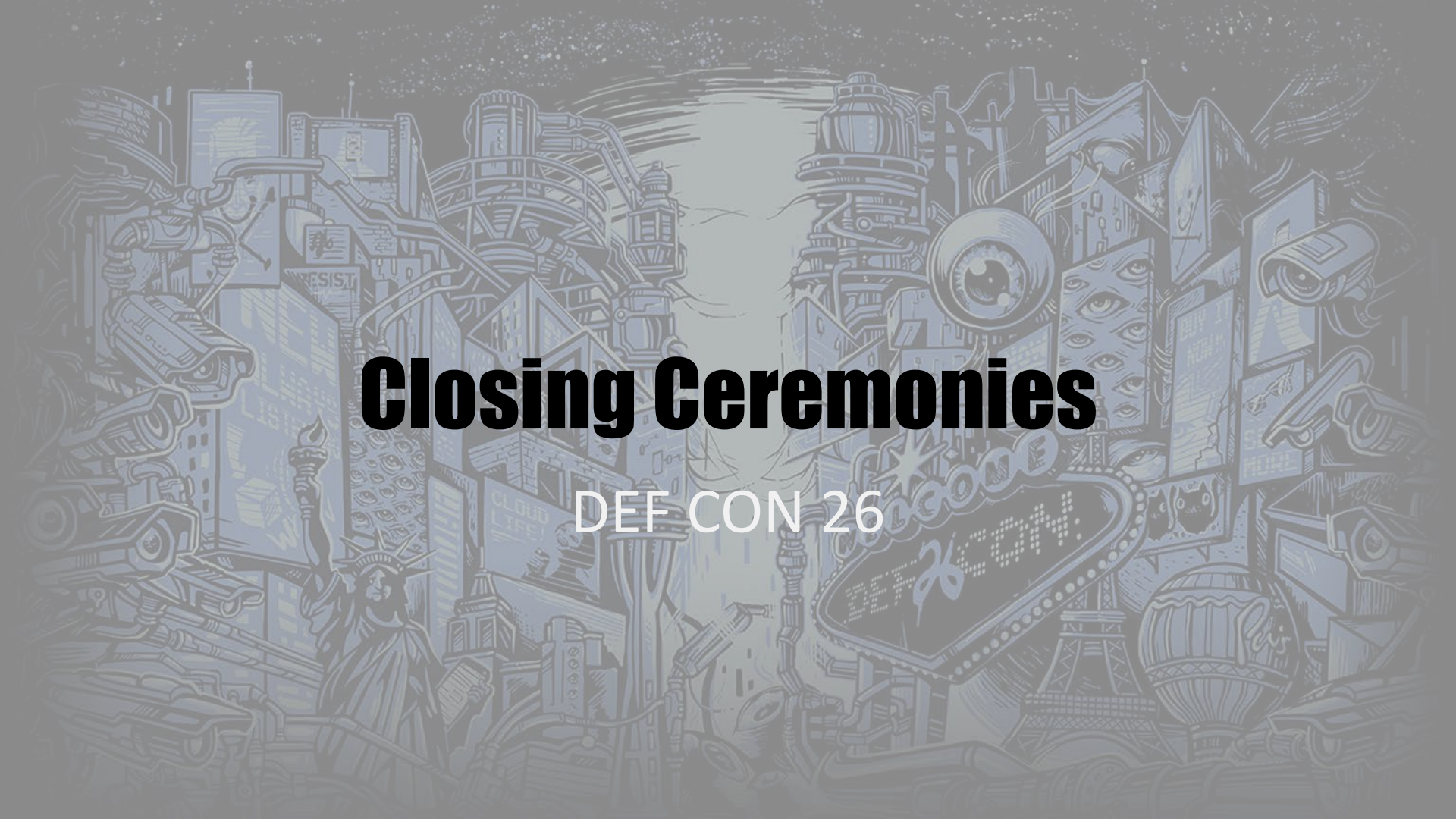

Closing Ceremonies
DEF CON 26



We’re too big for one building

Caesar’s Palace, Flamingo, and LINQ

Over 400,000 square feet of space



Badges badges BADGES!

Badge Makers Community area and contest

Over 100 different badges, add-ons

Badge Archive Project



Speaker Ops

In 2017 we had a total of **315** minutes lost in presentation time to A/V issues

This year, at DEF CON 26, the total is **10** minutes.


We have a tradition…

Transparency

First report published in 2018

https://www.defcon.org/html/links/dc-transparency.html

Now to be reported annually

The more data we have, the more data we can share

Transparency

Harassment – 3

Sexual Harassment – 7

Sexual Assault – 1

Medical Incidents – 7

Theft – 2

Vandalism – 3

Tresspassing – 1

Falling Ceiling – 1

Badge Makers Exonerated – 1

Attacks On Casino Foiled – 1

Dust Storms / Flash Flood – 1

Other Event's Attendees Claiming We Hacked Them – 1

Warnings Issued To Our Staff - 1

Support Line – “Help!”

