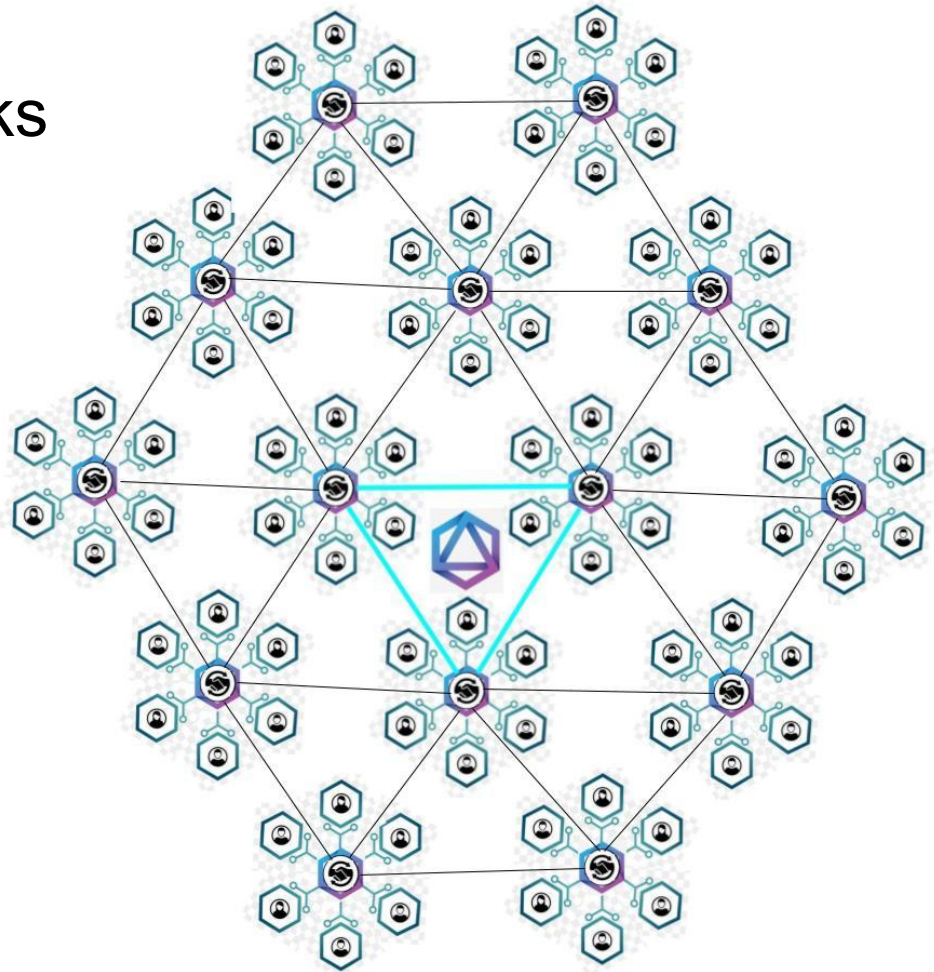
The server acts as a catalyst, facilitating communication across a large network of servers, each controlled by their own chosen server administrator.



