Closing Ceremonies

25th Anniversary
Badges Badges Badges!

And...is that the line for Swag?!  
#badgelife
Swag!

Sold out again!

Thank you from Swag to Speaker Goons!
Transparency

- More information about DEF CON departments and what’s going on.
Thanks to all DEF CON Goons

- Administration
- A & E
- Artwork
- Badges
- Contests/Events
- Demo Labs
- Dispatch
- DC Groups
- Forums
- Info/HackerTracker
- Inhuman Reg
- Operations
- NOC / DCTV
- Press
- Production
- QM
- Registration
- Review Board
- SOC
- Social Media
- Speaker Ops
- Swag
- Vendors
- Workshops
Old and New Goons – Thank You!

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

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

NOC
Wired Infrastructure
- Closed Captioning
- Contests
- DC TV
- Goons
- Media Server
- Press
- Rootz
- Richard Cheese
- SOMA FM
- Speaker Ops
- Speakers
- Vendors
- Villages
- WiFi Monitoring

Wireless Infrastructure
for the brave (and patched devices)

DC TV
for those people in their rooms
The Network

- 10 gbps backbone
- 200-250 mbps internet uplink
- Wired
  - Firewall - FreeBSD
  - 1 x Core Cisco Switch (#yolo, but we had a cold stand-by box)
  - 14 x Edge Cisco Switches
  - 3 x Monitoring “Servers”
  - 2 x DC TV “Servers”
  - 1 x WiFi Registration “Server”
  - 1 x Admin “Server”
  - Media Server
The Network (cont)

• Wireless
  – 7210 Aruba Controller
  – 61 Aruba Access Points (70, 105, 135, 225)
  – 69 Aruba Access Points (model 305) – THANKS Aruba!

• DCTV
  – 13 ODROID units
  – 2 x on-site streaming servers
  – Video Transcoding provided by SOK
The Network (cont)
DC TV

- HD Broadcast
- 2 Tracks streamed to the internetz
- 5 channels at Caesars
- 4 channels for each remote properties
Timeline

Sunday
- NOC Setup
- WiFi APs hanging/patching
- DC TV server installs
- DC TV oDroids configuration
dctv.defcon.org up
wifireg.defcon.org up

Monday
- Site-Site VPN to Paris/Ballys
- Remote oDroid Installs
- Network Management Systems
- Network Monitoring
- Lots of walking
- APs install done
- patching patching

Tuesday
- DC TV ready to go (not all hotel towers/properties though)
- patching patching mushroom mushroom
- DONE! (record for the NOC, but then last minute requests)
- Decent team dinner

Wednesday

Post-Con 2016/2017
- Lots of Planning
- Less planning than it should have been
- We did slightly better on planning this year
- Pre-staging Wired & Wireless Gear

Firewall
- Aruba Controller
- MDF/IDF connections
- Internet UPLINK

NOC Setup
- WiFi APs hanging/patching
- DC TV server installs
- DC TV oDroids configuration
dctv.defcon.org up
wifireg.defcon.org up
Timeline (cont)

Thursday  
Last Minute Requests  
(new patches, cables, switches)

Friday  
Just worked (despite the issues)

Saturday  
DC TV stuffz

Sunday  
Teardown  
Start Packing  
Beer

Monday  
Packing  
Leaving Las Vegas
Issues

- Bandwidth
- AP Coverage / AP Capacity at times
- DC TV
  - ODROIDS
  - Remote Location Setup
  - Flood at Paris
  - switched from rtsp to rtmp
WiFi Stuff

- 802.1x misconceptions
- Twitter trollage
The Usual Stats

- 4.886 TB of internet traffic
  - Inbound: 3.688 (compared to 3.13487072983 from DC24)
  - Outbound: 1.198 (compared to 1.1607473418 from DC24)
- 5,455 users registered on wifireg (~4k last year)
- 2,104 wireless users peak (compared to 1400)
- 22k unique DHCP leases (compared to 35k, thanks!)
- 8,226 ”unique” mac addresses
- 6.74 TB of wireless traffic
- 1.89 TB media server traffic
effffn’s twelve

- Leads
  - effffn
  - mac
- Infra/ Systems
  - #sparky (The Machine)
  - booger
  - c0mmiebstrd
  - c7five
  - deadication
- DC TV
  - videoman
  - serif
- WiFi
  - CRV
  - Jon2
- n00b
  - musa
THANKS!