Available each day of the conference from 08:00 to 04:00

Completely anonymous

Trained community volunteers

Total Calls – 62

General Information Calls – 42

Harassment Calls – 3

Sexual Harassment Calls – 5

Medical Help Calls – 1

Concern Over Drink Tampering – 1



INFO-GOONS 2018



Info Booth / Hacker Tracker

Android and iOS
Source available on GitHub - https://goo.gl/bbVRMt
Created by @shortstack and @sethlaw
Developed by @ChrisMays94 @MaceraMeg
Designed by @iMacHumphries

HACKER TRACKER - 2018



15,000 Users this DEFCON
8.8k Android, 6.6k IOS

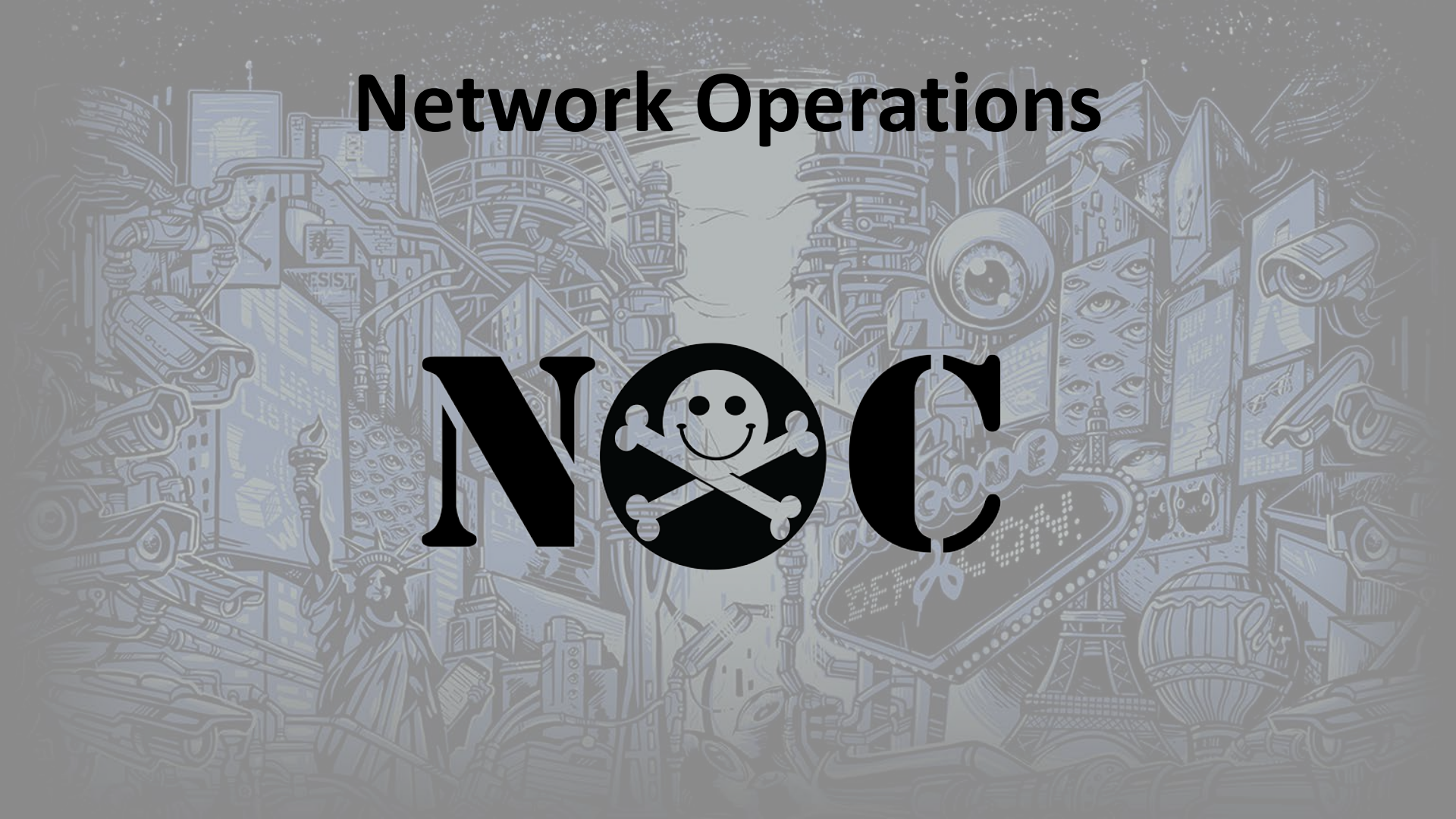
Created by Info Booth Goons



Workshops

Nearly 2,000 registered attendees,
Three days,
Six concurrent tracks daily,
Twelve sessions per day,
Their very own hotel!

Network Operations



What kind of network you usually have here?



