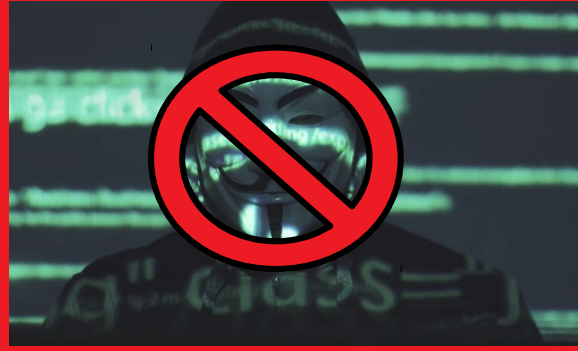
Becoming Anonymous

Part III - Infrastructure

@bugg

DISCLAIMER!!!



- This is not legal advice!
- This is a **FANTASY** BACKDROP for learning about Cybersecurity
- This has not been done IRL
- If you do this IRL you are committing a **CRIME**!

Series Overview

- Part I – Overview
- Part II – Intel
- Part III – Infrastructure
- Part IV – Recruiting
- Part V – Action

Infrastructure Overview

- Real-Time Communication
- Information Storage Platform
- Several Needs
- Many Wants

Wants and Needs

- Needs
  - Secure
  - Anonymous
- Wants
  - Easy
  - Robust
  - Decentralized
  - Ephemeral

Challenges

- Hosting
- Payments
- Software Changes
- Maintainability
- Migrations

Real-Time Communication

- Vetting Process
- Daily Communications
- Meetings
- Group/Shared Task Communications
- Builds rapport

Real-Time Communication

- IRC running as a Hidden Service on a VPS
- IRC
  - BBS → Twitch Chat (yes really)
  - ngIRCd → simple, easy, effective
- Hidden Service
  - Tor/TOR/T.O.R. → forced anonymity for server and clients
- VPS
  - Ubuntu Server Latest → simple, easy, reasonably secure
  - Fast/Cheap to spin up new nodes

Information Storage Plat.

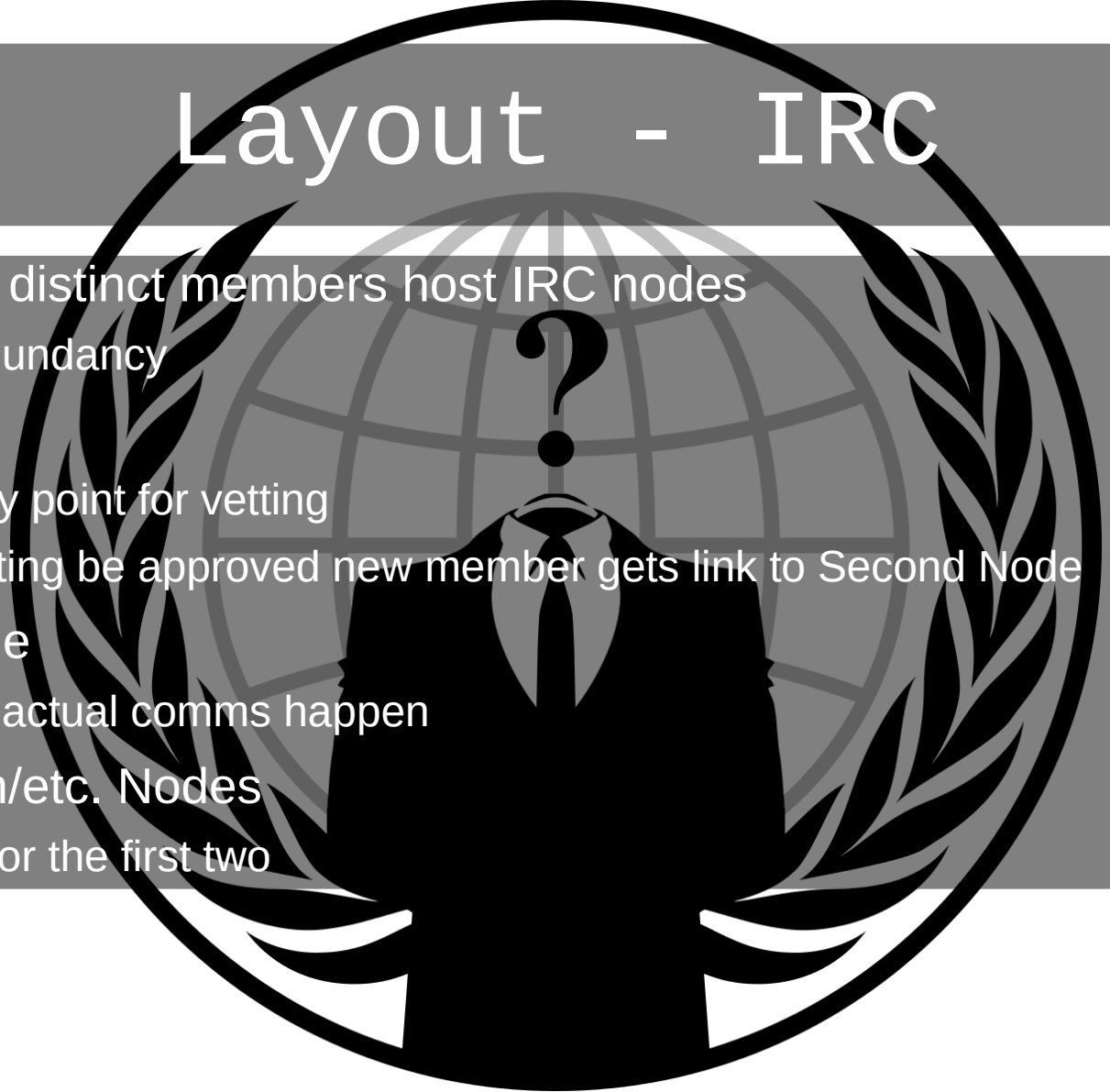
- Data, Information, Intelligence needs a home
- Long-term storage (non-ephemeral data)
- Group policies
- Group layout
- Infrastructure information (addresses)

