Another week of being a Human in IT Infrastructure. Are you still alive to talk about it?

View this email in your browser

IN THIS WEEK'S ISSUE: Lifelong Learning And Sacrifice; Patching Should Be Easy; Blogging Balance. Please remember to enable the images; the magazine looks a lot better that way!

PACKETPUSHERS
Human Infrastructure Magazine
A Newsletter About a Life in Networking

Table of Contents
(aka The Project Plan)

Issue Number 59

06/22/2017

The "Pain and Gain" issue.

Thought For The Week:
All work and no play make Jack a dull boy

1. Lifelong Learning And Personal Sacrifice
by Ethan Banks

While recording a show on IT careers with [Katherine McNamara](#), a couple of themes recurred. One was **lifelong learning**. The other was **personal sacrifice**.

Technology careers aren't static. You probably aren't doing today what you were doing five years ago, and certainly not what you were doing ten years ago. Perhaps your job description is similar, but what you actually do each day is different.

Somewhere along the way, a new backup system came into the office, and so you don't change tapes anymore. Load balancers brought a whole new level of complexity to application deployments. And then there's that pesky cloud thing...

Each technology transition has likely impacted you. The greater your role and responsibilities inside of the IT team, the more impactful the technology shifts have likely been.

The question becomes, **"How do you feel about that?"**

In our recording, Katherine said she's run into folks who just don't want to keep up. A technological shift causes angst, frustration, and complaints.

I get that. I have a binder full of certificates from classes I've taken and certifications I've achieved over two decades in enterprise IT. It's frustrating that little of that specific knowledge is applicable today.

Yes, in tech there are historical patterns we can spot that give us insight into new tech we've never seen before. I'm contributing a few chapters to a book on exactly that topic. However, no one will find my specific MCSE-level knowledge about running Windows NT4 networks useful. Technology has moved on. I accepted this a long time ago, but it still hurts because I worked hard to get that cert.

These cycles of learning happen over and over. To remain highly employable in technology, we must sacrifice time and money. We study outside work hours for exams, or stay late at the office to master a technique. We buy access to remote racks. We lab. We blog. We present at user groups. That's what we do to be top-tier technologists.

So back to the question: **How do you feel about that?**

If you're up to the challenge, there's a payoff of long-term, well-compensated employability.

Acquiring certifications is part of that challenge. However, certifications aren't the end game.

The end game is knowledge. Staying on top of the latest useful technology that organizations can leverage is what you're actually trying to achieve.

If you cheat on an exam because you think the certification is the goal, then people like me and Katherine will eat you alive in the interview process and spit out your bones.

Technologists no longer assume you know anything just because your resume or CV says you have an education, work experience, or a certification. We actually assume you're exaggerating, or even flat-out lying, and we'll dig to find out what you actually know.

If you're part of the culture of personal sacrifice and lifelong learning, you'll be fine. But, if you're faking it, we'll find out.

With my point made, you might wonder, "Isn't there such a thing as too much personal sacrifice to succeed in tech?" Yes, I believe you can go overboard. You can lose the balance.

Tune into the next edition of *Human Infrastructure* and I'll address this.

2. Patching Should Be Easy And Predictable

by Greg Ferro

So-called IT security experts tell us that simply patching our products would substantially reduce the risk of owning IT.

What they conveniently forget is that patching costs serious money for operational resources, and involves substantive operational risks to deploy.

Vendors are making big claims about their "software futures," so let's see a return on those recurring licenses and increased maintenance fees. If we are paying more, we should expect more.

Risks Of Failure

In my own experience, and in discussions with many other people, the risk of patching is perceived as high. Experienced engineers **expect** failure.

Think about that: Vendors tell us their products will have bugs and we should plan to test and upgrade often. But we also expect that upgrades will be faulty and that we have to bear that risk. Why?

Patch What Needs Patching

In networking particularly, product vendors have been building monolithic, mainframe-style products for the last 30 years. You can't "patch" an insecure application or operating system; you must replace the entire software stack in a single action.

