the Availability Digest

@availabilitydig – Our August Twitter Feed of Outages
August 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.

Hospital's prompt response to double systems failure

Well-rehearsed contingency plans were activated during the failure of telephone and IT systems at St. Mary's Hospital on the Isle of Wight in early August. Employees have been praised for the way they responded to the rare incident. A failure of the uninterruptable power supply (UPS) to the computer servers meant that for 90 minutes, the telephone and IT systems were down. The power outage at 11.15pm was such that it blew the fuses on the backup system; and it failed, too.

https://t.co/MZF8ZZnzaE

Erroneous alert of massive Tokyo quake causes brief panic

Railway companies temporarily stopped trains, and social media users were in a state of panic after the Meteorological Agency sent a false alarm of a magnitude-9 earthquake across wide parts of the Kanto region.

https://t.co/q5H8aOjLiR

3 Worst-Case Scenarios when it comes to Business Server Outages

Servers crash. Whether your employee downloaded by mistake a virus that took down your server, a malicious hack, a hardware failure or corrupted software – server crashes are bound to happen. In these scenarios, it's all about what systems you have in place to protect for these things and what backup and continuity or disaster plan you have to keep you running when the disaster occurs. But what is going to happen to your server? How will the crash occur? Here are three worst-case scenarios.

https://t.co/9OlkLxTtXb

Energy and the IoT: Future-proofing Britain's energy infrastructure

Few companies can afford to have their operations halted by unexpected downtime; but for the energy grid, potential power failures could plunge parts of or even entire countries into darkness. The cost of ensuring that Britain can switch its lights back on following a failure has grown by £12 million in the past year alone. Naturally, developed economies are not at high risk of power blackouts, apart from in the most extreme of circumstances. However, as the current infrastructure continues to age, industry leaders should begin to review the operational lifespan of capital equipment to avoid blackouts in the future.

https://t.co/yTPMGGl2nj

Remove IT Systems from All Branch Offices to Save Money and Harden Your Security Posture

The number of enterprise employees who work in remote offices and branch offices (ROBOs) continues to rise; consequently, so do the amounts of business-critical information stored in these locations and IT budget dollars devoted to managing these systems. Yet one figure that is not going up is the small number of dedicated IT personnel available to staff ROBOs. This inevitably leads to poor system performance, unreliable data backups, and system outages that all directly impact employee productivity and the amount of time and money IT must devote to remediating issues.

https://t.co/glpIzVappz

Protecting the grid

A dependable electricity supply touches every aspect of our society. Losing power for just a few hours is a potent reminder. Utilities like Dominion Virginia Power (in the U.S. state of Virginia) are conditioned to respond in the aftermath of violent weather. Yet in a world increasingly connected by electronics, new omens of violence loom on the horizon, both physical and in cyberspace. Terrorists and computer hackers pose hazards to a secure electricity supply. Mirroring trends globally, Virginia producers are investing time and money to stay ahead of the bad guys.

https://t.co/osiaSCDHDc

Southwest's system failure a blow to Las Vegas tourism

In late July, the traveling public saw again that it doesn't take an act of terrorism to create havoc on a city's tourism economy. It can be something as simple as a bad router. Southwest's problem was a malfunctioning router, a piece of computer hardware that many of us have in our own homes to help establish a wireless network. Southwest's router went down; and a redundant backup system failed, causing the entire network to crash. The down system prevented passengers from checking in for flights and getting boarding passes. Las Vegas is Southwest's third-busiest destination. It's hard to say how much this technological snag cost Las Vegas in visitation and tourist spending. We'll know more at the end of August when McCarran International Airport and the Las Vegas Convention and Visitors Authority post their July numbers.

https://t.co/N5H6koUoy8

EE hit by major roaming outage: Customers can't call, text, or use data

EE, the UK's largest mobile carrier, experienced a major service outage at the end of July. Angry customers roaming as far afield as Greece, Cyprus, and even Mauritius were prevented from making calls or using Internet data for at least two days, with dozens of customers venting their frustration on Twitter during the peak summer holiday period.

https://t.co/JhIYnZhFVw

Southwest CEO Compares Major Outage to "Once-In-A-Thousand-Year" Flood

In July, a massive technical outage hit Southwest Airlines. The outage cancelled 700 flights and snarled travel plans for thousands of people. That was a bad thing, the airlines CEO Gary Kelly says, but Southwest will move past it. Kelly compared the outage to an infrequent natural disaster. The issue was traced back to the failure of a single router at Southwest Airlines' Love Field data center. That, at least, is what the company thinks right now. Though it had a backup system in place, the way that it failed was so rare the company couldn't quite have prepared for it, Kelly says.

