

DEF CON 27 REVIEW





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C



Internet Uplink

Core Switch

Firewall

Aruba Controller  
(Paris/ Bally's/  
PH)

MDF/ IDF  
Connections

Access  
Switches

**Friday/  
Saturday**

Moar MDF/ IDF  
Connections

Flamingo  
Connection to  
Core

NOC Room  
Setup

Patching

wifireg website  
up (w00t)

Malort

**Sunday**

Moar patching

APs placement  
Paris/ Bally's

**Monday**

Patching  
Patching  
Patching

APs placement  
Planet  
Hollywood

Paris Theater  
fiber patch

Patching testing

**Tuesday**

Flamingo Aruba  
Controllers

Patching and  
APs placement  
Flamingo

Paris Theater  
Fun and games

Media Server  
Setup

"Need my  
requests done  
NOW"

**Wednesday**





Patch  
verification  
everywhere

Contests going  
live assistance

“Need what I  
forgot to ask you  
before done  
NOW”

Patching last  
minute requests

CFS Setup

**Thursday**

Patching moar  
last minute  
requests

**Friday**

Shit worked with  
minor issues/  
requests

Workshops  
teardown

NOC NOC  
panel/ talk

Drunk Hacker  
History

**Saturday**

Teardown

Malort

**Sunday**

Finish Teardown

Packing

Go home!