Decentralized Social Networks

A New Paradigm

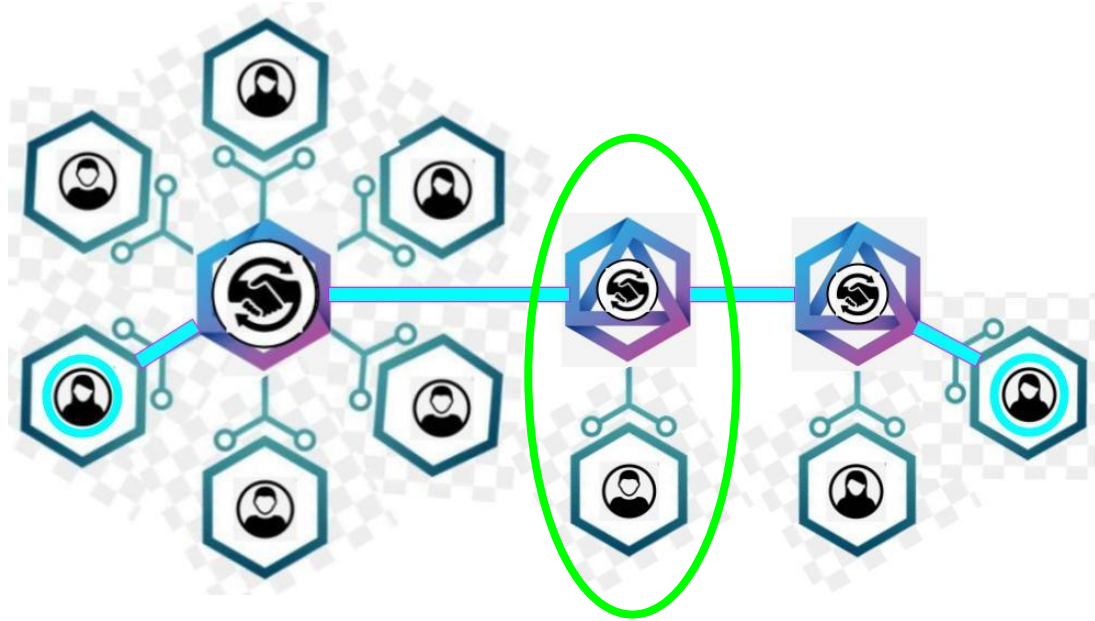
This power dynamic is based on mutual agreement, and no central authority has the power to control the open discourse between individuals.



