

IN THIS WEEK'S ISSUE: Big Data Vs. Big Insight; Is Amazon Splitting Up? 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

Table of Contents
(aka The Project Plan)

Issue Number 65

09/14/2017

- [1. Big Data Vs. Big Insight](#)
- [2. Is Amazon Splitting Up?](#)
- [Thanks, Internet](#)
- [Internets Of Interest](#)
- [Product News](#)
- [PacketPushers.net - The Last Five](#)
- [Quick Survey: Recognize This!](#)
- [Last Issue's Survey Results](#)

The "Insights and Speculations" issue.

Thought For The Week:
"Wait--what happened to iPhone 9?"

1. Big Data Vs. Big Insight

by **Ethan Banks**

While recording a sponsored show with a vendor, the idea came up of “whether I can enjoy my coffee in the morning.”

The notion was that IT ops staff come into the office and check their e-mail; based on what they find in their inbox, they know whether they'll enjoy their morning coffee.

I've had those inboxes where lots and lots of automated e-mail from the night before had piled up. Routing adjacency flaps. Threshold alarms from that link that seems to get overloaded at 2 am. (Probably a backup job. Gotta remember to check that out.) The warning that the SSL cert is going to expire in 30 days. Syslog messages of a certain level.

In other words, I'd typically have so many morning messages in my inbox, that I'd enjoy my coffee no matter what, assuming that if something was really on fire, the NOC would have already told me. Thus, I didn't make use of the morning alerts. At best, I'd sort by subject line, quickly scan for something unusual, and then delete en masse.

Was there useful information in those alerts? Probably, at least from time to time. However, I wasn't really able to make use of the hundreds of messages I'd receive, even though these were carefully whittled down messages I'd already optimized. I wouldn't get any alert in my inbox unless it was really important. Supposedly.

And therein lies the problem. No matter how important a message might be, humans have a difficult time picking them out of the crowd. There's too much volume to successfully filter, process, and rank all of the messages you might receive.

Ideally, an infrastructure engineer doesn't want to hear from the infrastructure unless something is wrong. And by "wrong," I mean a detected condition that, if left unresolved, will have a material impact on the business. This brings to mind another idea from the recording.

“I don’t need big data. I need big insight.”

That really hit me, although in fairness, this is not a new idea. The notion has cropped up on a number of Packet Pushers recordings. For example, I remember a past security vendor whose big promise was to only raise an alert if there was an action item--a compromised host that needed to be addressed.

Even though it’s not a new idea, it seems to be just in the past few months that the notion is being talked about repeatedly.

The takeaway? You should ask more of your monitoring tools than just monitoring.

Monitoring is the price of admission. Monitoring is boring technology. Anyone can build an SNMP polling engine, pair it with a syslog daemon, throw the data into an event display, and maybe roll up some aggregate stats. *That doesn’t help you.*

Real help comes in the form of insights. Software should be able to analyze millions of events and tell you what you need to know. Software should NOT be a dumb relay that does a bit of filtering before passing through to you the events marked “critical” by a syslog level or exceeded threshold.

Software that offers insight gives you conditions, impacts, and action items. You as the engineer can then take those insights, validate them to your satisfaction, and move ahead with a solution.

That makes you more efficient, which is crucial, because in infrastructure operations, human beings are the hardest things to scale.

If you're wasting your time looking for a particular needle in a pile of needles, you'll spend most of your days reacting to contextless events. Or worse, ignoring an important issue until a flaming turd hits your desk.

Start looking for the platforms that can offer insights, or be tailored to do so. Think Veriflow, Arista CloudVision, Cisco Tetration, Juniper Cloud Analytics Engine, Turbonomic, ExtraHop, Forward Networks, and several others that use analytics, event aggregation, and possibly genuine machine learning to make sense of the data mountain.

Analytics is the future of network monitoring that helps you scale.



2. Is Amazon Splitting Up?

by **Drew Conry-Murray**

Amazon's recent announcement that it's scouting locations for a second headquarters set off a frenzy of speculation about which city would be the lucky recipient of an estimated 50,000 new jobs and billions of dollars of investment.

