IN THIS WEEK'S ISSUE: Take Your Manager Out For Lunch; How Farming Explains Intent-Based Networking. Please remember to enable the images; the magazine looks a lot better that way!



Table of Contents (aka The Project Plan)

- <u>1. Taking Your Manager Out</u> <u>For Lunch</u>
- Sponsor: Cato Networks
- 2. How Farming Explains The Concept Of Intent-Based Networking
- Thanks, Internet
- Internets Of Interest
- Product News
- <u>PacketPushers.net The Last</u>
 <u>Five</u>
- Quick Survey: Developing New Skills
- Last Issue's Survey Results

Issue Number 61

07/20/2017

The "Story time" issue.

Thought For The Week:

Turn and face the strange. Ch-ch-changes.

1. Taking Your Manager Out For Lunch

by Ethan Banks

How's your manager doing? Do you have any idea? Are they just that person in the up-sized manager cubicle?

Perhaps they're the person you rarely see because they're in so many meetings. Or perhaps your manager is that person you dread seeing walk to your desk, because it means more work for you.

For most of us, I doubt we know our managers all that well. We keep our distance, and maybe we even like it that way.

I've been a manager a few times in my career. In that context, allow to me share a few things you should know about your manager.

1. They have more on their plates than you. I used to think managers didn't really contribute much to the company. They existed in a ghostly realm, where they were almost relevant--if only they could materialize. I would smile and nod during my interactions with them, until they faded back into the executive mist, and I could go on with my day.

In my role as a manager, I found that I was quite material, but now in two worlds instead of one. On the one hand, I had to deal with the managers above me, who had their own projects and priorities. I had to determine what impact these projects would have on the technology team I was responsible for, and vice-versa.

On the other hand, I had to deal with the team I was

managing, to be sure their projects were prioritized properly and moving ahead, that they had the tools they needed to do their jobs, that I was contributing to their work technically as required, human issues were handled, and all was well.

This meant that I was incredibly busy, functioning as a communications switchboard between multiple groups of people, often with varying priorities, temperaments, and perspectives. Was I busy? You bet. I had zero time to sit around at a desk and invent busy work for people to do. It was all I could do to keep everyone's priorities, including my own, aligned with the business' ever-changing needs.

2. They aren't stupid. My management career was usually in a technical role, where I came up through the ranks as an engineer and architect, ending up eventually leading a team. Because I had the technical background and relationships with technical folks, people were aware of what I knew, so I never had a problem with rapport.

However, I have worked for non-technical people in management roles, and I sometimes struggled to respect them. After all, they didn't know how to fix the server, troubleshoot the network, or perform a forensic analysis. I had real skills. They had...whatever they had. I didn't know or care, because they couldn't do what I could. (This was a sadly immature view; it never occurred to me that I couldn't do what they could.)

I've since learned that being a manager is, in itself, a difficult job. People that manage others well are no dummies. They are as deserving of your respect as someone you consider a technical peer. I promise that you will learn from these folks if you are bright enough to ask the right questions. That's on you.



What about it? Do you view your manager as an asset who can help you grow in your career? Or as a pariah leeching your soul while you try to do whatever it is you've decided is important?

I know there's a lot of room for gray here. I've had a few truly bad managers. But I've also had managers that I didn't get along with that I really should have through no fault of theirs.

Maybe it's time to break down a wall or two with your manager. Take them out to lunch, and see if you can get to know them. Oh, I know-that would seem like sucking up. So maybe you do it outside of work hours. Have them over to the house for burgers.

My point is to hang out like real people, and see if you can form a bond. A foundation you can build on. That's worthwhile time invested in a relationship that should bring empathy.

If you're lucky, it might even make you a better contributor to the company you work for.

Sponsor: Cato Networks

SD-WAN And Beyond: Critical Capabilities For A Successful WAN Transformation



While SD-WANs address yesterday's business requirements around high costs and inflexibility of MPLS networks, the bigger question is: Do SD-WANs address today's business needs?

Enterprise networking expert and analyst Jim Metzler from Ashton, Metzler & Associates; and Ofir Agasi, Director of Product Marketing at Cato Networks, will discuss:

- Data gathered by Ashton, Metzler & Associates around the drivers and inhibitors for WAN transformation and SD-WANs
- Best practices for successful SD-WAN projects
- How the convergence of networking, security, cloud, and mobility can maximize the business benefits of SD-WAN

Register today to attend this live Webinar taking place August 2nd and August 3rd, 2017.

2. How Farming Explains The Concept Of Intent-Based Networking

by Greg Ferro

I was asked to explain Intent-Based Networking. Here's the story I used.

In ancient times, a farmer would till the field with a hoe. It was hard work, didn't scale well, and wasn't very reliable.

This is where we started before there was a human-readable command line. Equipment was unreliable and difficult but it was worth doing for a limited number of people. (And yes, there was a time when a CLI was a serious advance in device operations.)

Agriculture was improved by the use of domesticated animals such as horses and cows, which were harnessed to single-blade ploughs. Animal power greatly increased the

area that a single farmer could plough. In turn, this improved the productivity of the crops, leading to improved food reliability.

Your CLI is roughly equivalent to the horse and plough. It's a simple tool that's widely used. It's complex to own but easy to understand. It works at a limited scale.

The next major step was the tractor and multi-blade plough, which further increased productivity and human food supply. However, you need a lot of infrastructure to build tractors, and their operation requires fuel and spare parts.