Oh, we got both kinds. We got

Wired

- Villages
- Press
- Contests
- Vendors
- InfoBooth
- Dispatch
- Speakers
- Closed Captioning
- DC TV
- Roots

WOW-Fi

- For the brave



Post DC25

Site Visit

Planning

Pre-staging gear

Sunday

MDF/ IDF Connections

Firewall

Caesars Aruba Controller

Internet Uplink

Orange Whips

Monday

NOC Setup

Moar Core Switching

Flamingo & LINQ Connections to Caesars

wifireg site up

Patching Caesars

Tuesday

Flamingo & LINQ Aruba Controllers

Patching Patching Patching

APs hanging

Orange Whips

Wednesday

Flamingo & LINQ Aruba Controllers

APs Installs done at Caesars

Patching Flamingo & LINQ

Fiber and Hardware issues at Caesars



Thursday

Moar Patching for Flamingo while…

Scrambling to get DC101 up and running

Wireless Client-isolation vs Multicast

Villages Setup

Friday

DC Labs setup

Patching last minute changes

Contest area Patching

Chillout patching

Media Server Busted

Bump up Internet Uplink speed

Saturday

Shit worked with minor issues/ requests

Workshops teardown

Sunday

Teardown

Orange Whips

Monday

Finish Teardown

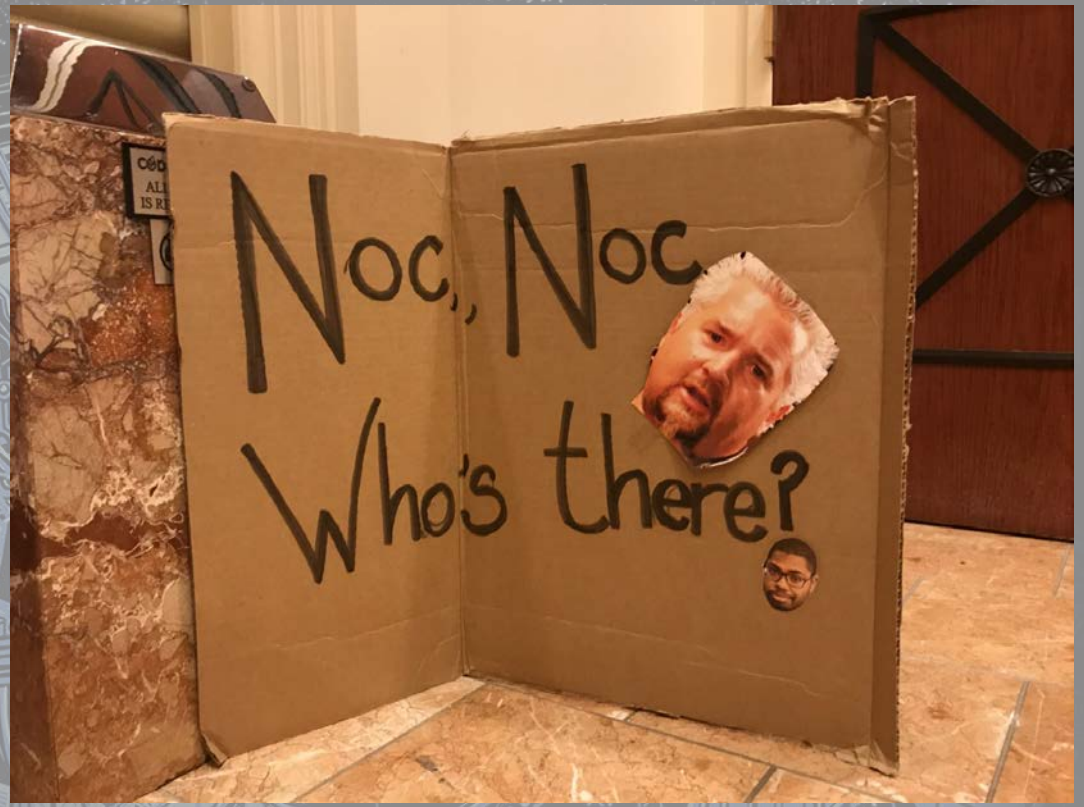
Packing

Go home!