While it's fun to play guessing games about the location (the New York Times [picked Denver](#), an economist with Moody's [made the case for Philly](#), and my own dark-horse pick is [Pittsburgh](#)), there's another

question to ask:

Why?

Tim Crawford, a technology advisor and former CIO, [suggests](#) that Amazon could spin out AWS as a separate, standalone business.

Certainly AWS is large enough. The cloud service earned \$4.10 billion in revenue in its most recent quarter—twice as much, for instance, as VMware did. AWS also owns 34% of the market share for IaaS and PaaS, [according to Synergy Research](#). That's three times the market share of Azure, its closest competitor.

There would be upsides to running AWS on its own. One is focus.

Right now Amazon is a collection of a lot of different businesses. At its core it's an e-commerce company, but it also makes consumer devices (Kindle, Alexa, Echo, etc.), runs a media arm that creates original video content and produces a daily newspaper, owns a robotics company, operates an enterprise cloud service, and now runs a brick-and-mortar grocery chain.

It's true that all these businesses can be seen as feeding Amazon's retailing core, but it leads to a sprawling and complex organizational structure.

The larger the organization gets, with additional layers of management, bureaucracy, and internal politicking, the less nimble it becomes. New ideas may have a harder time coming to light, quashing innovation.

A loss of agility and innovation can be the kiss of death in the technology industry.

By setting up AWS as a separate entity, that business becomes unshackled from the broader, more diffuse concerns of its parent. Its

executives can focus on strengthening and broadening its cloud services, striking new partnerships, and fending off competitors.

And AWS will need focus. While the company is currently king of the cloud, it faces intense competition from Azure and Google. At the same time, AWS's torrid growth is slowing. As [CNBC reported back in July](#), AWS's "...revenue growth (on a year-over-year basis) has declined for eight consecutive quarters."

At the same time, as Crawford notes in his blog, there's a disincentive for customers that compete with Amazon to use AWS. Case in point is WalMart, which has been [warning its technology and developer partners](#) to stay away from AWS platforms.



The Alphabet Option

Amazon doesn't have fully divest its AWS business to reorganize its corporate structure. The company could take a page from Google, which in 2015 restructured itself into the holding company known as Alphabet.

Beneath the Alphabet umbrella are multiple standalone businesses with their own chief executives and distinct market pursuits. These include:

- Google (you know what they do)
- Nest (home IoT)
- Calico (human longevity)
- Sidewalk (smart cities)

The benefit of this structure is that Google, which is the primary revenue-generating engine of the organization, won't have its financial performance hampered by riskier ventures or slow-growth businesses.

Meanwhile, by breaking the organization into smaller, self-contained units, Alphabet hopes to avoid becoming a sprawling, shambling behemoth dragged down by institutional inertia--a fate that's befallen other tech stalwarts.

Maybe, Maybe Not

An Amazon/AWS split is, of course, just speculation. There are good reasons why CEO Jeff Bezos might not want to spin off AWS: It's a strong business with a commanding market share. Cloud will continue to consume more IT spend. And Amazon itself benefits from AWS services and innovations.

We have to wait and see if this creation of a co-equal headquarters is just an organizational shift for a huge and growing company--or the first phase in a broader plan to divide, and then continue to conquer.

Thanks, Internet

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



LAWFUL GOOD
RETURNED TO THE STORE



NEUTRAL GOOD
RETURNED TO A CORRAL



CHAOTIC GOOD
LAUNCHED INTO A CORRAL



LAWFUL NEUTRAL
RETURNED TO ANOTHER STORE



TRUE NEUTRAL
RETURNED TO THE POOR



CHAOTIC NEUTRAL
RETURNED TO NATURE



LAWFUL EVIL
UNRETURNED BUT
NEATLY STACKED



NEUTRAL EVIL
LEFT IN A PARKING SPACE



CHAOTIC EVIL
RETURNED TO A CULVERT

ROB BESCHIZZA

Source: Rob Beschizza @Beschizza



PACKETPUSHERS

Get Plugged into Membership...