Detox

**Monday/ Tuesday**

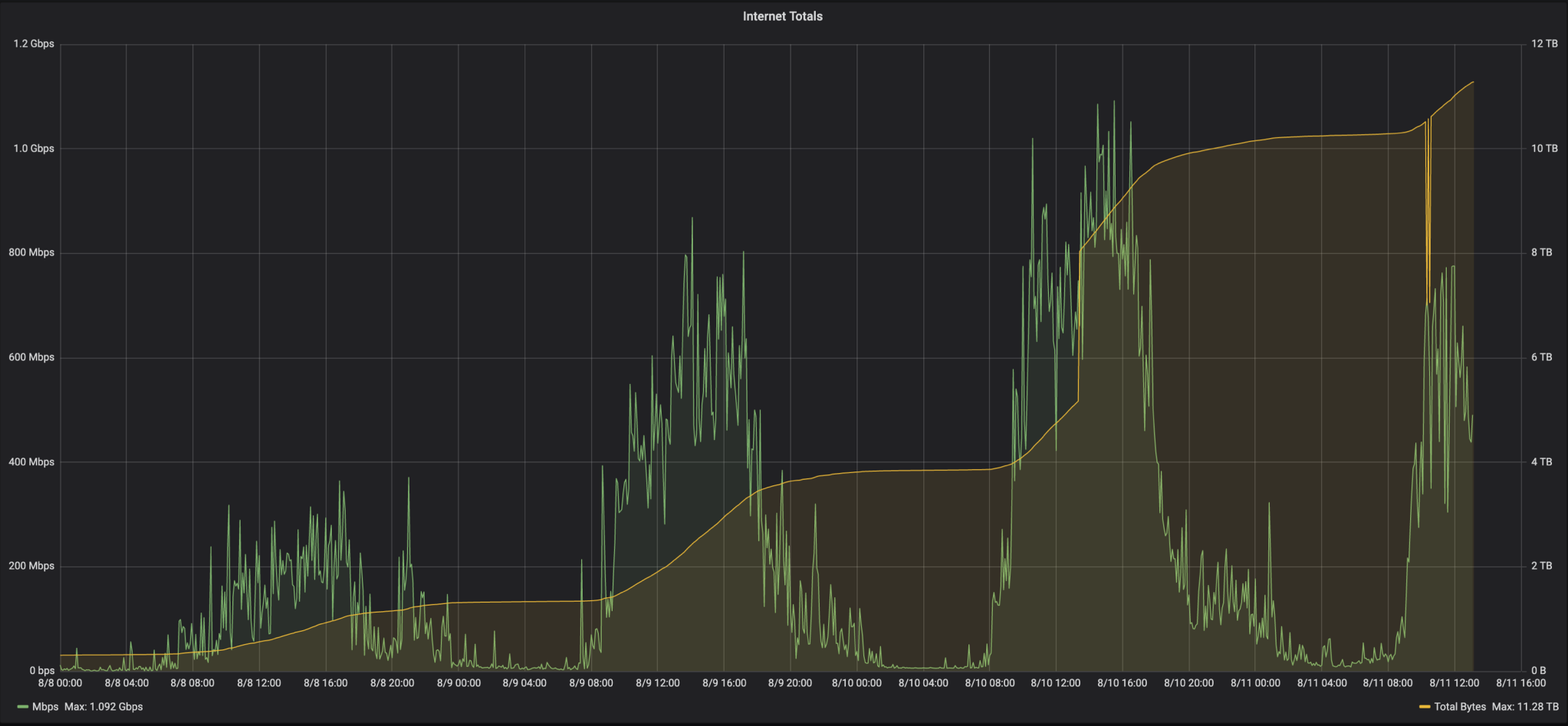


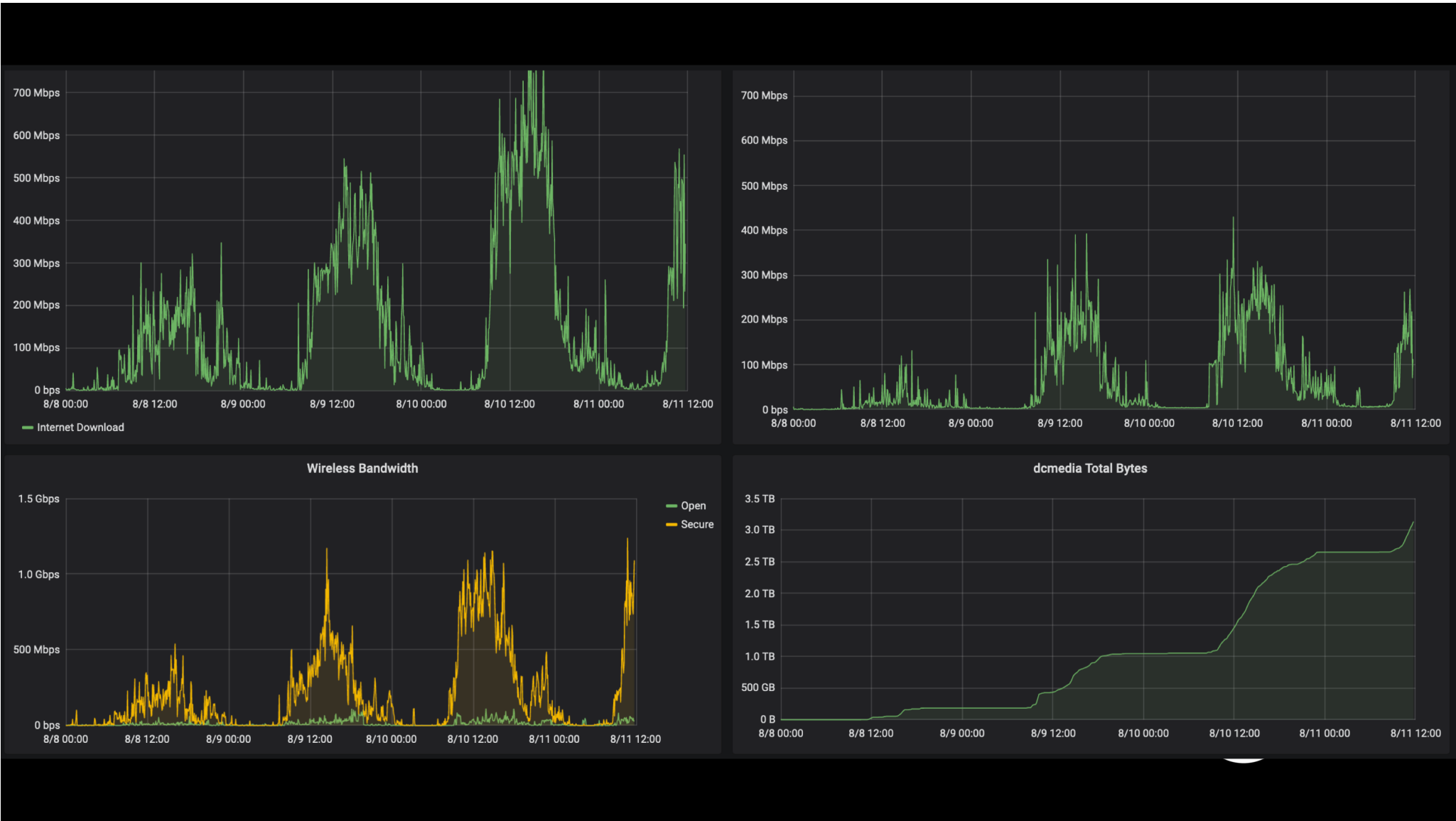




NOC

# Bandwidth





# Challenges/ Issues : aka yoloOps

- Some of the fiber connections
- Timing
- Last minute requests
- VERY last minute requests
- AP coverage and capacity at times
- 802.1X understanding (still)
- Lots of ground to cover