We don't do this for virtualization or servers, so why are we still implementing this 30-year old idea when most other technologies have advanced to modular code?

Monolithic code made sense in the 1980's when software development

tools were expensive, complex, and unreliable. In 2017, we're well past time for modern approaches to network software.

Installation Complexity

While some advances have been made around improving the upload and booting of images to devices, it's not simple or straightforward.

Let's not ignore security here either. Are the images secure and unmodified by a malicious actor? Some customers believe that custom and proprietary silicon is a feature; so let's use that to include security checks on the running software.

Note: This area has been addressed well by startups in the SD-WAN market, where cloud operations are normal. This proves it is possible at low cost.

Moral Hazards

Vendors charge for tech support. Yet when bugs or security flaws are uncovered, customers are expected to fix the problems themselves.

Vendors should:

1. Make the code upgrade process simple and reliable
2. Ensure the code is reliable and well-tested
3. Ensure code upgrades are modular to reduce operational risk

Thanks, Internet

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

What's in the box?

Digital transformation.

3. Blogging Balance
By Eric Shanks

Blogging has been a labor of love for me for a little over five years now. I started a blog to get my own ideas written down, to document my own experiences with technology and to try to give back to an industry who had helped me improve my own skills.

But blogging hasn't been an easy thing all of the time and often comes with challenges. If you're new to blogging and thinking about getting started, this post may help you figure out how you want to blog. If you're an experienced blogger, I expect that you can relate to this post.

The Rewards

Before talking about some challenges, I wanted to reiterate that

blogging does come with some perks.

- **Added Skills** – There are soft skills that blogging has helped me with such as vocabulary, grammar and getting used to explaining things through pictures. Maybe for you grammar police out there, it still looks like I can't write a coherent sentence, but imagine how bad of a writer I'd be if I didn't write as often. My day job benefits from these skills since I write designs and documentation for customers and must articulate points in much the same way. In addition to this, I'm diving into technologies more deeply than I might normally, because I'm expecting to have to explain it in a post later to someone else. Being able to explain how to, or how should you, do something takes a deeper level of knowledge so this is a benefit.

- **Networking** – I've met a lot of great people because of my blogging. Being introduced to the Tech Field Day team has opened many doors, and just being involved in social media has been amazing. If it weren't for my blog, I don't know how involved I would have gotten in social media, but now that I am, I touch base with a lot of fellow bloggers, or people I've met at conferences. Blogging can open some doors for you if you're looking for work and this point is not lost on me.

- **Community Awards** – Vendor programs such as VMware vExperts, Cisco Champions or Microsoft MVPs is a nice perk if you routinely cover solutions in those ecosystems. While this isn't a reason to blog, it is a nice thing to be acknowledged from a vendor and get access to licensing, or new products ahead of the rest of the pack.

Balancing The Blogging Difficulties

It's not all sunshine and cake by the ocean though. There are plenty of reasons that people don't blog.

- **Time Away From Family** – I have a great family that knows the importance of blogging for an outlet and as a benefit to my career. But writing a blog, researching technologies and going to community events can put a real strain on relationships as well. It's one thing to have a demanding job, but an entirely other thing to spend additional time writing a blog. I think I've failed in regards to this balance in the past by spending too much time blogging and not enough time ensuring that my personal responsibilities are met.

- **Fear Of Criticism** – If you want to blog, you have to write things. I know this is a very profound statement, but you have to lay out what knowledge you have on the Web page for everyone to see. This can be a very intimidating prospect for new bloggers. What if I write something that's inaccurate? What if I write something and people realize how little I know? What if people make mean comments about a post I worked hard writing? Well, all of these things can happen. You have to find that right balance about what you want to write about and what level of criticism you're willing to take. I will tell you that the criticism can be very humbling at times, but if used correctly can also make you better at your job.