Detox

NOC

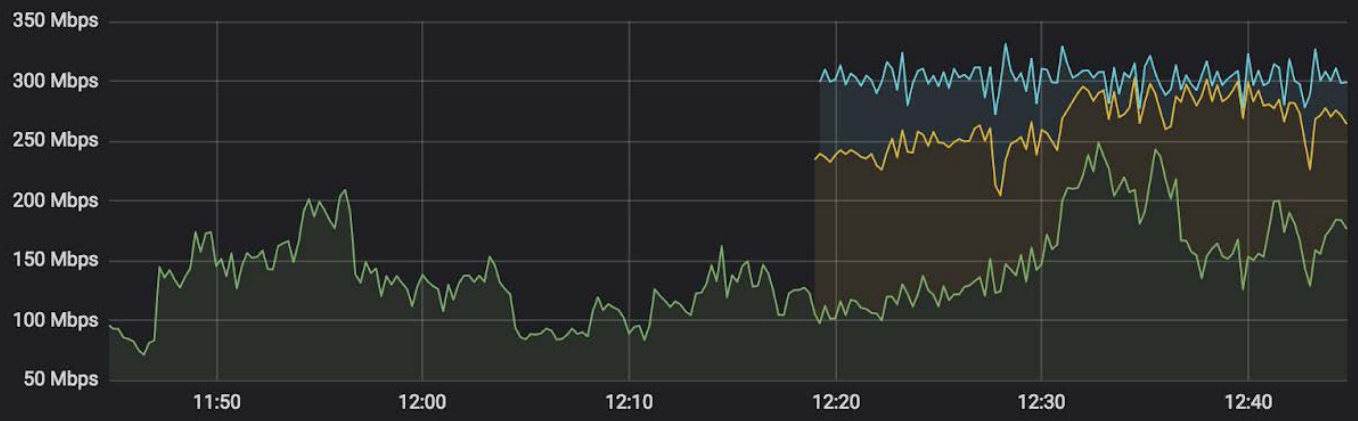




NOC

Internet Download

305 Mbps





NOC


Internet
Aug 10, 2018 08:00:00 to Aug 12, 2018 16:00:00
Internet Download
176 Mbps
Internet Upload
62.6 Mbps
500 Mbps
400 Mbps
300 Mbps
200 Mbps
100 Mbps
0 bps
8/10 08:00
8/10 16:00
8/11 00:00
8/11 08:00
8/11 16:00
8/12 00:00
8/12 08:00
8/12 16:00
avg current
Caesar 124 Mbps
Flamingo 34 Mbps
Linq 17 Mbps
400 Mbps
300 Mbps
200 Mbps
100 Mbps
0 bps
current
Caesar
Flamingo
Linq
IPSEC In
887 kbps
IPSEC In
765 kbps
IPSEC In
2.5 Mbps
2.0 Mbps
1.5 Mbps
1.0 Mbps
500 kbps
0 bps
current
Caesar's
Flamingo
Linq
IPSEC Out
2.5 Mbps
2.0 Mbps
1.5 Mbps
1.0 Mbps
500 kbps
0 bps
current
Caesar's
Flamingo
Linq

Challenges/ Issues : aka yoloOps

- Bandwidth
- Some of the fiber connections
- Switch swap/ power issue
- Client-isolation vs Multicast
- AP coverage and capacity at times
- 802.1X confusion



The Network

10 Gbps backbone (with some 1Gbps fallbacks)

~~300 350~~ 400 Mbps internet uplink (Caesars)

And then...

Flamingo + LINQ

Layer 3/ IPSec between the properties



Gear

Wired Gear

3 x Firewalls - FreeBSD
3 x Core Cisco Switches
17 x Edge Cisco Switches
Tons of unmanaged switches
3 x Monitoring ”Servers”
1 x WiFi Registration ”Server”
THE Media Server



Gear

Wireless Gear

3 x Aruba Controllers

136 x Aruba Access Points (model 305)THANKS ARUBA NETWORKS!

- 110 x Caesars
- 20 x Flamingo
- 6 x LINQ



(the usual) Stats

9.11 TB of internet traffic (double of last year)
– Inbound: 6.71
– Outbound: 2.40
7,398 users registered on wifireg (5,455 last year)
2,403 wireless users peak (compared to 2,104 last year)
8,365 total number of devices on WoW-Fi
15k unique DHCP leases (compared to 22k, and 35k the year before, THANKS!)
12k different mac addresses
15 TB of wireless traffic (6.74TB last year… WOW-Fi!!!!!!)
15 GB media server traffic
5.1 Gbps of peak traffic on the core



effffn and The Orange Whips

Leads
@effffn
mac

Infra/Systems
#sparky
c7five
deadication
musa

Monitoring
c0mmiebstrd

WOW-Fi
CRV
Jon2

n00bs
johntitor
wish



NOC



Melanie Ensign @iMeluny · 13h

Amazing when longtime #DEFCON attendees assume the con lacks structure or process on the backend. After 26 yrs, there is a well-oiled machine behind the scenes. Every year = another stress test.

I have my work cut out for me to bring this all to light so everyone can see it.

NOC

Thank you, gracias, obrigado!

- DT
- Charel
- Nikita
- Will
- QM
- Caesars IT
- Encore Staff
- @thepacketrat
- @thelockheed
- Apostrophe Bar Staff
- The very nice folks who brings us snacks
- **All other DEF CON departments**
- YOU!



Defconnetworking.org
@DEFCON_NOC
Noc \o/ defconnetworking.org




DEF CON 26
DCTV

DCTV

- New Def Con Department
- Acquired three more goons
- Broadcasting to 6 hotels:
  Caesars / Nobu
  Harrahs
  Linq
  Flamingo
  Paris
  Ballys
- Senior Overnight Program Director (Pictured left)



Friday Late start

- Six F**ked up shipments from seller
- Friday morning:
  Drove 30 minutes from DC to parking lot hand-off
- "90 minutes from package physical acceptance in North LV to having 4 hotels up. (I have time stamps on that)" - Morgan