https://t.co/eYkupzaOCq

Mag Instrument Upgrades Its ERP System with the HPE Superdome X and Microsoft SQL Server

There's nothing like real-world examples to illustrate a platform's true capability to support enterprise-level production workloads. Flashlight maker Mag Instrument, for example, used HPE's Superdome X and Microsoft SQL Server to modernize its aging infrastructure, demonstrating the scalability and availability that the combo can provide.

https://t.co/7fsUT1Yqvs

Don't let testing stop your agility

Agile is no longer a long sought-after dream for businesses. It is no longer a secret weapon for organizations that wish to stay ahead of the curve. Agile, for the most part, is the modern way of working. By now, most organizations know the purpose of agile: to build higher-quality software faster. But in order to ensure that quality, businesses have to make sure their testing processes can keep up with this new pace of working.

https://t.co/J2M5GbCTU4

Hundreds of pets go hungry after server outages render PetNet's feeders useless

When PetNet, the automatic pet feeder billed as "the smartest way to feed your pet," burst on the scene last year, it aimed to revolutionize the way people cared for their beloved cats and dogs. However, despite the company packing the $149 system to the gills with smart tech and automation, a recent server outage did the exact opposite of the device's purpose, leaving hundreds of pets hungry.

https://t.co/yVInvZS0yF

Severe Solar Storm Could Shut Down U.S. Grid for Months, Study Says

A severe solar storm striking the continental U.S. could cause trillions of dollars in damage to the global economy and shut down portions of the U.S. grid for up to a year, according to a new study prepared by the Cambridge Centre for Risk Studies

https://t.co/xWCpRGqt0I

Week's Second London Data Center Outage Disrupts Connectivity

Another day, another data center outage in the London Docklands. Like Wednesday's data center outage, downtime at Telehouse on Thursday morning, 21 July, affected BT, a major provider of internet access and telephone services in the country. Loss of phone and broadband services started at 9:32 am BST and impacted some customers for hours.

https://t.co/kGcGdgZlfZ

Router at root of Southwest Airlines' computer systems outage; delays, cancellations persist

A router failure caused Southwest Airlines' system to crash on Wednesday, and all backups failed. The results were flight delays and cancellations nationwide and a cost to the company of probably $10 million in lost bookings alone.

https://t.co/a2bdOPrxYR

Inside Mark Zuckerberg's 10-year plan to bring the internet to every human on earth

Whatever else Facebook does going forward, Mark Zuckerberg says that it starts with a connected world. Facebook believes its Aquila could be a powerful tool in bringing Internet access to the entire world.

https://t.co/X6LWd6lS9g

Balancing the data vs. power equation

Power grids have become a problematic stumbling block for companies that want to expand their HPC, Big Data, and other compute-intensive programmes. Under increasing strain, the world's aging power infrastructure is unable to keep up with the electricity demand in many developed countries. The UK power grid, for example, is extremely vulnerable. In May, the National Grid issued its first summer-time 'Notification of Inadequate System Margin' (NISM) alert in eight years – indicating that even in warm weather, when power demand is typically lower, the UK grid is suffering.

https://t.co/EJKBEpfcyl

Inside the diabolical Ukrainian hack that put the U.S. grid on high alert

The unparalleled grid strike in Eastern Europe has led to stronger, more frustrated complaints by industry and security experts about the performance of the U.S. Department of Homeland Security as a source of rapid, actionable cyberthreat intelligence for the electricity sector. It also has raised concerns that federal guidelines applicable to the high-voltage interstate grid don't guarantee the security of local utilities that distribute power to millions of homes and businesses.

https://t.co/k2npLwGK0Q

How DHS fell silent when a hack threatened the U.S. power grid.

A month after hackers blacked out power in western Ukraine, a team of U.S. security experts touched down in Kiev to piece together the extraordinary assault. Interviews, cell phone video evidence and a crash course in Soviet-era grid equipment helped the dozen or so Americans untangle the Dec. 23, 2015, cyberattack on three utilities. The investigators traveled thousands of miles with one big question in mind: Could the methods used to hack the Ukrainian power distributors, or the hidden code behind the strike, pose a threat to the U.S. electric grid?

https://t.co/3C1cCP7BRe

A Digest Oldie but Goodie: Wondering how technology impacts political races? Let's remember the 2012 ORCA failure.