- **Employer Conflicts** – This will certainly be different for every employer. Does your company have a blog that they expect you to write for? If they do, how do you know what content goes on your blog vs the companies blog? If you're writing up some cool new code or a runbook, what content is yours to use and what could be considered intellectual property by your employer. These are sometimes tough decisions that need to be dealt with. If you've already got an established blog, I'd recommend having some discussions with your employer when you interview for a new position to get this straightened out going in.

Why Do It?

For me, its a way to document my training activity and give me a reference point for where I'm at technically. I can't list all of the times I've gone to do something and found my own blog as a great technical resource to remind me how things were done and why I did them. Maybe this is a selfish reason but its one of the big ones.

The other reason blogging is important to me is out of a sense of duty. When I was a Systems Administrator, I spent a lot of time on blogs figuring out how to do stuff for work. They were lighthearted, more direct, versions of technical documentation where the operator would tell you what really worked vs. what should have worked. Being able to provide this type of resource to other Systems Administrators seems like something I owe to the community.

Thank You

During my career, I've had different job roles ranging from level 1 technical support up to being a Senior Solutions Architect for a consulting company. My focus has changed and so have the types of blogs I've read.

When I was starting with vSphere I read yellow-bricks.com and frankdenneman.nl. Later I found Wahlnetwork.com and virtuallyghetto.com to be the most useful to me. And now Keith Townsend's Linkedin posts or CTOAdvisor posts are the most relevant to me personally.

I'd like to thank these bloggers and more for taking the risks and balancing the difficulties for the betterment of the community, regardless of the reasons they decided to start blogging. Thank you.

If you have bloggers that you appreciate, you still have an opportunity to go vote for them at vsphere-land.com. Go show them your appreciation.

See Eric's original version of this post, and his other blogs, at his site [The IT Hollow](#).
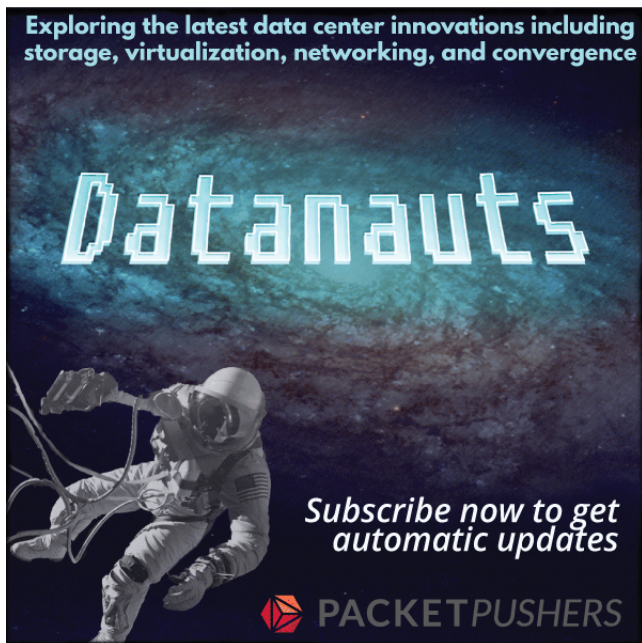
Internets Of Interest

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

Deciphering Malware's use of TLS (without

Decryption)

Cisco recently announced technology that allowed it to identify malware in encrypted traffic--without the need to decrypt the traffic first. Turns out that Cisco researchers figured out they could reliably identify known malware families based on parameters in unencrypted TLS headers. If you want to dig into the gory details, the researchers [published a paper that's available as a PDF](#).

The new status symbol: it's not what you spend – it's how hard you work

The Guardian has [an interesting essay](#) about how the amount of time one spends working has become a way to signal one's elite status, alongside more traditional signs (expensive cars, second or third homes, designer labels, and so on). The essay suggests this arises from the recent obsession with personal productivity, as well as the need for executives to justify their outlandish compensation.

> "In the new Gilded Age, identifying oneself as a member of the ruling class doesn't just require conspicuous consumption. It requires conspicuous production."

