IN THIS WEEK'S ISSUE: Is The CCNA The Right Way To Start A Career?; The Messy Tangle Of Technology And Values. Hey, turn on those images, they might be cute. Or not. Probably not. But it's worth a try.

PACKETPUSHERS
Human Infrastructure Magazine
A Newsletter About a Life in Networking

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(aka The Project Plan)

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The "Drew Is Back To Clean Up The Mess" issue.

Thought For The Week:
Don't panic.

1. Is Starting A Career With CCNA The Right Choice?

by Greg Ferro

I received the following email:

I have recently found your show on my podcast catcher. After listening to the show, I am worried I have made a poor choice to start my career. I began to study the CCNA. As professionals in the networking field, please could you provide advice on a networking certificate that will give me a leg up? While studying at university, Cisco was God in the networking program. I have never used an alternative company.

As a first step toward an IT career, you are on the right path for now and in the current climate. The CCNA program will give you a good grounding in some basics and prepare you for a long-term career.

Today Cisco remains the 'big dog' in data networking and you are much more likely to get your first few jobs with a Cisco certification on your resume. So you are making the right choice right now.

In the years ahead, however, I doubt Cisco certifications will be as dominant. I have abandoned my own Cisco certifications so I can spend time on new skills like GCP/AWS, Linux, and programming.

My advice is that you should learn as much as possible whenever you can. You will be learning new technology for the rest of your career. Your CCNA is just first step on that path and you will have many more things to learn in the future; the majority of them will not have a curriculum and test.

For example, learning Linux is not taught in 40 hours of classroom

time and some extra hours of self-study.

In terms of a university education, Cisco has spent large sums to provide course resources for teachers and institutions. This saves money and makes it easy for educational institutions to deliver a course with a recognized source.

Of course, Cisco gets a bunch of graduates who will be keen to use what they have learned, which is good for selling more Cisco products. (In psychology terms this is called exposure bias: you like what you know).

At the same time, the market is changing and Cisco isn't growing with it. Public cloud networking is being led by AWS/GCP/Azure. There is security and monitoring where Cisco is not a leader. That's not a negative, it's a reality. Keep an eye on what is happening in the market and adapt your career. Change direction as needed.

If you are surrounded by Cisco technologies and career choices based on Cisco, then go with it. Cisco is successful company and has large footprint in the enterprise. You could have a strong career just following that path for many years. Be wise and evaluate your choices on a regular basis.

Remember: The goal is to earn money so that you can live your life. It doesn't really matter which brand of technology you use; it is networking that will keep you employed for several decades.

It's highly likely that you will change employers every few years. Your skills must be portable to make the transition regularly.

Sponsor: Cato Networks

What SD-WAN Vendors won't tell you about SD-WANs

Cut WAN costs, improve performance, increase security – are software-defined wide area networks (SD-WANs) really the answer to today's WAN woes?

[Join us](#) as Steve Garson, President of SD-WAN Experts, speaks about the reality of today's SD-WANs. It's a packed webinar filled with the practical questions anyone should ask when evaluating SD-WAN appliances and services.

Topics to be covered in this webinar include:

- What aspects of network performance can SD-WANs really improve?
- When is service insertion and service chaining needed?
- Why is security still a problem for SD-WANs even though they encrypt all traffic?

Sign up for the [webinar here](#).

2. The Messy Tangle Of Technology And Human

Values

by Drew Conry-Murray

Over the past few weeks my social feeds have felt a little schizophrenic.

It's business as usual in the Slack channels I follow—requests for tech tips, questions about a routing bug, peer feedback on vendor products, and debates about the merits of SD-WAN.

My Twitter feed is another world entirely. There's the usual tweets about tech blogs, research papers, and preso highlights from tech conferences, but it's also boiling over with political commentary.

And frankly it's been a crazy few weeks for the overlap of politics and tech.

There's the former Google employee's memo about diversity policies; the banning of the white supremacist Web site Daily Stormer by GoDaddy, Google, and Cloudflare; and Dreamhost's battle with a Justice Department search warrant requesting information on visitors to a Web site that organized protests at Trump inauguration.

So why does one medium feel like a fishbowl in an underground bunker, while the other feels like Tornado Alley?

