# How we accidentally created our own:

RAT, C2, Botnet
Distributed Computer
Network

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#### Me Me Me...

•Who/What am !?

- •Simple answer:
  - Father/Husband/Son/Brother
  - Programmer/Pentester/Researcher
  - Hillbilly



BILL.....

•Who/What am I?



#### Sort of Boring Stuff

#### Agenda:

- Get over stage fright and get started...
- Talk about ourselves...
- Present agenda...
- Present rambling story of our accidental and haphazard path to creating a sort of working RAT/C2/etc...
- Maybe talk about other stuff too...
- Take questions...
- Go get drinks...

**DONE** 

DONE

**IN PROGRESS** 

**COMING UP NEXT** 

**MAYBE IF THERE IS TIME** 

**LATER** 

LATER...DOWN STAIRS

## More Boring Stuff

#### Basic Terminology:

- RAT
  - Remote Administration Tool
- C2
  - Command and Control
- Botnet
  - Robot Network
- Distributed Computing Environment



## Just a Bit More Boring Stuff

#### **Common Functions:**

- Encrypted Comms
- Upload/Download Files
- Exec System/Shell Commands





## Once upon a time....

- Multiple pentesters
- Internal engagement
- No Internet access
- In separate rooms

## Chat Program

#### Requirements:

- Server
- Client(s)

#### **Actions:**

- Client sends message
- Server receives message
- Server forwards message to other clients
- Other Clients receive message and display it



# DEMO: Chat Program

# Encryption

#### Options:

- SSH Tunnel
- SSL/TLS Wrapper
- Standard encryption (AES)



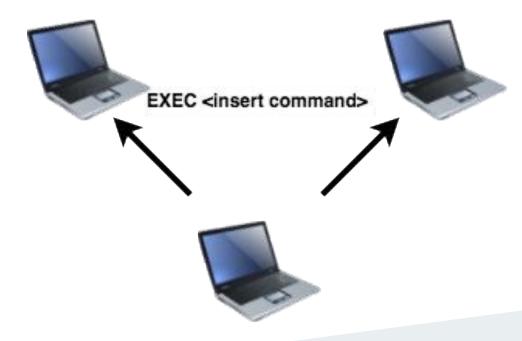
# DEMO: Encryption

#### Remote Commands

TOM: Hey, run this command and give me the output.

BOB: I am not at my computer, I will do it later.

**TOM:** Never mind, I can run it without you!



# DEMO: Remote Commands

#### File Transfer

Select file from local system

Send file securely to remote system(s)



# DEMO: File Transfer

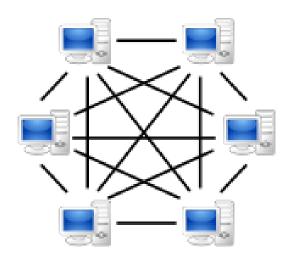
# Easy Deploy

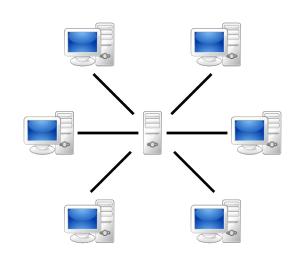
It needed to be easy to install or deploy.



# DEMO: Easy Deploy

# Paradigm Shift





# File Pull



# DEMO: File Pull

#### Remote Shell

Fully interactive

# DEMO: Remote Shell

#### Future Stuff

- Alternate communication channels/tunnels?
- SOCKS proxy

#### THANK YOU

#### **Questions? Comments? Thoughts?**

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