

#### **Table Of Contents**

- 1. The Unglamour Of Business Travel Greg Ferro
- 2. Tech Blogs: How To
- 3. Sponsor: Aviatrix
- 4. Tech Blogs: Opinion
- 5. Virtual Design Clinic June 6th
- 6. The Lulz
- 7. IT News
- 8. New Products & Industry Takes
- 9. New Whitepaper For Premium Ignition Members
- 10.Got A Tech Tip?

### The Unglamour Of Business Travel

#### **By Greg Ferro**

I'm in New York for business travel. I should be taking photos of myself in front of landmarks, having amazing food, and laughing as I walk down the street.

In reality, I'm sitting in front of a hotel mirror in my room, a constant reminder that I am ten kilos overweight (partly because it's hard to find good food when traveling). The chair and desk make my arms and neck hurt badly enough that I think the furniture was designed for a military detention camp.

I'm tired from the flight yesterday. Left home five hours before departure, then eight hours on the plane in an economy seat, which seems that have less leg room each time (again reminding me I am overweight). Traffic from JFK was bad, ninety minutes to the hotel. Which then proceeded to charge me 30% more for the hotel room, pissing me off.

The booking says \$929, but the hotel added six different taxes and a \$30/day facility fee. It's now a \$1250 stay, and the manager doesn't even look embarrassed while telling me that is just the way it is.

The lifts wobble enough to make you feel unsafe. The hotel room is clean enough (if you don't think about it too hard). The room is decorated in shades of brown like most U.S. hotels - curtains, drapes, bedspread, carpets, light, mirrors, wallpaper.... everything is subtle shade of turd brown.

Now I have a headache.

I might feel better if I can get outside and walk around a bit. It's raining but not cold. I'm looking for food that might be called healthy. Best I can manage is a taco bowl that comes drowned in mayonnaise and various sludgy compounds that may or may not be edible. I assume that it's all food, eat some, and toss most of it. This makes me feel guilty. My headache is fading as the food and ibuprofen get to work.

Jet lag means I woke up more than once in the night. I got back to sleep twice so it a good night for travel rest.

I get about six hours of low-quality, interrupted sleep. It's Sunday today, so I lie in bed for a while. Why Sunday? Because it's cheaper to fly Saturday to the U.S. and stay in a hotel than to fly in Monday. A LOT cheaper.

Eventually I drag myself up because that todo list won't get shorter on its own. In particular, I need to do several hours' preparation for the job I'm doing. On Sunday. In New York, FML.

I get some things started but I need coffee. Screw the hotel swill. I put on my shoes and head outside looking for somewhere that sells non-tourist breakfast that isn't covered in meat grease, butter, and other oils.

Oh joy, it's raining.

I don't find any. What they do to coffee here would be a near-criminal activity in most European countries. Not every place that serves coffee has an espresso machine and even fewer know how to use it correctly. I wish I had packed some decent instant coffee.

It's raining harder now. I'm getting wet, which I can live with - a bit of rain isn't going to make look any worse. Nor do I much care what people think of wet hair. I guard my eyes against selfish people with umbrellas.

In the end, I despair and just eat half a doughnut and coffee that comes from an espresso machine but the beans have been over-roasted as usual. You see, robusta beans are expensive so roasters burn the cheaper arabica and pretend that the burned stuff has a unique flavor profile. The overcooked bitterness of my espresso goes well with my mood as I stare morosely out the window on a rain-slick street wishing that I was having a good time.

I drag myself back to the rip-off hotel. Sit down in the chair that is too low for the desk and raise my hands to start work. My shoulders are aching already as I pull up my todo list and consider what I might get done in a few hours.