Get Immediate access to FREE Member Benefits

Where Too Much Technology Would *NEVER* Be Enough

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

CCIE Lab Attempt #1: Reflections

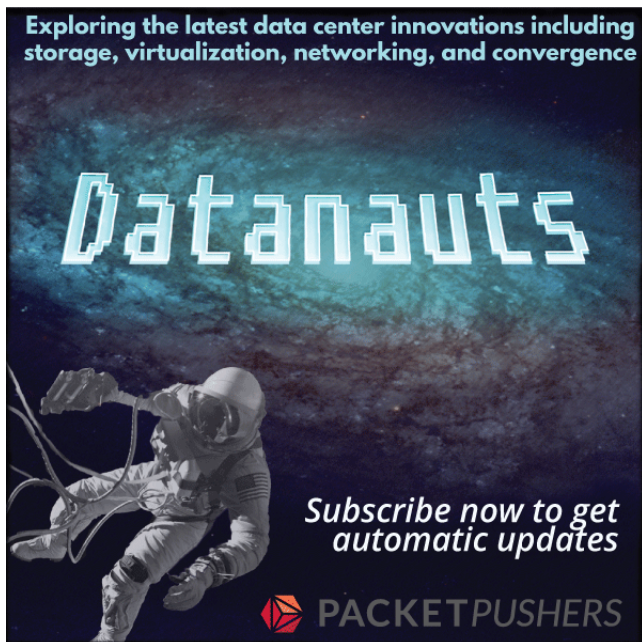
Dustin Beare, who blogs at NetworkIntrovert, has a [good post-mortem](#) of his first attempt to pass the CCIE lab. It's a valuable post for certification seekers not just because he shares useful insights on areas for improvement, but also because while lots of people will tout their successes, it's more rare for folks to open up when they stumble. Good luck on the next round--we're pulling for you!

[LINK](#)

Docker loses its first-mover advantage to Kubernetes - now what?

Kubernetes has leapt to the front of the pack in container orchestration, and [Kurt Marko has a good analysis](#) of how Docker blew its first-mover advantage, leaving its own Docker Swarm as a distant runner-up to K8s.


[LINK](#)



Exploring the latest data center innovations including storage, virtualization, networking, and convergence

Datanauts

Subscribe now to get automatic updates

 PACKETPUSHERS

The image shows a promotional graphic for the 'Datanauts' podcast. It features a dark space background with a nebula. In the foreground, an astronaut in a white spacesuit is floating. The title 'Datanauts' is written in a large, white, pixelated font. Below the astronaut, there is a call to action: 'Subscribe now to get automatic updates'. At the bottom, the Packet Pushers logo (a red cube) and the name 'PACKETPUSHERS' are displayed.

Join the Datanauts on their mission to bust silos and explore the latest developments in cloud,

The Network Break



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

Network Break is a weekly podcast that delivers news & analysis on the networking industry

convergence, data centers, and more. [Sign up free here.](#)

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.

Savvius Spotlight Promises Real-Time Flow Analysis For Network Problem Solving

Savvius has released a new troubleshooting appliance called [Spotlight](#), which analyzes network performance in real time based on traffic flows.

Spotlight is designed to help network administrators identify network and application latency and track performance of TCP and VoIP in real time. To speed up problem identification, Spotlight's UI is configured to report on the worst-performing parts of the network.

[LINK](#)

Recent Podcasts

The last five podcasts published on Packet Pushers

[PacketPushers.net - The Last Five](#)

[PQ 127: Path Aware Networking Research Group – IETF 99](#)

[Datanauts 101: CIOs And The Business Side Of IT](#)

[Network Break 152: Oracle Guts Solaris; Equifax's Epic Fail](#)

[Show 356: Oracle Ravello's Networking 2.0 \(Sponsored\)](#)

[PQ 126: The Future Of Data Center Fabrics – IETF 99](#)



Full Stack Journey tells personal stories about the ongoing quest to become a full stack engineer. [Subscribe today!](#)



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

Priority Queue tackles niche and nerdy tech topics and cutting-edge research projects. [Subscribe here!](#)

Quick Survey: Recognize This!