Decentralized Social Networks

A New Paradigm

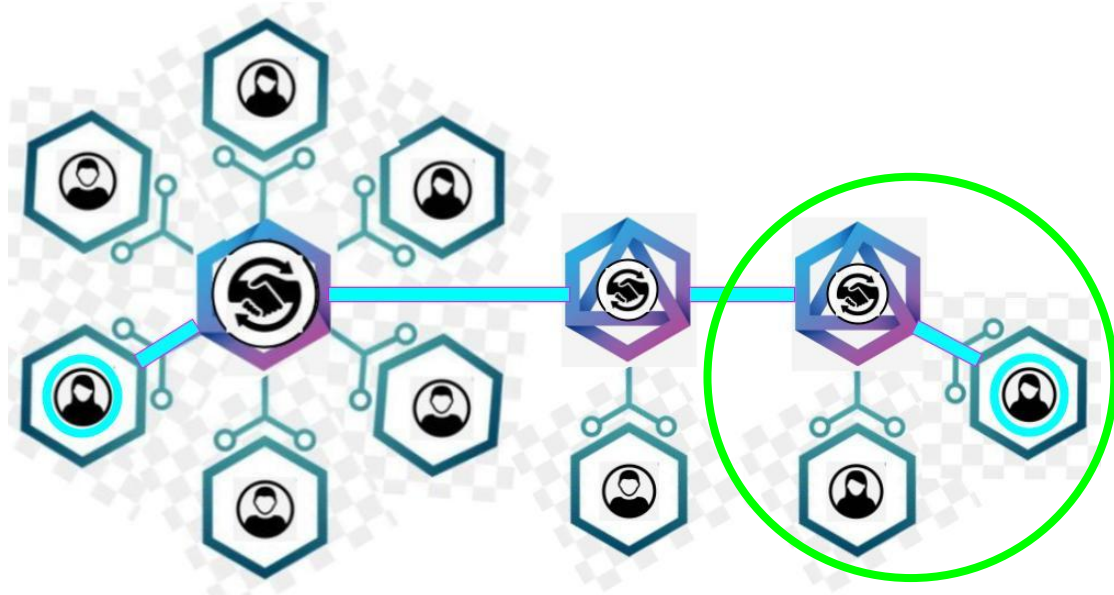
Servers can be owned by
an individual,



Decentralized Social Networks

A New Paradigm

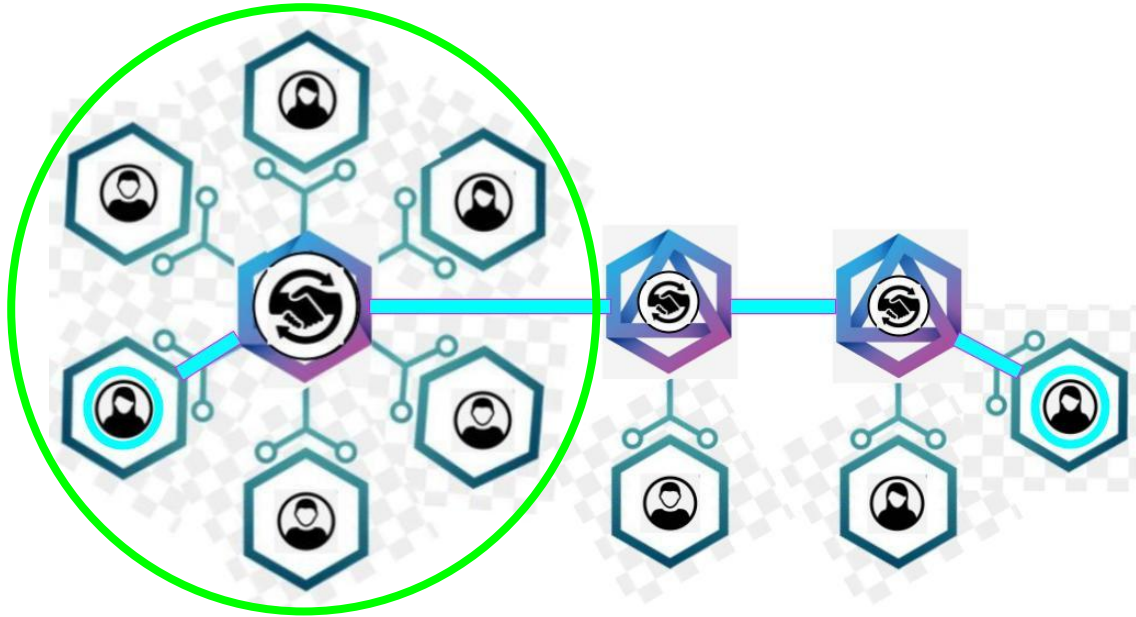
Servers can be owned by
an individual, a small group,



Decentralized Social Networks

A New Paradigm

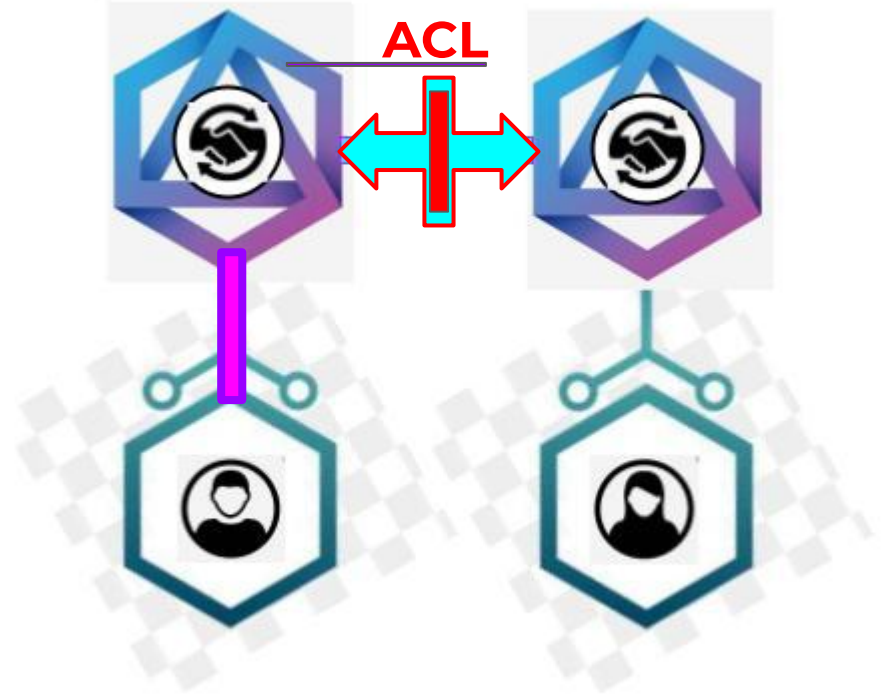
Servers can be owned by an individual, a small group or a larger community.