### **Tech Blogs: How To**

# Interprovider Option A, On Juniper Junos Routers (Includes Full Topology Config!) - Network Fun Times

https://www.networkfuntimes.com/interprovider-option-a-on-juniper-junos-routers-includes-full-topology-config/

A funny man who's handy with Juniper kit, Chris Parker heads down a rabbit hole that, "is the first in a series, dedicated to the different ways you can extend an MPLS VPN over two autonomous systems." Deep and detailed with context provided. This sort of post is what community is all about. Chris makes the world a better place, and if I ever get to meet him, the beers are on me. - Ethan

#### FCIX - Lighting Our First Dark Fiber - The Life Of Kenneth

http://blog.thelifeofkenneth.com/2019/05/fcix-lighting-our-first-dark-fiber.html

Enjoyable account of how the Fremont Cabal Internet Exchange lit its first 40G single mode fiber between a pair of sites 3km apart. Lots of nerdy details about optics. - Ethan

#### The Speed Of BGP Network Propagation - APNIC Blog

https://blog.apnic.net/2019/05/15/the-speed-of-bgp-network-propagation/

Discusses a global anycast deployment and the challenges of effectively and consistently load balancing inbound requests across geographic regions. Covers the pros and cons of prepends, propagation times, and stable routes. Lots of hard data comparing provider performance as BGP announcements are changed or withdrawn. - Ethan

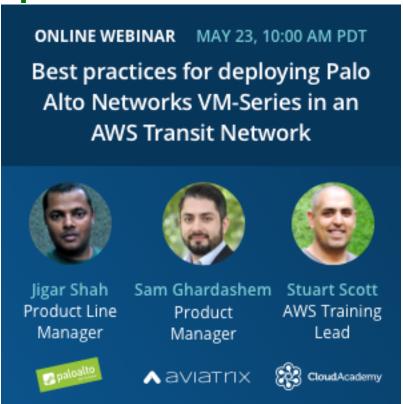
# Install the Antidote (NRE Labs) network emulator on a Linux system

http://www.brianlinkletter.com/install-antidote-nre-labs-network-emulator-linux/

--NRE Labs is a new initiative to provide free training on network automation tools and concepts. Juniper Networks is fronting the money and the humans to drive the effort, but it's not just a Juniper promo platform. Case in point, the engine that runs NRE Labs, called Antitode, is free and open-source. Brian Linkletter has a blog with

instructions on how you can download and install antitode on your personal computer. --Drew

### **Sponsor: Aviatrix**



## **Tech Blogs: Opinion**

With Great Wi-Fi Comes Great Vendor Headaches, Unfortunately - IT Toolbox Blogs

https://it.toolbox.com/blogs/leebadman/with-great-wi-fi-comes-great-vendor-headaches-unfortunately-051319

Lee Badman with a frustrated rant about wireless vendor promises vs. actual product. "If you run a big WLAN environment and haven't done a major overhaul in a few years, get ready for some shockers when you do evolve. Buying network equipment is getting as loathsome as going to Honest Larry's Car Dealership." Lee's not wrong. Licensing and negotiating discounts from ridiculous list prices has complicated buying and implementation for those of us that just want to GET ON WITH IT. - Ethan

#### Three Year Retrospective - NetworkToCode Blog

https://www.networktocode.com/blog/post/three-year-retrospective/

Ken Celenza tells a great journey story, and reminds me of the "compliment sandwich." (You're great! You suck! No, seriously though, you're great!) A good read if you're trying to grok how to move your career in a different direction or fulfill personal aspirations. BTW, Ken also holds the dubious distinction of recording the longest single podcast Packet Pushers has ever published. Listen to the epic Building A Network Automation Framework to hear Ken. - Ethan

#### IT And The Exception Mentality - The Networking Nerd

https://networkingnerd.net/2019/05/10/it-and-the-exception-mentality/

Tom Hollingsworth thinks through the "what if" mentality typical of engineers. We tend to toss out solutions that don't solve every conceivable problem. What if this unlikely thing or that corner case comes to pass? What then? WHAT THEN, AUTOMATION VENDORS?!? Tom suggests this is wrong. "I realize that the Brave New World of IT automation needs people that can focus on the exceptions. However, we need to focus on them after they happen instead of worrying about them before they occur." A great point. - Ethan

