



S E R V I V U S

# The Future of Port Security

Data Science Applications for Ports



# The Future of Port Security - Data Science Applications for Ports

## Agenda

- A little about us
- A little about me
- AdData – Where it comes from and what it is.
- AdData – What it looks like, how to prevent it spreading.
- AdData – How we use it in our work.
- AdData – What we can do with it.
- AdData – What can YOU do with it.
- Questions.



Servius Group is a full-cycle intelligence organization specializing in collection, analysis, and operational execution to address complex security challenges.

Professionals from U.S. Special Operations Command (SOCOM), the Federal Bureau of Investigation (FBI), the Department of Homeland Security (DHS/HSI/ICE), and academic leaders in cognitive science, data science, and threat analysis.

Delivering unmatched expertise in counterintelligence, security, and strategic risk assessment, ensuring that our clients receive the highest level of intelligence-driven security solutions.



## Who Am I?

Mike (Anch) Guthrie:

Mike is a seasoned cybersecurity professional with deep experience leading and executing physical and cyber penetration tests against national security targets for various federal agencies. He has a proven track record in Red Teaming, Incident Response, and Disaster Recovery, with broad expertise spanning penetration testing, SSDLC and DevSecOps practices, container and virtual machine security, and application security assessments—particularly in environments involving Operational Technologies (OT). His work has contributed directly to national and industry cybersecurity standards, including NIST 800-53, NERC-CIP, and the Penetration Testing Execution Standard (PTES).

In addition to hands-on technical operations, Mike has developed custom hardware and software for Red Team missions, managed command and control infrastructure, and conducted in-depth code reviews and software lifecycle evaluations. He is also an active thought leader in the field, having published research and spoken at major cybersecurity forums such as DEF CON, the IAEA International Convention on Nuclear Security, and the United States Congress. Mike is currently pursuing a Master's degree in Computer Science at Oxford University, focusing on Software and Systems Security.



## AdData – Where does it come from?

Your Phone! – Your iPad – Your Computer!