Decentralized Social Networks

A New Paradigm

The server administrator has full control over who has access to their server. This is done with a mechanism called **ACL** or **Access Control Lists**



Decentralized Social Networks

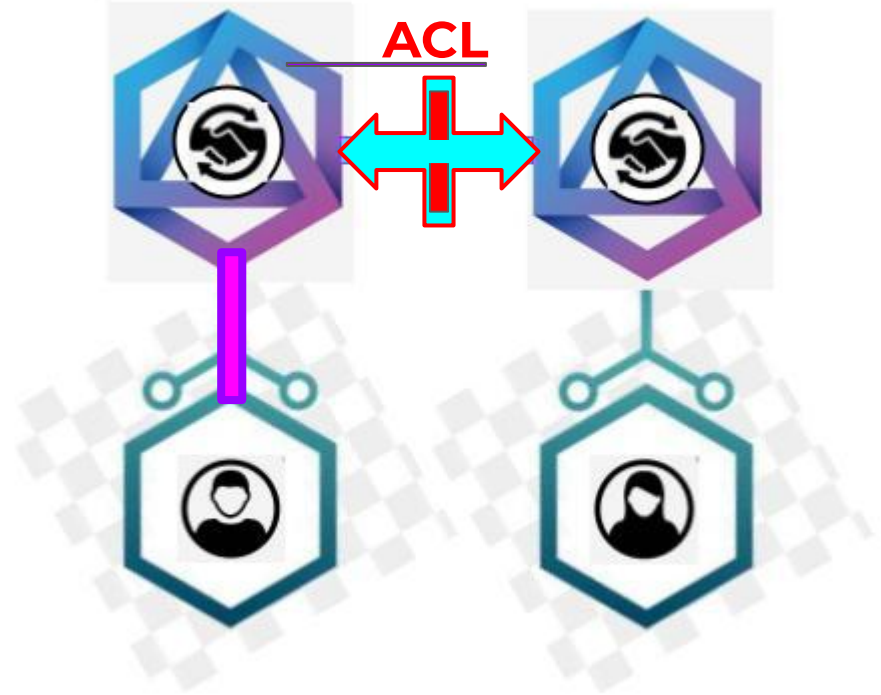
A New Paradigm

The server administrator has full control over who has access to their server. This is done with a mechanism called **ACL** or **Access Control Lists**

The administrator has the power to choose if & how they wish to participate in the larger network.

The server can be open or completely Private, with many variations In between.

The power is in the hands of the individual



Decentralized Social Networks

A New Paradigm

The power is in the hands of the individual

An individual can choose to have ownership over several servers and set them up for a multitude of purposes like home & family, education, work, political discussion, business, etc.