Information Storage Plat.

- Apache hosted HTML (Wiki) as Hidden Service synced with wget backed up with Borg on a VPS
- HTML
  - Easy, Simple, Secure (no JS BS)
  - Apache → Literally no config
- Hidden Service
  - Tor/TOR/T.O.R. → forced anonymity for server and clients
- Syncing
  - To keep the nodes in sync
  - wget → extremely robust and straightforward
- Backups
  - To recover from bad updates
  - Borg → easy and de-duplicating
- VPS
  - Ubuntu Server Latest → simple, easy, reasonably secure
  - Fast/Cheap to spin up new nodes

Layout - IRC

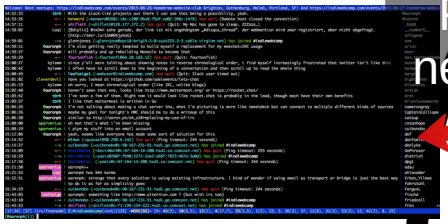
- At least two distinct members host IRC nodes
  - Explicit redundancy
- First node
  - Introductory point for vetting
  - Should vetting be approved new member gets link to Second Node
- Second node
  - Where the actual comms happen
- Third/Fourth/etc. Nodes
  - Fallbacks for the first two



Layout - Wiki

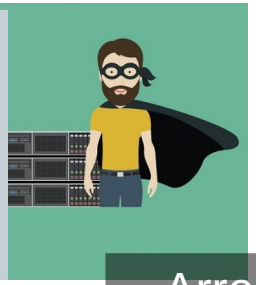
- Wiki nodes are decentralized
- More node-runners = More redundancy
  - Decentralization doesn't benefit from single-user redundancy
- Node-runners
  - Know how to manage their node
  - Make it easy to get right
  - Make it hard to get wrong
- Bad actors get purged then everybody rolls back
- Updates from non-node-runners are manual (not as easy)

The DATDA Collective (TDC)



Posts new link

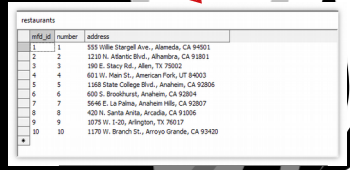
Finds Address



Arrests Site Operator

Puts link in Target List

Starts Targeting Site



Sends Address to POPO