DCTV



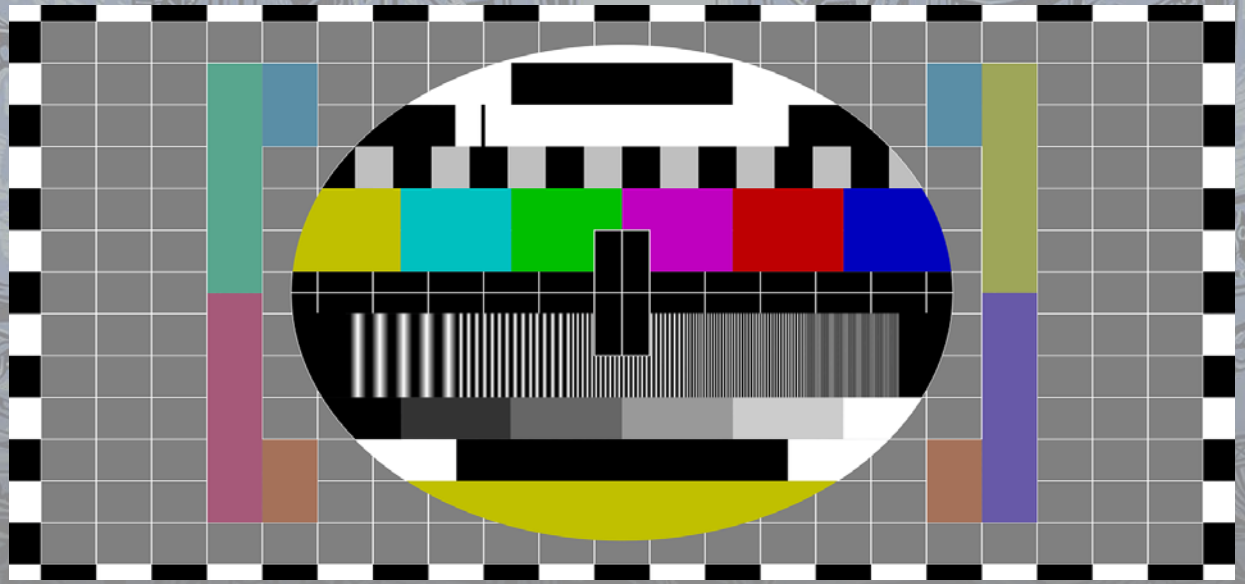
- Total of 18k+ hotel rooms
- 99.9% uptime
- Streaming DC101 and Track 1 to Internet
  - 4k viewers
    DC 101 much more popular.


DA-LITE
Vendor Ops
in Naples
DCTV
Room

@DEFCON_TV

We get up in the morning so you don't have to.

https://dctv.defcon.org



Villages

AI Village
Biohacking
Car Hacking
Crypto and Privacy
Data Duplication
Hardware Hacking
ICS Village
IoT Village
Lockpicking
Rootz Asylum
DEAF CON
Dronewarz
Soldering Skills
BCOS/Monero

VX (Chip-off)
Mobile Museum
Ethics Village
Skytalks
CAAD Village
Blue Team
Packet Hacking
Recon Village
Tamper Evident
Wireless Village
Social Engineering
Cannabis (PuffPuffHack)
Voting Machine Hacking

Data Duplication Village

Sources (6TB each)

- Infocon.org
- Hashtables
- More hashtables

Drive Types

- Seagate– 118 and <6% fail
- Western Digital – 98 <6% fail
- Toshiba – 76 - 0%
- HGST – 59 <8% (in talks w/them)
- Dell – 4 – 100% (HUHWHAT?)

Output (more info at dcddv.org)

- Dupe time was:
  13h to 16h per drive

- Infocon 99 copies
- Hashtables 1-2 121 copies
- Hashtable 2-2 99 copies
- Total dupes 319 copies
- 319 dupes @ 6TB each = 1.9 PB Out!
- Standing room only during talks
- 84 duplicators for 60 straight hours

Vendors

ATTIFY
Baidu
Capitol Technology University
Cloudflare
EFF
Freenode
Ghetto Geeks
Gunnar Optiks
Hacker Boxes
Hacker Stickers
Hacker Warehouse
Hackers for Charity
HAK5
Hardware Zoo
Healthy Mentals
Human Rights Foundation
Keyport
Kinkayo
Malicious Life Podcast
No Starch Press
OWASP
NUAND
Rapid7
Scam Stuff
Security Snobs
Security Weekly
Sewashree
Shadowvex Industries
Simple WiFi
Sparrows
Tencent
The Calyx Institute
Think Penguin
TOOOL
UAT
360 Unicorn Team
WISP

Artists and Entertainment

Juno Reactor

Yurkmeister
os.system
Icetre Normal
DJ %27
Acid-T
YT Cracker

MC Frontalot

Dualcore
Tineh Nimjeh
CTRL
Scotch & Bubbles
Circuit Static
Skittish & Bus
S7a73farm