Decentralized Social Networks

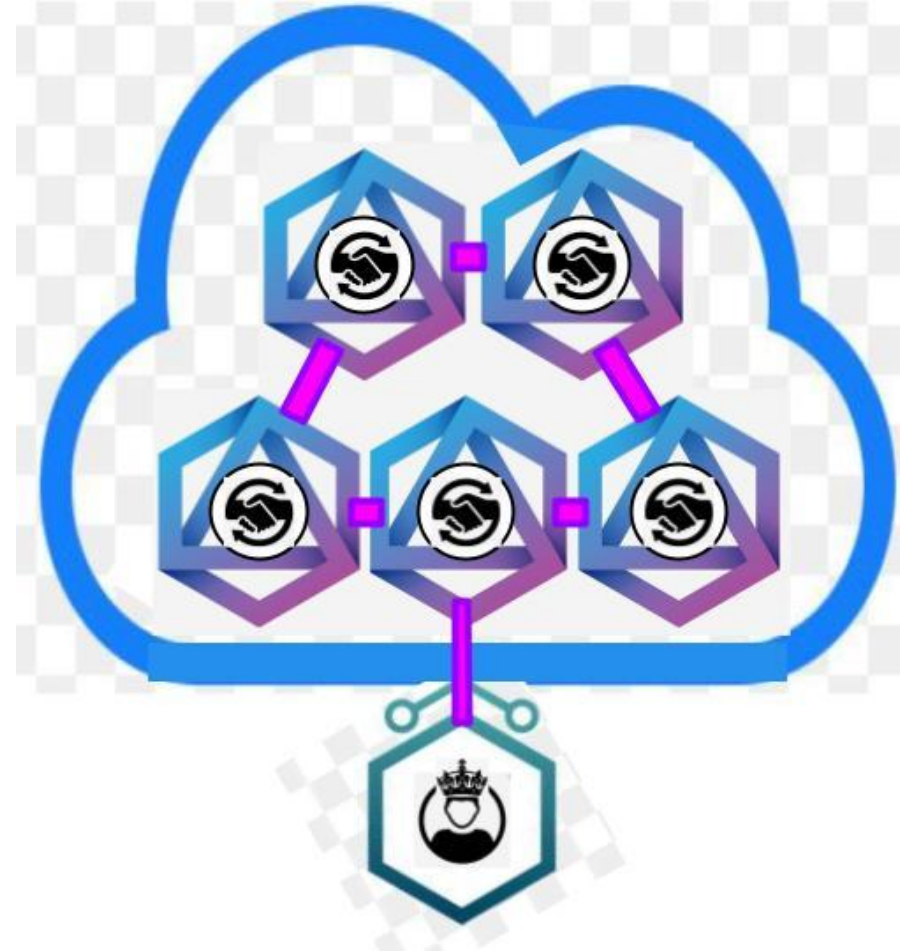
A New Paradigm

The power is in the hands of the individual

Beyond that, an individual can create a distributed server consisting of multiple nodes in other physical locations all linked together over the internet.

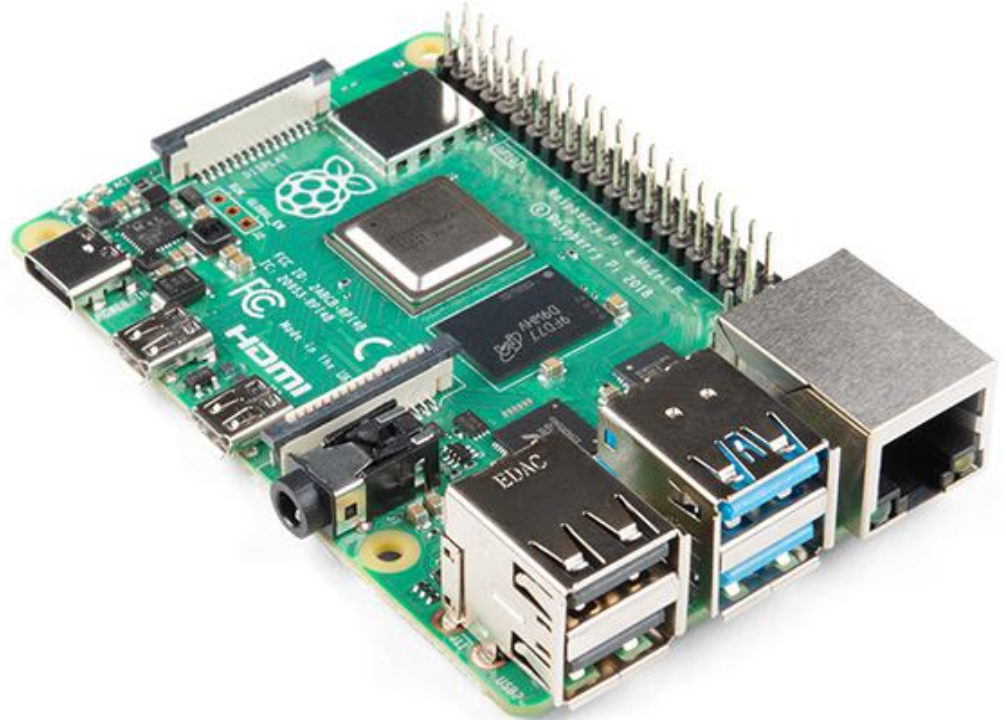
This creates the ability for a server to run regardless of a power outage on one node because the other nodes fill in for the demand.

