

the Availability Digest

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@availabilitydig – Our November Twitter Feed of Outages

November 2016

A challenge every issue for the Availability Digest is to determine which of the many availability topics out there win coveted status as Digest articles. We always regret not focusing our attention on the topics we bypass. With our new Twitter presence, we don't have to feel guilty. This article highlights some of the @availabilitydig tweets that made headlines in recent days.



The Antique Computers That Just Won't Quit!

If Apple's marketing chief believes it's sad to use a PC that's older than five years, he'd be rendered speechless by the decades of service squeezed from these vintage machines. These systems are relics, kept in use for years longer than the norm and still doing useful work at a time when their contemporaries are gathering dust.

<https://t.co/PD90rebOsq>

Linux exploit gives any user full access in five seconds

If you need another reason to be paranoid about network security, a serious exploit that attacks a nine-year-old Linux kernel flaw is now in the wild. The researcher who found it, Phil Oester, told V3 that the attack is "trivial to execute, never fails and has probably been around for years."

<https://t.co/byioCoUAmq>

The internet apocalypse map hides the major vulnerability that created it

During the massive distributed denial of service (DDoS) attack on DNS service provider Dyn, one might be forgiven for mistaking the maps of network outages for images of some post-apocalyptic nuclear fallout. Screenshots from sites like downdetector.com showed menacingly red, fuzzy heat maps of, well, effectively just population centers of the United States experiencing serious difficulty accessing Twitter, Github, Etsy, or any of Dyn's other high-profile clients. Aside from offering little detail and making a DDoS literally into a glowing red menace, they also obscured the reality of just how centralized a lot of internet infrastructure really is. DNS is ground zero for the uneasy tension of the internet's presumed decentralized resilience.

<https://t.co/61X8fAGuAk>

When disaster strikes: Use the cloud - it's not 2009

One thing that hasn't changed since 2009 is that the number one cause of a data failure in a business is still human error. If you have a backup system in place that relies on humans remembering to take a tape out each morning, label it, put it in a box, hand that box to another human who takes it somewhere (hopefully safe) and then repeat again every morning, then you are asking for trouble. Most companies don't even do it daily - usually it's only once a week when those tapes are sent offsite.

<https://t.co/Mpi39F3Du7>

What's better: Amazon's Availability Zones vs. Microsoft Azure's regions

Although they both offer core IaaS features like virtual machines, storage and databases, the leading public cloud providers, Amazon Web Services and Microsoft Azure, take very different approaches in offering cloud services, including at the most basic level how their data centers are constructed and positioned around the world.

<https://t.co/bMaUgevY91>

An IoT botnet is partly behind Friday's massive DDOS attack

Malware that can build botnets out of IoT devices is at least partly responsible for a massive distributed denial-of-service attack that disrupted U.S. Internet traffic on Friday, 21 October. Since Friday morning, the assault has been disrupting access to popular websites by flooding a DNS service provider called Dyn with an overwhelming amount of internet traffic.

<https://t.co/VQTB401EgL>

Major DDoS attack prompts Internet problems across US east coast

US officials are investigating multiple attacks that caused widespread online disruption on both sides of the Atlantic on Friday, 21 October. The Department of Homeland Security has begun an investigation into the DDoS (distributed denial-of-service) attack. The incident took offline some of the most popular sites on the web, including Netflix, Twitter, Spotify, Reddit, CNN, PayPal, Pinterest and Fox News – as well as newspapers including the Guardian, the New York Times and the Wall Street Journal.

<https://t.co/43MHzQondF>

IBM offers hybrid cloud data store

IBM is introducing a new cloud object storage service that redefines the security, availability and economics of storing, managing and accessing massive amounts of digital information across hybrid clouds. The company's new IBM Cloud Object Storage offering derives from IBM's acquisition of Cleversafe and its significant portfolio of patents, which are designed to deliver clients better value with industry-leading security.

<https://t.co/GyXFiAdxts>

Disaster recovery: Test, test then test again

In September, ITProPortal hosted a roundtable with fifteen business leaders to discuss and debate the findings from their *'The State of IT Disaster Recovery Amongst UK Businesses'* survey. This article discusses the key takeaways.