# Your device is a snitch!

- Browsers have lots of access to your data.
  - IP
  - Location
  - Timezone
  - Screen Resolution
  - Memory (The browser can see)
  - Even “Do not track” (lies!)

```
303party.org

congratulations! (the party is a lie)
your consolation prize is all
the data your phone/browser
leaks every time you visit a
website, click a link, or scan a
qr code...

ip_address 97.115.166.197
city Portland
region Oregon
postal_code 97213
country United States
lon -122.5989
lat 45.5375
timezone America/Los_Angeles
is9_name unknown
asn 209
is_vpn true
platform MacIntel
screen_size 3840x1600
device_memory 8 GB
language en-US
browser_vendor Google Inc.
cookies_enabled true
do_not_track true...
user_agent Mozilla/5.0 (Macintosh; Intel
Mac OS X 10_15_7)
AppleWebKit/537.36 (KHTML,
like Gecko) Chrome/139.0.0.0
Safari/537.36
java_enabled false

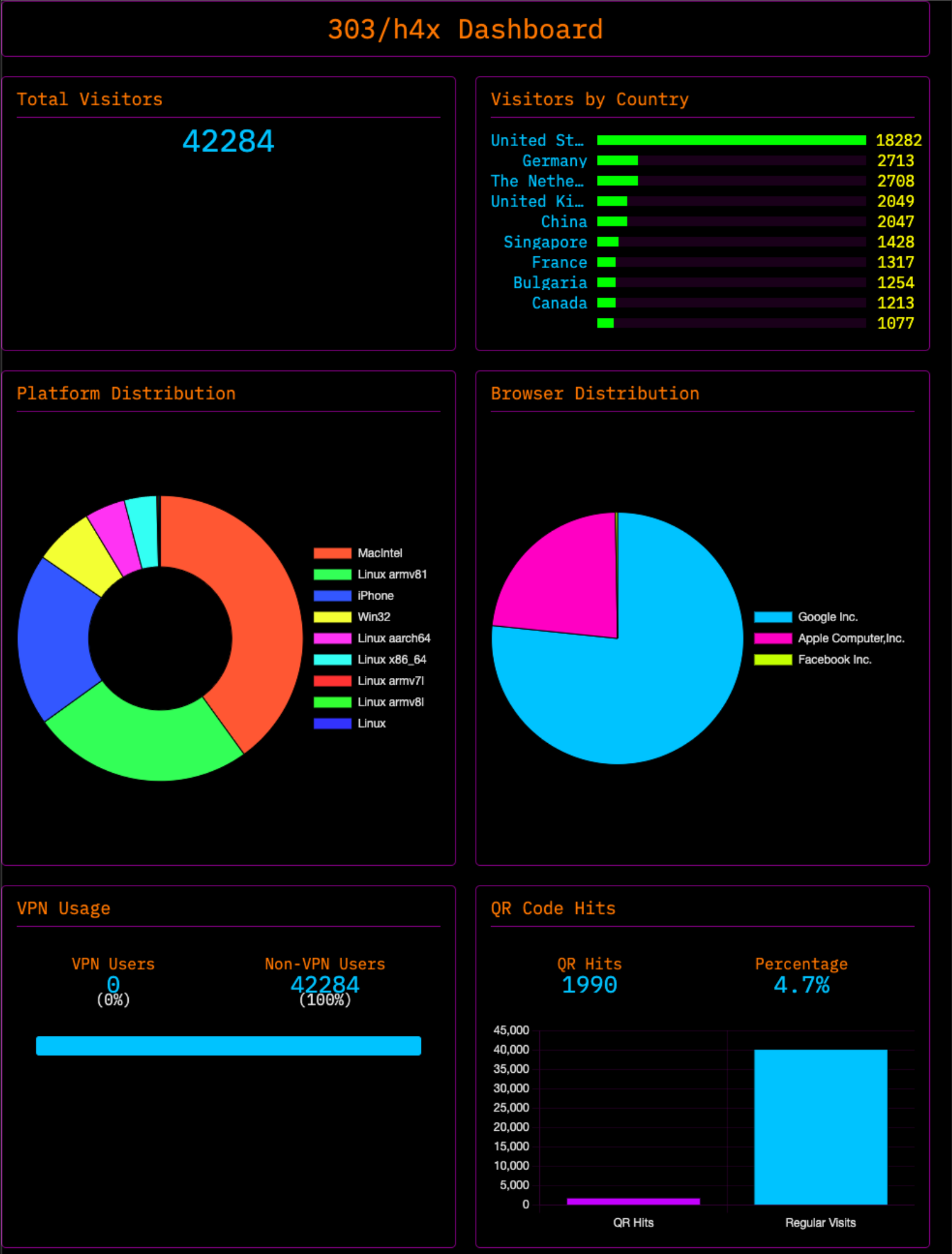