Apple is causing a stir with its facial recognition technology to unlock the iPhone X. What might we expect as an authentication option in the

next release?

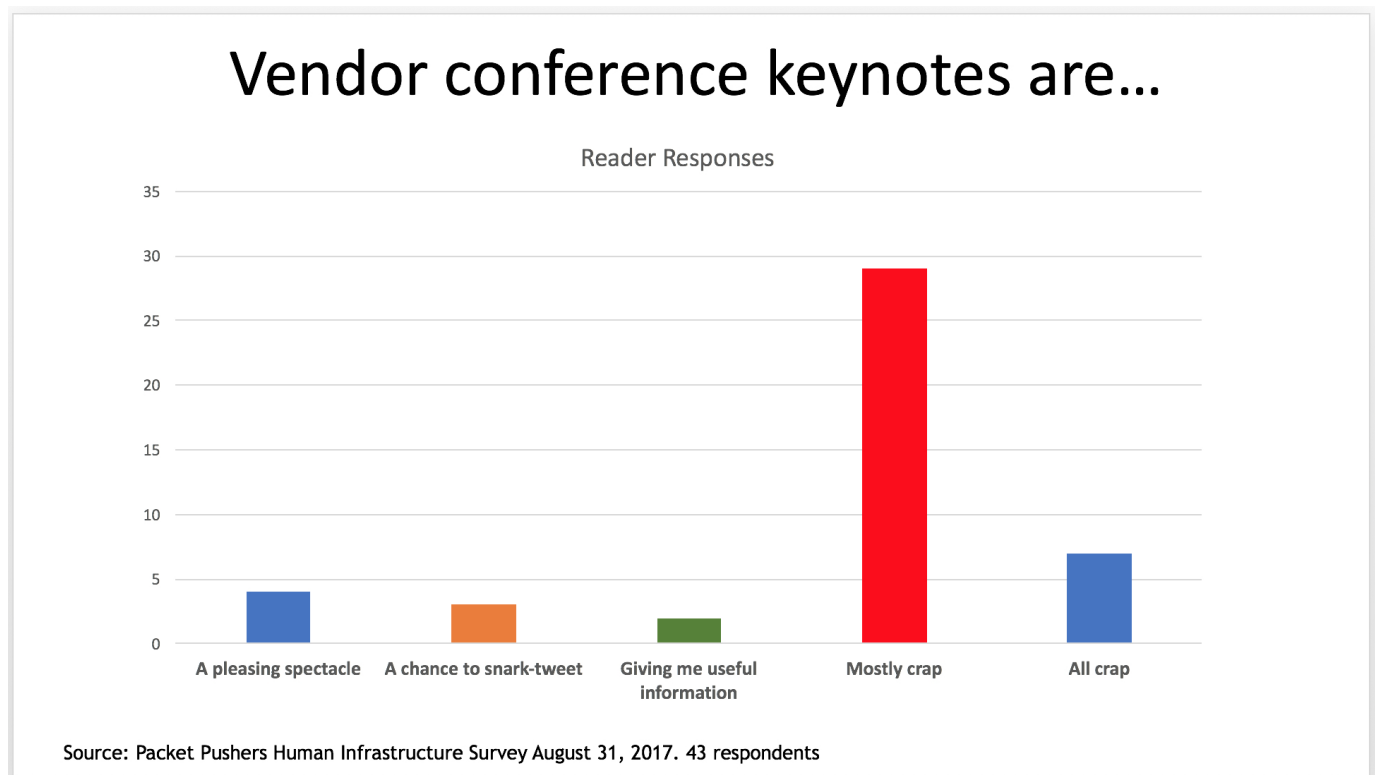
[A. Nude selfie](#)

[B. AirPods in the brain stem](#)

[C. A sample of your gut bacteria](#)

[D. The Apple iMRI](#)

Last Issue's Survey Results



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.

[unsubscribe from this list](#) [update subscription preferences](#)