Metaphorically, this is SDN and scripting. The engine does the heavy lifting, which scales up productivity and reduces manual effort. Tractors are easier to operate than horses but cost more and have complex maintenance (such as fuel and spare parts). Time is now spent maintaining the tools/tractor instead of just mindlessly walking up and down the fields.

You can do a lot more work with a tractor than with a horse and greatly improve food production. A decent SDN system will do a lot more networking than you can achieve with a CLI or scripting, and for less overall effort.

The first generation of tractors such as Ansible and Python will be replaced by SDN platforms as the market accepts the need for investment, and understands the value of what they are buying—that is, better tractors that run reliably, cheaply, and easily.

Tractors continue to improve, becoming more powerful and efficient until there is a technology transition to robots that can drive a tractor better than a person. People are still

needed to maintain the mapping and laser guidance systems that mark the field perimeter, and operate the tender support vehicles. Farming policy—that is, what crops, what fertilizers, and when to plant and harvest—is made by a person.

This is Intent-Based Networking. A person maps out the requirement for network operations over a knowable, clearly defined infrastructure. There is a clear understanding of the process and the work being done, but instead of sending a human to do boring, unpleasant work, we use a machine-like operation to perform those tasks.

We aren't (yet) ready to have the intelligent network configuration that happens without active human supervision. We don't have enough technology for simple things like telemetry and reliable configuration, which we'll need before we can really build SDN systems that work dynamically across a wide range of architectures.

However, Intent-Based Networking is basically about reducing the pointless 'ploughing the field' work with more useful, and valuable, work that directs the operations of your robots.

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. <u>Click here for details and to sign up</u>.

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

Take The Packet Pushers Audience Survey

The Packet Pushers annual audience survey is <u>live and online</u>. Once a year we ask our listeners for feedback on how we're doing. We also collect demographic information to help us lure sponsors into our trap. No, wait! I mean, to give sponsors an idea of who's listening and why it's an audience they want to reach. Yup, that's what I meant.

In any case, we'd appreciate if you could take a little of your time to <u>complete the survey</u>. We won't share individual responses or details with anyone. We do share aggregate data with sponsors as part of our media kit. Thanks in advance for your support--this means a lot to us!

LINK

Tutorial: Everything You Always Wanted to Know About Optical Networking

<u>This presentation</u> from Richard A. Steenbergen of PacketFabric, recorded during a NANOG presentation, is one of Greg's all-time favorites.

If you want to get nerdy on optical networking, here's your invitation.

LINK

A Crossroads in My Networking Career

Phil Gervasi, a network engineer, <u>has written a thoughtful and</u> <u>personal essay</u> about whether he should pursue a CCIE or dive more deeply into automation and Python.

As he notes in the blog, core networking knowledge is still central to what he does, but he also sees more opportunities emerging in "finding ways to automate tasks, collect large amounts of information from the network, find meaning in it, and use whatever methods I can to make network devices and the security posture of my organization more stable and consistent."

If you're wrestling with similar questions, check out the post.

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.

New Cisco UCS Software Leverages Turbonomic For Workload Optimization Cisco is <u>marketing its latest UCS servers</u> with the message "It's not a server. It's a system." In other words, Cisco doesn't want you to think you're just buying a bunch of boxes.

Instead, Cisco wants you to focus on the purchase of an integrated package of hardware and software that includes compute, a fabric, and management tools. A system, Cisco's thinking goes, offers much more value than just a server.

LINK

Recent Podcasts

The last five podcasts published on Packet Pushers

PacketPushers.net - The Last Five

<u>Datanauts 093: Erasure Coding And Distributed Storage</u>

Network Break 144: Cisco Unveils New UCS Line; Microsoft Targets Rural Broadband

<u>Show 348: Tata Communications & F5 Deploy Anuta NCX For Network Orchestration (Sponsored)</u>

Datanauts 092: Microsoft MCSA Lab Creation With Chef

Network Break 143: Broadcom Acquisition OK'd; Mellanox Announces New ASICs





Where Too Much Networking Would **NEVER** Be Enough

The Weekly Show channel is our one-hour deep dive on networking technology. <u>Subscribe today!</u>

Where Too Much Networking Would **NEVER** Be Enough

Priority Queue tackles niche and nerdy tech topics and cutting-edge research projects. <u>Subscribe here!</u>

Quick Survey: Developing New Skills

As automation, scripting, and programmability begin to play a greater role in networking, which tool, language, or framework are you most interested in learning?

A. Ansible

B. Chef/Puppet

C. Python

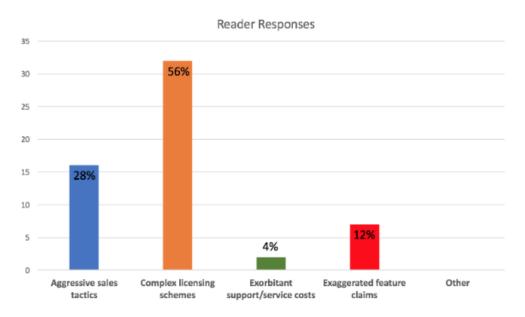
D. YANG

E. Other

F. Nothing at this time

Last Issue's Survey Results

Which vendor sales practice most annoys you?



Source: Packet Pushers Human Infrastructure Survey July 6, 2017. 57 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.