Liqid - Is Composable Hardware the Future of the Data Center? - Not Your Dad's IT

http://www.notyourdadsit.com/blog/2019/5/14/liqid-is-composable-hardware-the-future-of-the-data-center

Nathaniel Avery has a good blog about composable infrastructure in general and the vendor Liqid in particular. Nathaniel writes "It was my first time hearing about the technology, and it was eye-opening. Composable infrastructure takes compute, network, storage, and GPU from various servers and allows them to be reconfigured into virtual computers composed of some, or all, of the resources. This takes place by leveraging the commonality and speed and low latency of the PCle bus." Check out the rest of the blog to get more details. --Drew

## Virtual Design Clinic June 6th

Register now to join the Packet Pushers online for our next Virtual Design Clinic on June 6th.

This live, online event includes 3 Ask Me Anything sessions with a panel of experts where you can get your networking, IT, and design questions answered.

We've also got two tech presentations:

Wi-Fi 6 Is Knocking. Are You Ready To Let It In? - Lee Badman

The Art of Network Maintenance: A Practical Guide - Tom Ammon

Plus a sponsored presentation on network automation from Anuta Networks

We hope to see you there!



#### The Lulz



#### **IT News**

# **Economic Factors Affecting IPv6 Deployment - Team ARIN Blog**

https://teamarin.net/2019/05/02/economic-factors-affecting-ipv6-deployment/

This summary of economic findings balances what's driving IPv6 adoption with what's keeping IPv4 around. If you need IPv6 to make money, you're investing in IPv6. But since you still need IPv4, you're actually adopting dual-stack...which costs you more money. If you don't think you need IPv6, you're not spending the money...but that costs other people money since they need to keep their IPv4 around to talk to you. Round and round we go. - Ethan

# Mellanox Infuses Ethernet Switches With Network Telemetry Tech - SDxCentral

https://www.sdxcentral.com/articles/news/mellanox-infuses-ethernet-switches-with-network-telemetry-tech/2019/05/

On-chip telemetry is where a switch can export metadata at line rate about packets flowing through an ASIC. More and more ASICs have telemetry capabilities, but the problem is doing something with all the data. Mellanox's telemetry flavor is called What Just Happened (WJH). WJH offers, "the ability to provide context and actionable details on abnormal network behavior, eliminating guesswork from network troubleshooting." A little hand-wavy, but interesting. I want to know more about this. - Ethan

# Yes, Americans can opt out of airport facial recognition. Here's how - TechCrunch

https://techcrunch.com/2019/05/13/americans-opt-out-facial-recognition-airport/

I can't quite articulate why facial recognition at the airport unnerves me, other than it feels like a further step toward pervasive video surveillance, which makes my tinfoil hat itch. In any case, this piece from Tech Crunch tells you how you can opt out. I've got some travel coming up, so I think I'm going to try it and see what happens. --Drew

## **New Products & Industry Takes**

1u Rack Mount Case for Raspberry Pi Computers - PCSL

http://www.pcsl.eu/index.php?route=product/product...

A 19" 1RU rack mount for Raspberry Pi for those people when rack mounting is the only answer (when duck tape would be more than enough). - Greg

#### **EVPN** and the Future of Data Centers - Juniper J-Net Blog

https://forums.juniper.net/t5/Enterprise-Cloud-and/EVPN-and-the-Future-of-Data-Centers/ba-p/462303

If you want a reason to care about EVPN, this isn't a bad piece to read. Decide for yourself if the value proposition Mike Bushong lays out maps to your business. Or not. - Ethan

#### Yangify is Released - NetworkToCode Blog

https://www.networktocode.com/blog/post/yangify-is-released/

Those crazy kids at NTC have released Yangify. "Yangify is a framework that brings structure and sanity for working with YANG based data. ... Our goal is to provide the framework, structure, and repository for all parsers and translators so we can work together as in industry to solve problems in a more efficient manner." YANG models matter to network automation, but there's been an explosion of models across OpenConfig and the IETF. Tools like Yangify can help bring order to the chaos. - Ethan