- DT
- Charel
- Will
- Ceasars IT Staff
- Encore Staff
- Source of Knowledge
- The nice folks who always bring us snacks!
- Press Goons
- Capitan Obvious
- Micah (for nothing, #1 Genius Bar Employee <3)
- The Machine
- YOU!

http://defconnetworking.org
@DEFCON_NOC
noc\at//defconnetworking.org
Fundraising at DEF CON

- HFC $100 (reverse engineering challenge)
- EFF - $95,000+
- With small donations included from:
  - Beard and mustache
  - Badge hacking
- Darknet - $3,900 for EFF
- Rapid7 - $4,000 for EFF
- Hack fortress - $159 for EFF
- Mohawkcon:
  - $5,100 donations:
    - 158 heads $4,600,
    - Eff: $3,100
    - HFC: $1,300
    - Sticker bot: $105 (den hac)
    - Mohawk swag: $500
Villages at DEF CON

BioHacking Village
SE Village
Car Hacking Village
Crypto and Privacy Village
Data Duplication Village
Hardware Hacking Village (10th Anniversary)
ICS Village
IoT Village
Lockpick Village
Packet Hacking Village
Recon Village
Tamper Evident Village
Wireless Village
Voting Machine Village
Data Duplication Village

Sources (6TB each)
- Infocon.org
- Hashtables
- More hashtables

Drive Types
- Seagate – 150 and <6% fail
- Western Digital – 147 <1% fail
- Toshiba – 109 <1%
- HGST – 85 <18% (in talks w/them)
- Mediamax – 7 <43% (huhwhat?)

Output (more info at dcddv.org)
- Dupe time was: 7h50m to 16h22m per drive
- Infocon 229 copies
- Hashtables 1-2 95 copies
- Hashtable 2-2 96 copies
- Total dupes 420 copies (lols)
- 420 dupes @ 6TB each = 2.5 PB Out!
- 120MB/sec Average
- 95 duplicators for 60 straight hours
Contests at DEF CON
Contests at DEF CON

Beverage Chilling Contraption Contest
Bomb DEFusing
Capture The Flag
Car Hacking CTF
Capture the Packet
CMD+CTRL Hackathon
Coindroids
Counterfeit Badge Contest
Crash and Compile
Creative Writing:DEF CON Short Story Contest
DEF CON Beard and Moustache Contest
DEF CON DarkNet project
DEF CON Scavenger Hunt
Drunk Hacker History

Hack Fortress
Mission SE Impossible
Packet Detective
Pocket Protector
Schemaverse Championship
SECTF
SECTF4Kids
Sheep Hunt
SOH0pelessly Broken
Tamper-Evident Contest
TD Francis X-Hour Film Contest and Festival
The Box (Bomb Defusal Contest)
warl0ck gam3z
Whose Slide Is It
Wireless CTF
Black Badge Contests at DEF CON

Capture The Flag
Car Hacking CTF
Capture the Packet
Crash and Compile
DEF CON DarkNet Project
DEF CON Scavenger Hunt
Hack Fortress
SECTF
SOHOpelessly
Broken
warl0ck gam3z
Wireless CTF
Social Engineering CTF
Crypto and Privacy Challenge
SOHOpelessly Broken
Capture the Packet
Telephreak
Darknet Project
Carhacking Village CTF
Crash and Compile
Scavenger Hunt

OMG 20th Anniversary
Hack Fortress
Capture the Flag
Thank You
Legitimate Business Syndicate
Five incredible years
Five amazing operating systems
Nine Bits of fun!
Call for CTF Organizers

Opens very soon. Stay tuned.
“Super Secret” Announcement
See You Next Year at...

- Caesar’s Palace in 2018
- Registration for Hotel begins on Monday

DEF CON 26 is August 9-12th