Product News

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

Juniper Updates Security Platform To Incorporate Cisco Switches

Juniper's [Software Defined Secure Networks (SDSN) platform](#) can now work with Cisco switches and ForeScout's CounterAct NAC software to automatically respond to compromised computers connected to the corporate network.

If malicious files or programs are detected, automated responses include blocking or quarantining compromised computers, alerting

administrators, or simply logging the malware notification.

[LINK](#)

Aricent Targets Web Scale Data Centers With ISS 10.1

The name Aricent has been bouncing around the technology background for sometime. The company has 12,000 employees and has been manufacturing products for 25 years, which is about a long as Cisco. (Aricent started out as Hughes Electronics and then rebranded).

It's been a supplier of software components and hardware designs to the usual network vendors for the last 20 years, but is now looking to go direct to the market like other suppliers.

[LINK](#)

Recent Podcasts

The last five podcasts published on Packet Pushers

PacketPushers.net - The Last Five

[Datanauts 089: SRE vs. Cloud Native vs. DevOps](#)

[Network Break 140: Broadcom Announces Trident 3; Nokia Launches New Network Processors](#)

[Show 344: Analyst Talk With John Fruehe](#)

[PQ Show 119: Can The Network Do That?](#)

Link Propagation Newsletter

Our weekly newsletter delivering essential headlines, announcements, and useful news to your inbox

Can't get enough newsletters? Check out Link Propagation, our newest publication. We send you a free weekly digest with tech news, interesting blogs, and industry announcements, all curated by the Packet Pushers. It's an easy way to keep up and stay informed. Subscribe at packetpushers.net/link-propagation.
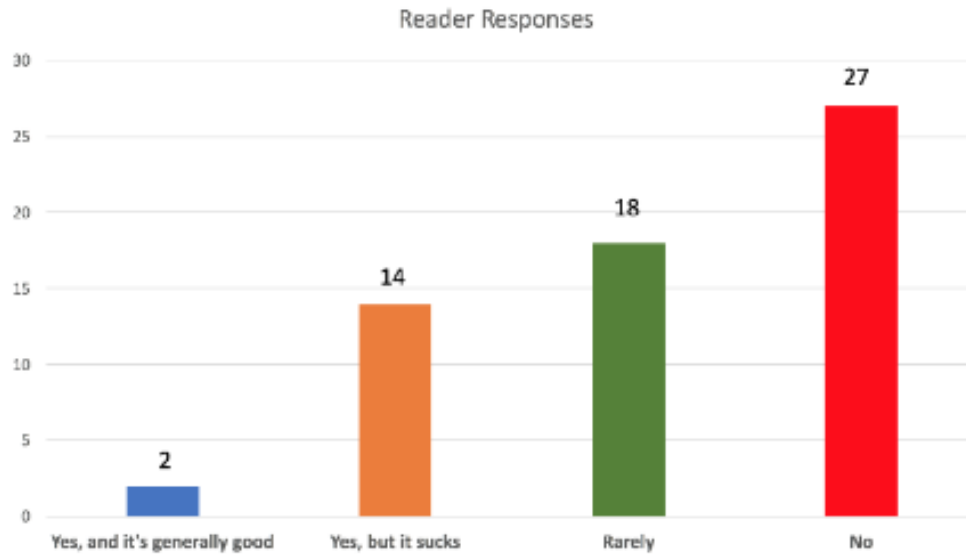
Quick Survey: Outdated Certifications

How many IT certifications have you earned that are now outdated because of technology changes (for example, Windows NT, Token Ring, etc.)?

A. None yet
B. A few
C. At least four or five
D. More than I want to count

Last Issue's Survey Results

Do you use Wi-Fi on airplanes?

Reader Responses

Source: Packet Pushers Human Infrastructure Survey June 7, 2017. 61 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.

Copyright © 2017 Packet Pushers Interactive LLC, All rights reserved.