//////////+++ =[RI9 Tuna] = [RIP Roamer]+++//////////
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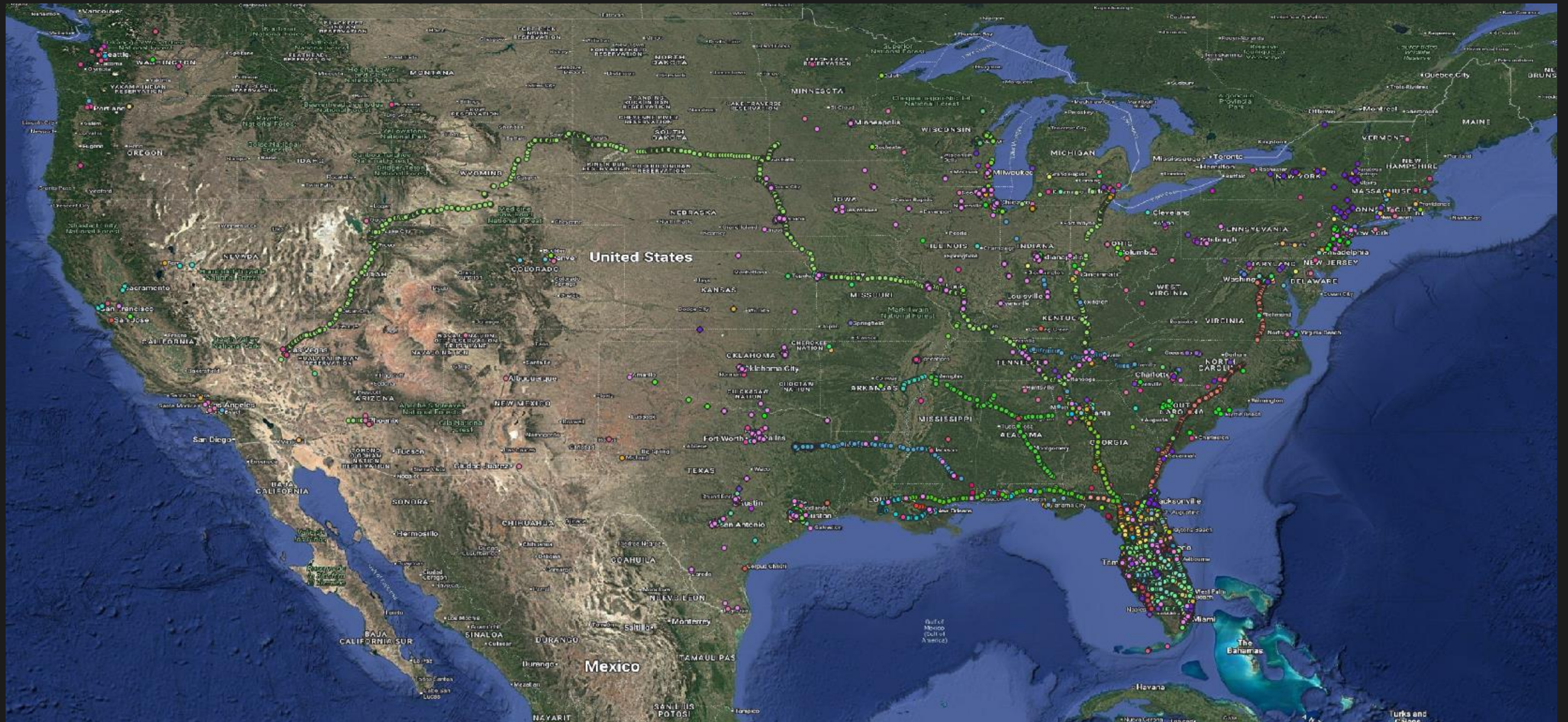
# The data can be useful

- Language can tailor a website for the locale.
- Screen resolution can make sure you can read a website.
- Browsers have different capabilities...





# We can also see where you've been!





Data Analysis – Selecting what we want to look at.





## AdData – How we use it in our work.

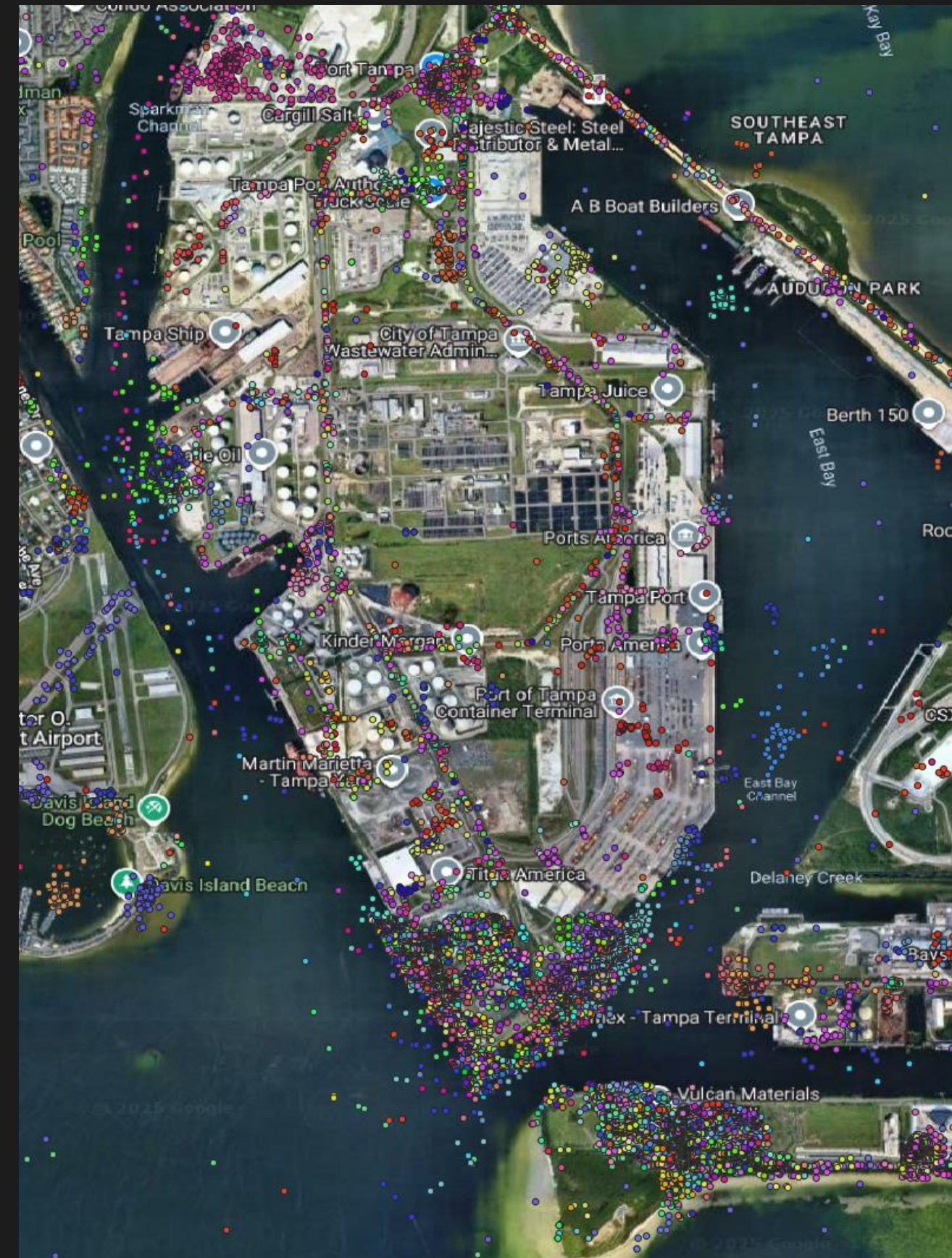


- Primarily investigative
  - Incident response activities.
  - Try to get to the Who and Where not What and Why
- Not good for specifics
- Really good for Patterns and Trends
- Not a Real Time picture



# AdData – What you can do with it.

- Mostly investigative/patterns/trends
  - Human Trafficking
  - Smuggling
- How far does the port reach?
- Incident Response/investigation







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