The Mitt Romney campaign in the U.S. presidential elections looked forward with confidence to the vote on November 6, 2012. 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/TSHKUylAdz

The Government's Do-Nothing Approach to EMP Threats

Imagine you're driving down the interstate; and suddenly, your car comes to a halt. You pick up your cell phone to call a family member for help, but you don't have service. Then, when you look up, you see that all vehicles are also stopped. It's 96°F outside, so you decide to walk to the nearest gas station to grab a bottled water only to find that your debit card has been rendered useless. Believe it or not, this scenario is a very real possibility.

https://t.co/XPSBt8dUH6

Despite massive reliance on GPS, there's still no Plan B if it crashes

It took only thirteen millionths of a second to cause a lot of problems. Last January, as the U.S. Air Force was taking one satellite in the country's constellation of GPS satellites offline, incorrect time was accidentally uploaded to several others, making them out of sync by less time than it takes for the sound of a gunshot to leave the chamber. The minute error disrupted GPS-dependent timing equipment around the world for more than 12 hours. While the problem went unnoticed by many people thanks to short-term backup systems, panicked engineers in Europe called equipment makers to help resolve things before global telecommunications networks began to fail.

https://t.co/JFN6fZIc80

Malicious Pokémon Go fakes infiltrate Google Play Store

Be careful, or your phone could end up trapped. Bad actors have been quick to leverage *Pokémon Go*'s thunderous popularity. According to ESET Security, a malicious app called Pokemon Go Ultimate actually made its way onto the Google Play store. According to ESET, this is the first "lockscreen" app ever found on Google Play. Though the app appears to have been pulled, ESET reports that when downloaded and run, the app installs not *Pokémon Go* but something called "PI Network." Anyone who runs that app will find their phone completely frozen, forcing them to restart the phone by removing the battery.

https://t.co/xBUXUSMNk0

Google admits its cloud was brought down by buggy software

Google has revealed that the lengthy outage experienced by the customers of its Compute Engine in the US at the end of June was caused by a software glitch that manifested during SSD maintenance. The glitch made the servers perceive all disks as full even when they were empty, causing elevated latency and errors for most writes that involved flash storage.

https://t.co/C8LjvE3z73

Disk failure caused Thursday's trading outage: SGX

The Singapore Exchange disclosed more details on Tuesday (July 19) of the technical malfunction that caused the longest trading outage in its history. SGX halted trading for more than five hours last Thursday after the discovery of a fault that generated duplicate trade confirmation messages. The fault, caused by a hardware failure, was the longest trading disruption in the exchange's history.

https://t.co/QjmPsu7r0L

Please join us at @247uptime's Technical Demo Event "Fault Tolerance in Action" on Wednesday July 27th in London

Due to popular demand, we are holding our next Technical Demo Event in Central London with Volta Data Centre kindly providing their facilities. So please join us at 24/7 Uptime's Technical Demo Event "Fault Tolerance in Action": an informal morning of discussion and demonstration, exploring the very latest in protection of critical systems, including security and data centre infrastructure applications, from unplanned downtime.

https://t.co/SZM0cNzYmi

Communications End of Support Can Impact Your Organization

Unified Communications is now realized by most enterprises as having gone mainstream in the IT Communications market, and most want to embrace it. The challenge, of course, is what drives interest and approval for UC projects by senior management.

https://t.co/uyD9BdnArR

Google, Amazon and Apple Are Forging the Future of Corporate Energy Management

Apple recently made headlines when it established a subsidiary called Apple Energy and filed for authorization to sell capacity, energy and ancillary services in wholesale energy markets nationwide. It will be some time before we see Apple participate in many of these markets, since Apple's application currently covers only its renewable energy projects in California and Nevada as well as one under construction in Arizona. But the fact that a consumer technology company has formed an energy subsidiary reflects the extent to which large corporations are taking an active approach to energy management.

https://t.co/bvGV9h5fwH

How This Massive Structure in the Oregon Desert Keeps Facebook Running

There are a lot of ways to make sure you have fast Internet. You could move to a Google Fiber city. You could select one of our Fastest ISPs. Or, you could build your house next to a Facebook data center. Take the first Facebook data center, for instance. Opened in Prineville, Ore., in 2011, it has served as the model for every data center the social media giant has built since then, from Sweden to Iowa. It consumes so much bandwidth that it requires multiple ISPs serving the area to fortify their networks, bringing local residents along for the ride.

https://t.co/hriLWXQNSH

Why does Texas have its own power grid?