NOC

# The good stuff

- Awesome team
- Great interaction with all of the other departments (thanks for the understanding at times in terms of prioritization)
- Adoption of 802.1X through Apple Profile, (the brand new) Android App (THANKS CRV!) and the off-the-cuff Chromebook Profile creation (THANKS c7five and johntitor!)
- NOC talk





## Wired

- Villages
- Press
- Contests
- Vendors
- InfoBooth
- Dispatch
- Speakers
- Closed Captioning
- DC TV
- r00tz

## WOW-Fi

- Attendees



# The Network

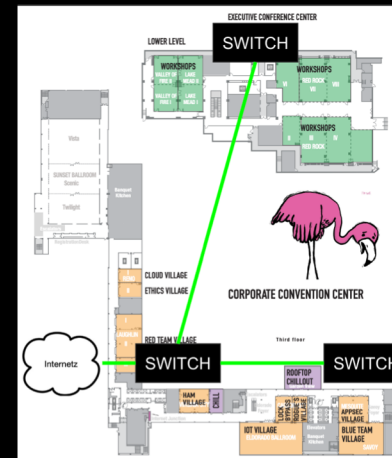
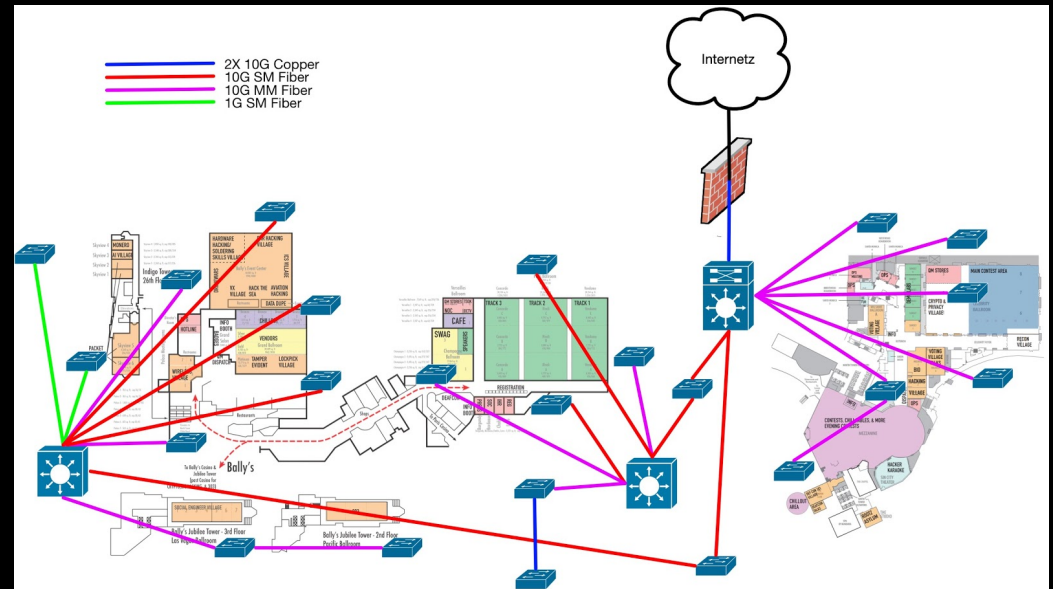
10 Gbps backbone

900 Mbps internet uplink (PH)

And then...

Layer 2 connection PH-Paris-Bally's

Layer 3/ IPSec PH-Flamingo



NO C

# Gear

## Wired Gear

2 x Firewalls - FreeBSD  
4 x Core/ Distro Cisco Switches  
27 x Edge Cisco Switches  
Tons of unmanaged switches  
3 x Monitoring "Servers"  
1 x WiFi Registration "Server"  
THE Media Server

## Wireless Gear

2 x Aruba Controllers  
84 x Aruba Access Points (model 305)





## (the usual) Stats

12.6 TB of internet traffic (double of last year)

– Inbound: 9.2

– Outbound: 3.40

7,065 users registered on wifireg

2,100 wireless users peak

10,175 total number of devices on WoW-Fi

12,723 unique DHCP leases

12,182 different mac addresses

10+ TB of wireless traffic

3.011 GB media server traffic

5.1 Gbps of peak traffic on the core



# The NOC Team

## Leads

@efffn

mac

## Operations

#sparky

## Infra/Systems

c7five

booger

deadication

## Monitoring

c0mmiebstrd

## WeeW-Feez

CRV

Jon2

## runners

johntitor

wish

k4tn155

dp1i

## n00bs

Toph

MikeD



# Thank you!

- DT
- Nikita
- Linda
- Will
- QM
- Caesars IT
- Encore Staff
- @thelockheed
- Sully's Bar Staff
- The High Roller at the LINQ
- The very nice folks who brings us snacks
- All other DEF CON departments
- **YOU!**

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