Whether by custom or policy, the Slack channels operate as a no-politics venue. They serve as a kind of neutral zone (dare I say safe space?) where people leave politics at the door.

Twitter, clearly, is more free-for-all.

I don't have a problem with this division. It can be a relief to drop out of a noisy Twitter stream, where screeds and counter-screeds are hurled like 140-character lightning bolts, and into a nerdy, jokey thread about chassis vs. disaggregated switches.

But in my opinion, it's not good to hunker down in these technology safe spaces and pretend that the tornado isn't blowing.

That's because the work we do has consequences, and not just for the timely delivery of packets or the tidy provisioning of infrastructure.

Information technology is now deeply and inextricably embedded in every human endeavor: how we elect leaders, how we allocate resources, how we amplify or mute information, and on and on.

As much as we might want to detach technology from questions of morality, justice, and values, it's not possible. We can't retreat to the data center and pretend that the difficult questions confronting our society aren't relevant to us, or that we have no influence or effect on how they're answered.

I'm not saying tech-centric social platforms need to become hotbeds of political commentary, or that we all need to storm the barricades to support or protest the latest furor.

But I do think it's important to remember that the technology systems we build and operate are connected to actual human lives, with all the mess and complexity that entails. It doesn't hurt to stop now and then and to consider the intersection of the work we do and the values we hold. They are connected.

Thanks, Internet

All kinds of amusing things wash up in our social feeds. Here's one that caught my eye.

Join the Packet Pushers' new membership program and get benefits including our weekly Link Propagation newsletter and more. [Click here for details and to sign up](#).

Internets Of Interest

A collection of pre-loved links that might interest you. "Pre-loved" because I liked them enough to put into this newsletter. It's not *true* love.

By Greg Ferro and Drew Conry-Murray

Networking's next era: Age of Removal

Michael Bushong, who blogs for Juniper Networks, makes the case for a [new age of simplicity](#) that's coming to networking. The present

condition, one of significant complexity, is because of the number of protocols, features, and capabilities that have been gradually added over the past couple of decades. While such additions were necessary at the time, they aren't sustainable.

He outlines a handful of trends that may lead to more streamlined architectures, and offers this advice:

"If you want to measure progress, you should write down a list of all the protocols, policies, firewalls, and supporting technologies that you support today. Over time, if that list is shrinking, you are doing well. If, however, the list is growing, it probably signals a need to rethink the strategy."

LINK

Global Interconnection Index

The Equinix Global Interconnection Index "tracks, measures, and forecasts the growth of Interconnection Bandwidth." If you're interested in this type of thing, you can download the report for free.

LINK

Make SDN Real

Martin Casado, formerly of Nicira and VMware and now a partner at Andreessen Horowitz, reviews the brief history of SDN in this video of a keynote recorded at the Open Networking Summit.

Casado was at ground zero of the SDN movement, and while his presentation is from the perspective of Nicira/NSX, it's an interesting

view from an insider of how a product and technology come to market.

[LINK](#)
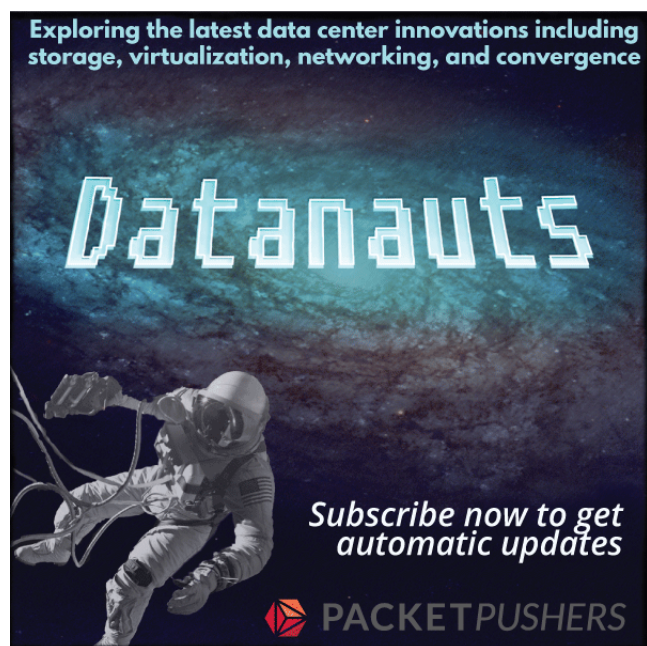
Join the Datanauts on their mission to bust silos and explore the latest developments in cloud, convergence, data centers, and more. [Sign up free here](#).