Texas' secessionist inclinations do have one modern outlet: the electric grid. There are three grids in the Lower 48 states: the Eastern Interconnection, the Western Interconnection — and Texas. The separation of the Texas grid from the rest of the country has its origins in the evolution of electric utilities early last century.

https://t.co/UMw0mYXwSy

On the worsening power failure (Nigeria)

With the relentless assault on gas pipelines by the Niger Delta militants, it is not surprising that the entire country has been plunged into darkness as a result of the massive shortage of gas to the power plants. The 2000 megawatts (MW), which the Federal Government intended to add to the national grid by July, 2016, is threatened. The operations of the power generating (Gencos) and distribution companies (Discos) have been hampered. Electricity consumers are left in desperation and hopelessness.

https://t.co/2xRmfUcnRF

NYC blackout of 1977 remembered

On the night of July 13, 1977, a lightning strike about 8:35 p.m. on a power station along the Hudson River in Westchester County, set off a chain reaction that plunged New York City into darkness at 9:34 p.m.
When the sun came up the next morning, the city took stock. News reports indicate there had been 3,400 arrests; hundreds of stores looted, especially in Brooklyn and the Bronx; and a thousand fires.
The city was for the most part without power for 26 hours.

https://t.co/opbmYKPkTf

Grid attack: How America could go dark

Dozens of break-ins examined by The Wall Street Journal show how orders to secure the power grid have still left tens of thousands of utility substations vulnerable to terrorist saboteurs.

https://t.co/XYc95WYK3S

After 2 deaths during 911 outage, Montgomery Co. exec seeks investigation

Two people died during an hours-long outage of Montgomery County's (in U.S. state of Maryland) 911 system on July 10th, and the county's top leader is now calling for an investigation into the glitch. The system went down at 11:10 p.m. and was down for two hours before a backup system was put online to take emergency calls.

https://t.co/KbNb5epLlD

Comcast Business Voice Customers Suffer Nationwide Outage

The evening of 12 July, Comcast Business Services customers began experiencing a nationwide outage of Comcast business voice services. The outage impacted millions of Comcast customers and also prevented Comcast Business Services customers from accessing the company's business portal. Down Detector data suggests the size and scope of the outage was relatively massive.

http://bit.ly/2aMXN6S

Too human (not) to fail

How design keeps you from screwing up and prevents disaster when you do.

https://t.co/nvwKp6JIt2

Want to know what the squirrels are up to?

"I don't think paralysis [of the electrical grid] is more likely by cyberattack than by natural disaster. And frankly the number-one threat experienced to date by the US electrical grid is squirrels." - John C. Inglis, Former Deputy Director, National Security Agency 2015.07.09.

www.cybersquirrel1.com

Are squirrels a bigger threat to the power grid than hackers?

After countless warnings from cybersecurity specialists about the digital security of the power grid, it appears that a furry adversary with a proven track record of taking out the lights is still the biggest threat to the grid. That adversary? – squirrels. The critters are such a large problem that the American Public Power Association tracks the blackouts caused by squirrels with its own "Squirrel Index."

https://t.co/ysaKH41fIF

Making your power infrastructure elastic

Data center providers need to re-examine their traditional practices with the advent of the cloud, re-considering hardware redundancy and failover sites, according to a power infrastructure provider.

https://t.co/K6Ap8E1GKs

Check out https://www.lora-alliance.org, **wide-area networks for IoT.**

The LoRa® Alliance is an open, non-profit association of members who believe that the Internet of Things era is now! Members collaborate and share experiences to drive the success of the LoRa protocol, LoRaWAN™, as the open global standard for secure, carrier-grade IoT LPWA connectivity. With a certification program to guarantee interoperability and the technical flexibility to address the multiple IoT applications, be they static or mobile, members believe that LoRaWAN can give all THINGS a global voice.

The Netherlands creates first national network dedicated to IoT

The Netherlands is the world's first country to complete a nationwide network dedicated to IoT (Internet of Things), in a major symbolic milestone for the technology trend. More than a dozen other countries have also announced plans to build national networks based on the LoRaWAN specification for low-power wide area radio networks. The project took eight months, with the rollout starting in The Hague and Rotterdam.

https://t.co/qc8eNlzFoJ

Oracle ordered to pay HP $3 billion in Itanium case

A California jury recently ordered Oracle Corp to pay Hewlett-Packard Enterprise Co $3 billion in damages in a case over HP's Itanium servers. Oracle said it would appeal the verdict. The Itaniuum processor is made by Intel Inc. Oracle decided to stop developing software for use with HP's Itanium-based servers in 2011, saying that Intel made it clear that the chip was nearing the end of its life and was shifting its focus to its x86 microprocessor. But HP said it had an agreement with Oracle that support for Itanium would continue, without which the equipment using the chip would become obsolete. In the first phase of trial in 2012, Santa Clara Superior Court Judge James Kleinberg ruled that there had been a contract. The jury just decided damages.

https://t.co/y7xcOVSZrH

Telstra's fifth outage in six months caused by 'misbehaving device'

Telstra's major enterprise and business customers were impacted on 30 June by a disastrously-timed seven-hour network outage. Internet data services for banks, retailers, airlines, politicians, schools and hospitals were down across Victoria from early afternoon until about 9pm.

https://t.co/SRvRwXcFOl