#### **Protecting the Internet of Things with MUD - APNIC Blog**

https://blog.apnic.net/2019/05/14/protecting-the-internet-of-things-with-mud/

https://tools.ietf.org/html/rfc8520

IoT makers are crapping out new devices as fast as they can. Security? Manufacturers don't care, so their crappy "things" are hackable. Help is proposed in RFC 8520, which describes Manufacturer Usage Descriptions (MUD). I did a quick scan of the article and RFC, and MUD reminds me of NAC. The IoT device pops on the network and announces the sort of turd that it is. A management platform says, "Oh, you're this sort of turd. Hey, infrastructure, apply this ACL to keep the turd from talking to too many other things." I like the idea, sort of...MUD is like applying a band-aid to a severed limb. I prefer unikernels for IoT devices, but maybe MUD is a compromise that will see adoption. Unikernels for IoT is merely a fantasy I cling to. - Ethan

#### The Choice Has Never Been Clearer - Arista Blogs

https://blogs.arista.com/blog/the-choice-has-never-been-clearer

Although you'd never guess it from the title, Arista has announced, "our new R3 Series which retains the proven VOQ big-buffer architecture of the previous generation, but is

designed around the latest packet processing silicon that radically increase throughput, density and power efficiency." 400G. Many form factors. Bigger, faster, etc. You know the drill. - Ethan

# Nubeva Unlocks NetFlow (IPFIX) In Public Cloud Platforms - Nubeva Press Releases

https://www.nubeva.com/press-release/netflow

It's a preview announcement, aka coming soon. Still interesting. "IT teams can use a Nubeva Prisms agent, or other cloud tapping service, to aggregate raw packet flows and send the flow of data to Nubeva's Elastic Packet Processor (EPP) for processing. Packets are then converted to NetFlow and sent to the NetFlow-capable analysis tools using a routable IP address." Yet another tool helping figure out what the heck is happening in cloud deployments. Nubeva has been a Packet Pushers sponsor if you want to know more about how they work. - Ethan

# **New Whitepaper For Premium Ignition Members**

If you're a premium member of Ignition (i.e. you dropped \$99 on us), we've just released a new whitepaper available for download:

Intent-Based Networking Part 2: A Deep Dive Into Network Abstraction & Continuous Validation, by Phil Gervasi.

The new whitepaper:

- Explores in technical detail how Intent-Based Networking (IBN) systems work
- Explains how IBN systems abstract network devices & configurations to build working models
- Discusses the pros and cons of different approaches to abstraction
- Reviews the closed-loop model that drives the value of IBN systems
- Provides key takeaways

Thanks to everyone who's signed on as a premium member. We'll have more premium content coming soon, including a new paper on SD-WAN, and Ethan is hard at work on a video course on QoS. We appreciate your support and patience as we build out a library worth your time and money.

### **Got A Tech Tip To Share?**

We've got a newsletter. You've got a cool tip, IT hack, or knowledge gem. Let's get together! What do we mean by a tech tip? It could be:

- 1. A useful little script
- 2. A favorite tcpdump command line parameter
- 3. Screenshot of an underappreciated feature in a GUI for some networking tool
- 4. A link to, and brief explanation of, a neat open source tool
- 5. Something else

If you've got something you'd like to share in this newsletter, drop me a line at drew@packetpushers.net. If we like it, and it's suitable for a newsletter format, we'll publish it in an upcoming issue (giving you all due credit, of course). Then you can sit back and bathe in the adulation that's sure\* to follow.

\*Adulation not guaranteed

#### The End Bit

Sponsorship and Advertising - Send an email to humaninfrastructure@packetpushers.net for more information. You could reach more than 6,000 subscribers.

Human Infrastructure is bi-weekly newsletter with view, perspectives, and opinions. It is edited and published by Greg Ferro and Drew Conry-Murray from PacketPushers.net. If you'd like to contribute, email Drew at drew.conrymurray@packetpushers.net.

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