<https://t.co/d5bvysFWiM>

Just a reminder how a whale fail (not fail whale) may have impacted the 2012 U.S. Presidential election

The Romney campaign looked forward with confidence to the November 6, 2012, U.S. presidential election. Not only were many polls improving in its favor, but it had a secret weapon that it did not disclose until just before Election Day. Orca! Orca was a massive, technologically sophisticated tool that was aimed at GOTV – Get Out The Vote – in the critical swing states that would decide the election outcome. In elections that are as close as this one was predicted to be, outperforming polls by a single point can mean that entire states and all their Electoral votes can be won. But Orca failed. It never got off the ground on Election Day. Was this outage the cause of Governor Romney's loss to President Obama?

<https://t.co/Az3KH94oqT>

The Availability Digest welcomes ideas for great articles & papers to post on Twitter

Dr. Bill Highleyman - editor@availabilitydigest.com.

Microgrids aren't being built fast enough: Hurricane Matthew - One Step Off The Grid

Hurricane Matthew made a blunt case for microgrids last week as it toppled thousands of electric poles and wires across four states in a cascade that left millions without electricity, some even a week later. Arriving about a month shy of the four-year anniversary of Superstorm Sandy, Matthew again reminded the U.S. why interconnected grids and storms can be a toxic pair.

<https://t.co/wTU6niWFDW>

Why you need backups for your payments processing

Businesses today wouldn't entertain the thought of not having backups for critical business functions. All technology is fallible, problems occur; and when they do, the level of impact felt comes down to how prepared the business is and how it deals with the problem. Why then, are some ecommerce businesses still without a fall-back option should their payments processing solution go down?

<https://t.co/By5Wc7b6tj>

ExoMars set for Mars rendezvous after communications failure

The ExoMars 2016 mission is set for its rendezvous with the Red Planet on October 19. On Sunday at 4:42 pm CEST (14:42 GMT), the Schiaparelli module successfully separated from the Trace Gas Orbiter (TGO), and Monday morning at 4:42 am CEST (02:42 GMT) the orbiter executed a crucial course correction after a heart-stopping glitch that caused the spacecraft to lose communications with Earth. Despite this, ESA says both the TGO and Schiaparelli are currently healthy and on course. *Note: after the publication of this article, the Schiaparelli module deployed its parachute prematurely and crashed.*

<https://t.co/gjUKkMLFAE>

Smarter, faster, brighter: business in an AI world

If you've had Google autocomplete a search query for you or Netflix suggest your next favorite television show to you, then you've already been the beneficiary of AI's helping hand. But recent huge strides in data processing and AI programming mean the world is on the cusp of an AI boom that promises to transform how we manage almost every part of our lives as thoroughly as electricity did in the 20th century.

<https://t.co/vUJssL3aJY>

Southwest, JetBlue booking systems back up after tech glitch

Travel software company Sabre says it has fixed a technical issue that affected booking services of its U.S. airline partners such as Southwest, Virgin America and JetBlue. Customers of these airlines were unable to book or modify existing reservations due to a temporary outage of Sabre's computer systems.

<https://t.co/F3Rt2bunf9>

Giant cyber wargame with 'dark scenario' of power cuts, ransomware and drones reaches its climax

More than 700 security experts are battling a fictional cyber crisis featuring power cuts, drones and ransomware as part of the European Union's biggest cyber defence exercise to date. Cyber Europe 2016 kicked off back in April and since then has been simulating the build up to a major cyber security crisis with a series of fictional attacks on European digital networks.,

<http://zd.net/2dqrQQH>

10 Days of Blackouts Cut to 2 After U.S. Utility Spends Billions

Billions of dollars spent on hardening the nation's power lines are reducing the time it takes to recover from major storms like Hurricane Matthew and are throwing growth-starved utilities a lifeline to better earnings.