All of these nodes act together as one individual server



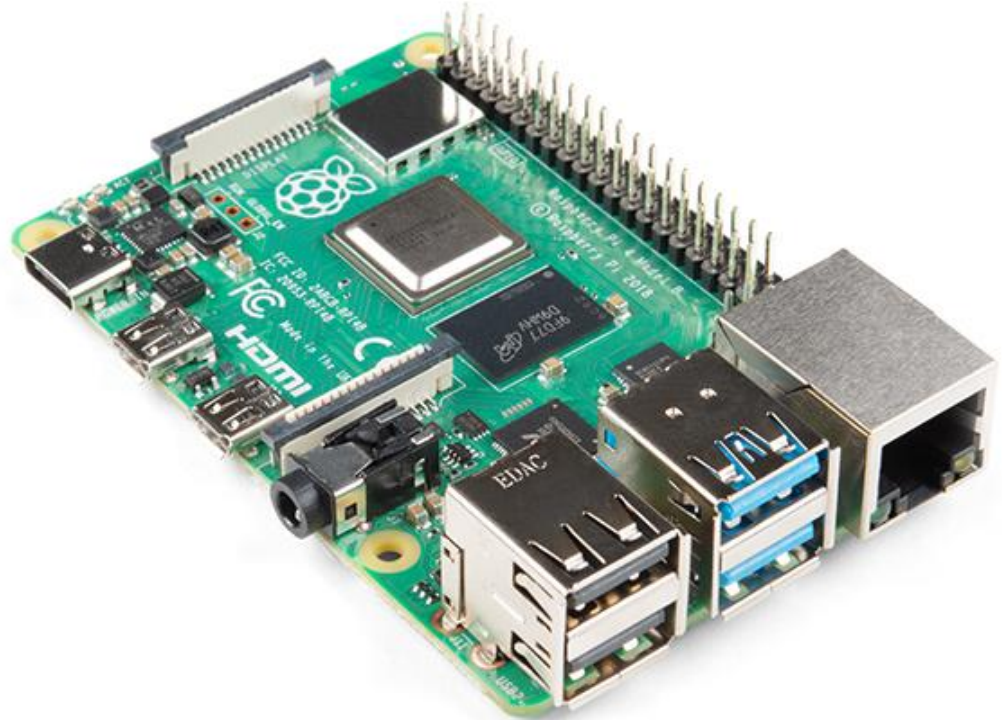
The CASP3R server

At the heart of CASP3R is an XMPP server built around a Raspberry Pi computer.