Network Break is a weekly podcast that delivers news & analysis on the networking industry in a fun, fast-paced style. [Subscribe here!](#)

Product News

Find out about interesting new products, or get essential information about things you might already be using.

PASS

Another quiet week. I think the vendors are keeping their powder dry for

VMworld. We'll try again next issue.

Recent Podcasts

The last five podcasts published on Packet Pushers

PacketPushers.net - The Last Five

[PQ 123: DMARC And Email Authentication – IETF 99](#)

[Datanauts 097: Unpacking Azure Stack For Hybrid Clouds](#)

[Network Break 148: HPE, Big Switch Partner; Brocade Spins Out SDN Startup](#)

[Show 352: Cloud & Network Insights With Nokia Deepfield (Sponsored)](#)

[PQ 122: Interface To Network Security Functions – IETF 99](#)

Full Stack Journey tells personal stories about the ongoing quest to

Priority Queue tackles niche and nerdy tech topics and cutting-edge

become a full stack engineer. [Subscribe today!](#)

research projects. [Subscribe here!](#)

Quick Survey: How do you pass the time on remote conference calls?

Conference calls can be tedious, especially if you're dialing in remotely. How do you keep yourself occupied?

[A. Turn your office chair into a human-size fidget spinner](#)
[B. Practice yoga/blast your core/do squats](#)
[C. Hit the mute button in a panic when you realize everyone can hear you playing StarCraft](#)
[D. Hello, Internet](#)
[E. Pay careful attention to everything being said](#)

Last Issue's Survey Results

Your data center's on fire. Do you...?

Reader Responses
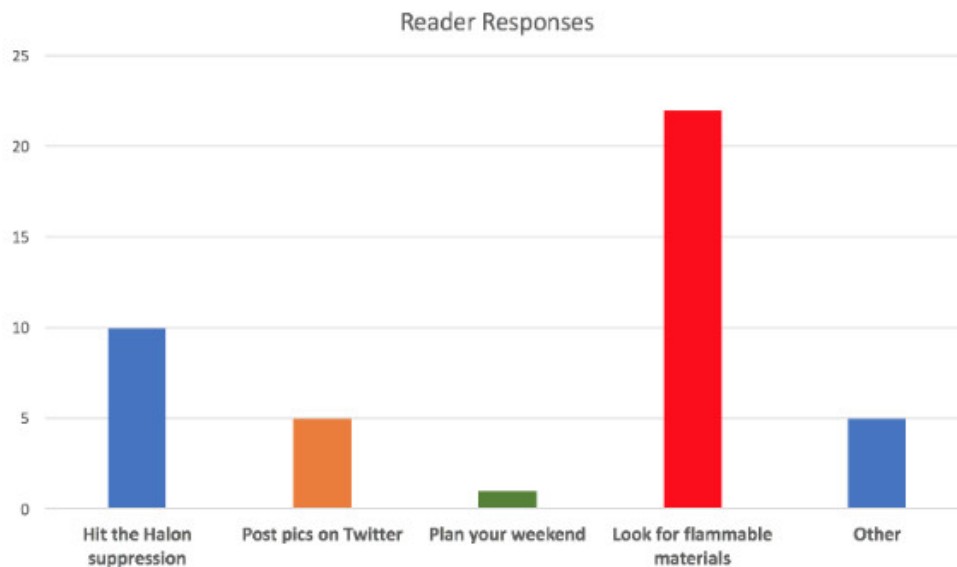
Source: Packet Pushers Human Infrastructure Survey August 3, 2017. 43 respondents

Did We Miss Something?

Got an link or an article to share? Email it to
humaninfrastructure@packetpushers.net

The End Bit

Sponsorship and Advertising - Send an email to humaninfrastructure@packetpushers.net *for more information. You could reach 5,013 people.*

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.

We don't give away your email address or personal details because that would suck.