JG & The Robots

Miss Jackalope
SomaFM
Zebbler Studios
Zebbler Encanti Experience

Parties / Meetups

New team, same great parties…

thanks Pyr0, 0x58, A.P. Delchi, Jixi Aeons, our n00ns, DT, Nikita, and Charel

303
/r/DEFCON
Arcade Party
BlanketfortCON
Brucamp
Friends of Bill W.
GEEKPWN
GothCON
Hacker Flairgrounds
Hacker Karaoke
Hacking for Special Needs
House of Kenzo
Lawyer Meet
Live Band Karaoke
Lonely Hackers Club
SECKC the World
VET CON
Wireless Village

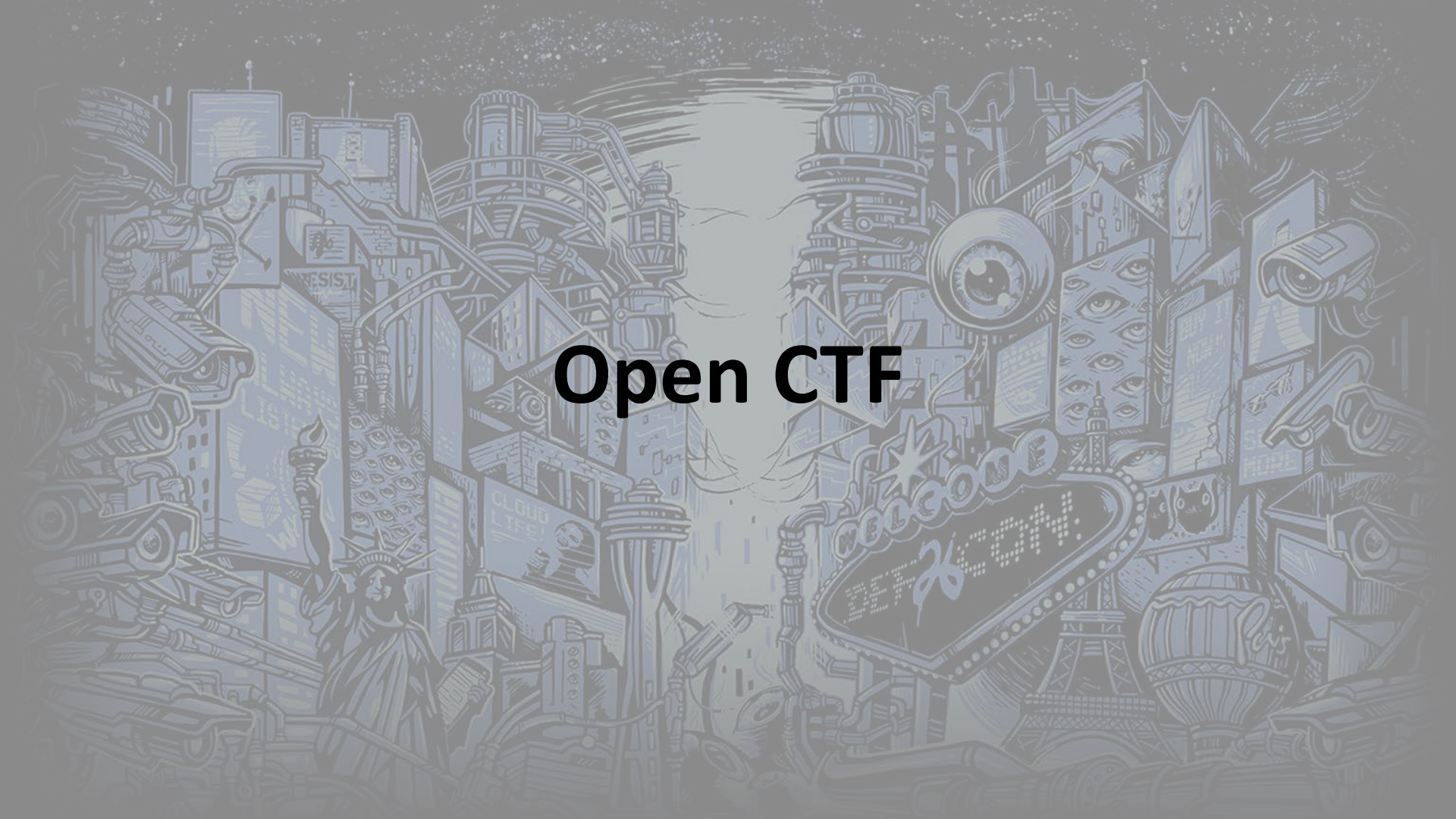
Contests and Events

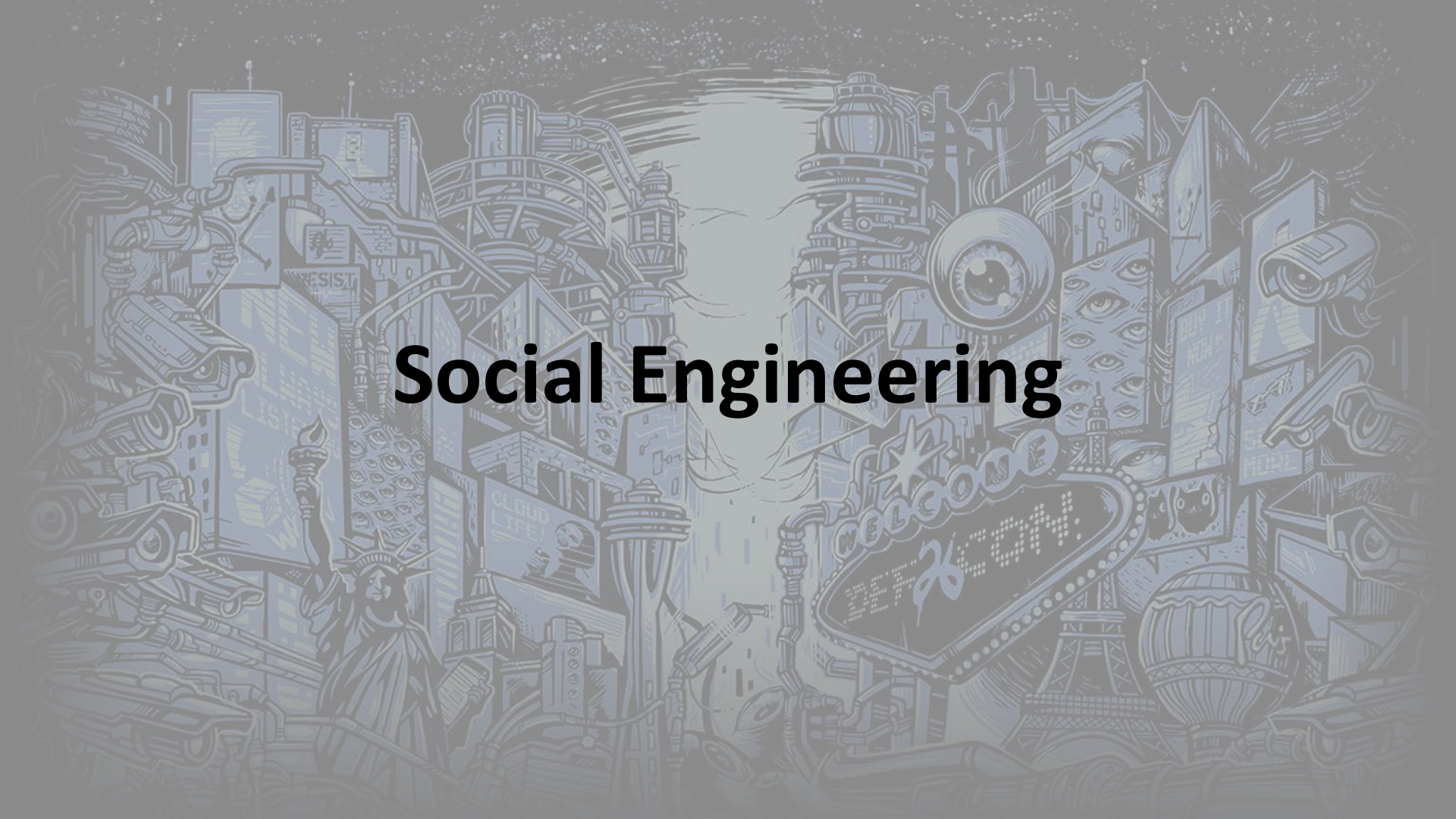
AI Village Jeopardy
#BADGELIFE
Beard and Moustache
Blitz Chess
Car Hacking CTF
CMD+CTRL
Coindroids
Crack Me If You Can
Creative Writing Short Story
D(struction)20
Darknet
DC Shoot
DEAF CON Meetup
Drunk Hacker History
EFF Tech Trivia
Friends of Bill W.
GeekPWN
The Gold Bug Puzzle
Hack Fortress
Hacker Jeopardy
Hacker Karaoke
Hack the Plan(e)t
Ham Radio Exams
Ham Radio Foxhunt
IntelCTF
Lawyer Meetup
Mohawk-Con
Movie Night
OSINT CTF
Pocket Protector
Queercon
Recon Village CTF
Recon Village Hackathon
Red Alert ICS CTF
Scavenger Hunt
Schemaverse Championship
SE CTF / Teens / Kids
SOHOPlessly Broken CTF
Spell Check - Spelling Bee
Skytalks
Telechallenge
Tin Foil Hat
Toxic BBQ
Underhanded Home Auto
Vulnsec Image Building
warl0ck gam3z
Whose Slide Is It Anyway?
Wireless CTF