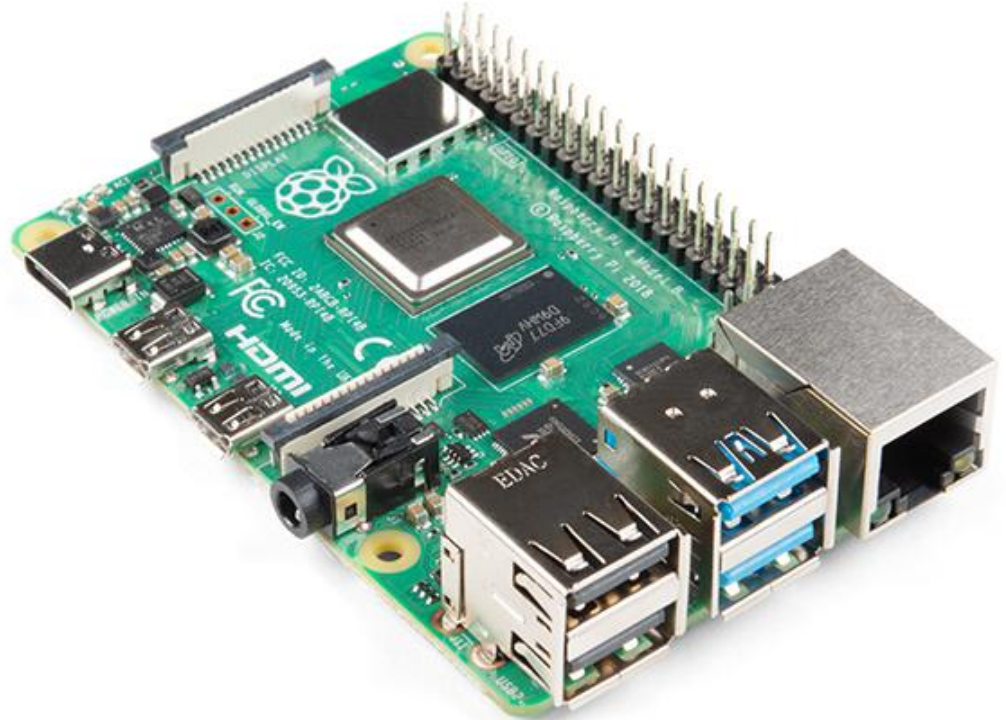
The CASP3R server

These little “micro servers” are remarkably powerful for their size & power consumption



The CASP3R server

At the cost of \$62, the option of ownership is very much within reach for the average individual.



The CASP3R server

This server system can be scaled up to handle an Infinite number of concurrent users by stacking the hardware like lego blocks and having those in more than one physical location as described earlier.

This network configuration has a built in distributed framework that balances the load of user demand between individual nodes, limiting “over demand” on any particular ISP connection.



The CASP3R server

This system is remarkably flexible and resilient to attack.

Unlike the centralized server structure of something like facebook.com if an outside agency decided to remove a server's URL like casp3r.im the server has several fallback URL's already built in, the change would only cause a minor hiccup.

If an agency pulled the plug on facebook.com it would be devastated & offline until they could reconfigure and launch under a new URL.



CASP3R

Chapter 2
A Catalyst

CASP3R

The digital foundation that the vision of CASP3R is built upon is XMPP.



CASP3R

XMPP was originally intended to offer an alternative that gave a middle finger to the monopoly of AOL chat rooms.

From its inception XMPP was a act of resistance to the power dynamic of the time

XMPP is the result of thinking outside the box.

CASP3R is not about reinventing the wheel...



CASP3R

CASP3R is about moving forward an existing inclination towards redefining the top down power dynamic.

We intend to build upon this battle tested infrastructure and bring it forward into the modern world.



CASP3R

The magic of CASP3R, XMPP,
& the hardware of the raspberry pi,
is that all of these & their critical system
dependencies are all completely open
source, and free for everyone.



CASP3R

Describing the vision and concepts of a new paradigm are easy. There is a trope in silicon valley that “*everything works on powerpoint*” and this is true.

There is a profound problem in this country and that was clearly defined during the election of 2021 with the tyranny of censorship and abuse of big tech on clear display.

The need for a solution that a vision like this *could be*, is fresh on the minds of the people.

I can clearly see the path forward and the technology that makes it possible. The implementation of this vision on the other hand will not be a simple process, and this is where the true test comes into play.



CASP3R

“We will build upon this battle tested infrastructure and bring it forward into the modern world.”

Bold statement...but, how *exactly* do you plan to deliver on that?

We can start with solving simple problems, and providing an alternative infrastructure as unrefined as it may be, to those who are ready now for that alternative.

The first order of business is making the XMPP server setup on Raspberry Pi stupid simple, instead of a nerd only exercise.



CASP3R

How can a product like CASP3R be made and given away for free?

Who is going to pay for it?

How can a company get a return on their investment by giving the product away for free?

CASP3R is only one product that the company ParaCom.co produces.

CASP3R is a project that builds trust and mutual respect with it's clients by contributing something that delivers tangible value to human beings.

We do receive a return on our investment, trust and mutual respect, a return that money can't buy.