<https://t.co/eYU4UdkI2O>

Wind system cut state's power

Two things are clear in the wash-up from September's costly and embarrassing statewide blackout in South Australia. First, the storm that ravaged the state's electricity infrastructure, causing uproar in renewable energy circles and among climate-change advocacy groups, was neither unprecedented nor particularly unusual. Second, unlike the thermal generators operating at the time, most wind farms were unable to ride out the effects of the storm.

<https://t.co/pkleej47tk>

New York Times website back online after 'technical problems' cause global outage

On Wednesday morning, October 19th, the website of the New York Times faced an outage that has been blamed on unspecified technical issues. The official New York Times twitter account acknowledged the global outage, however, and continued to post links to articles even after reporting the problems. It added the newspaper's various smartphone and tablet applications for iOS and Android were still working.

<https://t.co/8zTOaRczkT>

Syria's Government-Backed Telecom Company Announces 10-Day Internet Outage

Syria's government-affiliated telecommunications company announced Tuesday 18 October that 60 percent of the country's Internet would be down for ten days beginning Wednesday. Syrian Telecom attributed the outage to "submarine cable repairs" on international service lines. The anticipated outage will come just days after U.S. intelligence and military officials reported a Russian ship equipped with cable-cutting technology near the coast of Syria.

<https://t.co/nVDIyCFHSt>

Level 3 blames huge network outage on human error

Level 3 Communications has cited a "configuration error" as the root cause of its nationwide network outage on Tuesday, October 4th. According to the company, "Investigations revealed that an improper entry was made to a call routing table during provisioning work being performed on the Level 3 network. This was the configuration change that led to the outage. The entry did not specify a telephone number to limit the configuration change to, resulting in non-subscriber country code +1 calls to be released while the entry remained present. The configuration adjustments deleted this entry to resolve the outage."

<https://t.co/ViGmc5qXGK>

United Airlines computer failure causes widespread flight delays

Flights all over the world ran into delays Thursday night, 13 October, because of a major glitch with United Airlines' computer system. United also suffered a pair of technical failures in the middle of 2015, but it's far from the only airline to endure computer system troubles of late. Back in August, Delta had to cancel roughly 1,000 flights in a single day due to a power outage. British Airways suffered in September a systemwide computer problem that caused delays across its network. A common theme in the recent computer system failures is that the damage caused is widespread and tends to affect a significant number of passengers simultaneously.

<https://t.co/CvPubFITlj>

The Large Hadron Collider is running out of disk space

The Large Hadron Collider (LHC) has run into an unanticipated problem — it's running out of disk space. When the collider was planned out, scientists expected that it would be running about a third of the time. The rest of the time would be used for maintenance, refilling, rebooting, and other such logistical tasks. The LHC is actually doing collisions about 70% of the time, more than double its expected rate. This may be the first time in history when technicians have made a bad estimate about uptime.

<https://t.co/MHzoVhQnMR>

Fault-tolerant servers are the future of successful system virtualization. Stratus' John Fryer goes into detail

Technical Marketing Executive John Fryer talks to a lot of people in the industrial automation world; and almost without exception they share the same challenge. They need to prevent unplanned downtime while preparing for the future, which includes evolving to the Industrial Internet of Things (IIoT), Industry 4.0, and smart factories.

<https://t.co/9CQ3reK5bj>

Under Pressure in the Pursuit of Zero Downtime

The business of data center infrastructure can often feel like carpentry or home repair, as pieces need to be monitored, replaced and modernized. So if maintaining a data center is like fixing a house, you need to choose a reliable foundation, especially for your mission-critical workloads.

<http://bit.ly/2dm50uw>

Off the grid: protecting mission critical data centres

Renewable power generation offers a potential solution for keeping data centres online during a prolonged power outage caused by aging infrastructure, terrorists, hackers or extreme weather.

<http://bit.ly/2fCN2Gs>

NAB suffers second outage in less than a week

In October, the National Australia Bank (NAB) suffered its second outage in less than a week. NAB customers around the country were unable to use their bank cards in ATMs or at EFTPOS terminals.

<https://t.co/m23mB5f3dK>