Black Badge Contests


Hack the Plan[e]t


Dungeons@DEFCON


Open CTF



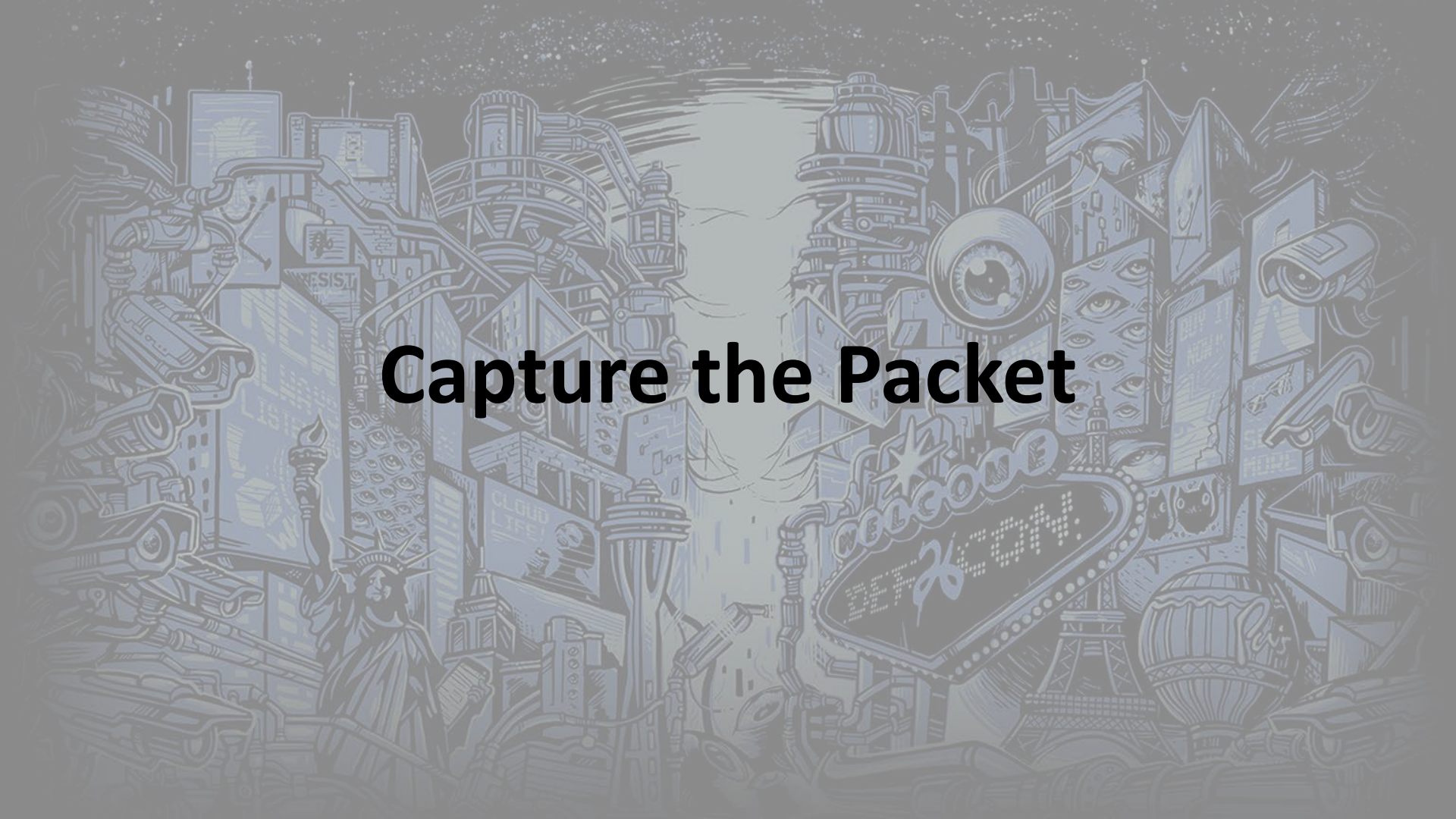
Social Engineering


SOHOpelessly Broken


Red Alert ICS CTF


warl0ck gam3z


Wireless CTF


Capture the Packet

Order of the Overflow



@Zardus, @lzcnt, @adamdoupe, @reyammer, @kapravel, @balzarot, odo, nullptr, slipper, tiffanyb, Aimee, @bboe, ASU volunteer crew


Capture the Flag

Thanks to all DEF CON Departments

Administration
A & E
Artwork
Badges
Contests/Events
Demo Labs
Dispatch
DC Groups
Forums
Info/HackerTracker
Inhuman Reg
Operations
NOC / DCTV
Parties/Meetups
Photo
Press
Production
QM
Registration
CFP Review Board
SOC
Social Media
Speaker Ops
Swag
Vendors
Villages
Workshops

Old and New Goons – Thank You!

New, retiring Gold Badge Holders
Gold Badge Holders of the past
New Goons – n00ns

DEF CON Organizers

DT, Nikita, Will, Janet, Neil, Charel, and Darrington
All Department heads and seconds

DEF CON QM

would like to thank all Goons, Humans, and Inhumans for their moving tribute and offerings in the shrine to our lost projectors: numbers 113, 062, 057, and 069.

113 in particular was cut off in the prime of light, never to shine to it’s true potential. It didn’t even make it’s first Closing Ceremony. We take solace in the thought that they are now together with Trevor





See You Next Year at…

Paris-Bally's

Oh, and…



Planet Hollywood

Additional 80,000 square feet of space
A quick walk next door
Registration for Hotel begins on Monday

DEF CON 27 is August 8-11th

MIGHTY TRAVELS