the *Availability Digest*

@availabilitydig – Our November Twitter Feed of Outages
November 2015

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.

State gov't internet access restored after 7-hour outage
New Jersey government offices had access to the Internet restored early Friday afternoon, 27 November, after an outage by provider Verizon put them in the dark all morning. Verizon, the internet provider for the State, experienced a hardware malfunction that disabled internet access for all State computers and internet-dependent systems between approximately 5:00am-12:30pm.

https://t.co/hS7sND8Vq9

Major outage at KPN keeps viewers without TV
Major problems at Dutch incumbent KPN internet services left subscribers to the company's IPTV platform in the dark for most of Friday, 20 November.

https://t.co/ujGGSWolgm

Android Gmail app security hole lets you pretend to be anyone online
A bug that allows you to pose as anyone when sending an email through the Gmail application has been deemed a non-issue by Google despite the risk of exploit via phishing campaigns. The bug is found within the standard Gmail application and needs only a few simple steps to implement.

https://t.co/d9GNkowIdf

State of emergency in Crimea after power lines blown up
Crimea declared a state of emergency on Sunday, November 22nd, after its main electricity lines from Ukraine were blown up and left the Russian-annexed peninsula in darkness after the second such attack in as many days.

https://t.co/pH8KJIafWj

Telecity Data Center Outage in London Dings Cloud, Internet Exchange

Two consequent power outages at one of TelecityGroup's data centers in London on Tuesday 17 November disrupted operations for many customers, including the London Internet Exchange and AWS Direct Connect, the service that connects companies to Amazon's cloud through private network links.

https://t.co/s7MBZqJxp4

Paris Airport Grounds Flights after Windows 3.1 (!) Glitch

If you've ever flown through Paris's Orly airport, you've definitely encountered Windows 3.1. Yes, some pretty critical systems at Orly *still* run Windows 3.1. Unfortunately, the Windows 3.1-based DECOR system went down in November. In doing so, it prevented air traffic controllers from giving pilots critical information. As a result, Orly airport had to ground its flights while teams worked to fix whatever it was that was preventing DECOR from working.

https://t.co/srtKIcV1js

Understanding the 4 Most Common Types of Data Backup

One of the most well known instances of near disaster due to a backup failure involves Pixar's "Toy Story 2." In 1998, an unknown employee mistakenly entered a delete command on the drive where the movie's files were kept, with the effect of wiping everything from the drive. Although the company regularly backed up the files, the backup system failed as well and there was no copy of the movie on Pixar's servers. By dumb coincidence, the technical director had recently had a baby and so once a week was making a copy to take home on her personal computer. The company nearly lost years of work because of one employee's error.

https://t.co/mUJkozNk9O

When Azerbaijan's Internet Burned Down

A fire that left most of Azerbaijan offline on November 16 appears to speak to the insecurity of the Internet supply in the South Caucasus, where nationwide Internet dim-outs are nothing new. Early on Monday, a cable caught fire in a ganglion of lines belonging to Delta Telecom, Azerbaijan's all-but-monopoly Internet supplier. The blaze eventually affected roughly 90 percent of the country's networks.

https://t.co/Jivd4owlHe

New Methods of Maximizing Your Oldest Data Center Technology

No matter how "high tech" your data center, there is a high likelihood that the backup power system of your critical facility is completely dependent on a room full of batteries. Data center surveys have shown that anywhere between 65 percent to as high as 85 percent of unplanned downtime can be attributed to battery failure of some kind. This means your facility is almost certainly at the mercy of a room full of what basically remains 1800s technology.

https://t.co/DBhFasbeKi

Heading to NonStop Boot Camp? Check out Digest Mng Ed. Bill Highleyman's talk on "Will a Backup System Meet Your Availability Requirements?"

Your CTO is concerned about running his critical applications on a single NonStop system at a single site that might suffer some disaster such as a fire or flood. He would like you to build a backup site that has the capacity to take over processing from the production site should there be a system or site failure. He is also assuming that providing a backup system will increase the availability of his mission-critical applications by several 9s. Is he correct in this assumption? We show the effect of failover times and failover faults on the availability enhancements provided by a backup system. If failovers are well-scripted and well-tested, a backup system might add another 9 of availability. If the two systems are run as an active/active pair, the overall system availability can be increased by a second 9. This means that the active/active pair is one-hundred times more reliable than a single system. Participants in this session will learn how to evaluate the impact of failover times and failover faults on the availability provided by their redundant systems.

Unrealistic expectations about IT outages put pressure on IT teams

Business managers' unrealistic views on how long the organisation can survive without its IT systems place unnecessary pressures on IT teams, according to a report by IT services firm Databarracks. The survey of more than 400 IT leaders found that while IT managers estimated that their organisations could survive a 48-hour IT outage, they said senior business managers would estimate around four hours.

https://t.co/pet8NNzOtL

18F's Micropurchasing Dilemma: Is $1 for Code Too Cheap?

The General Services Administration is struggling to pinpoint how much the U.S. federal government should pay for open-source software code. But this time, at least, it's not that it's too expensive. In fact, as evidenced in its new micropurchasing experiment, open-source software coding services could be too cheap.

https://t.co/86zn4vAy9Z

Indoor Pot Farms Putting Strain on Electrical Grid

Despite recreational marijuana legalization in Oregon and Washington, the electrical work that powers lights at marijuana farms has become a bit of an issue. Pacific Power, an electrical company which serves Oregon, recently said that growing operations from indoor marijuana farms have exceeded power grid capacity. The complications include blowing out transformers, causing outages, and equipment damage.

https://t.co/uEOXSna8TE

UK's high-wire act on power supplies laid bare

The scale of Britain's energy supply crunch was laid bare on Wednesday as an unexpected outage of power plants sent wholesale electricity prices soaring and prompted the grid operator to call for the first time ever for industry to reduce power. The measures highlighted the tightness of the margin between supply and demand in the UK, where old power plants have in the past decade been taken off the grid but not replaced quickly with alternatives.

https://t.co/FgDzP4o8h9

Amex Travel Dumps On-Premises For Cloud Apps

American Express Global Business Travel was saddled with 16 different legacy on-premises ERP systems. Rather than update, the $1.5 billion company ripped them out and replaced them all with simple cloud apps.

https://t.co/gM4zJQmpLE

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Stratus' everRun is continuous availability virtualization software that prevents downtime, ensures business continuity and maintains data integrity by keeping applications up and running– easily and affordably.

https://t.co/IcekZrZtC1

50 years ago today, the region went dark

A half-century ago, more than 35 million people across 80,000 square miles were hit by an electricity outage that remains one of the largest in North American history. The historic power failure lasted 13 hours, engulfed eight U.S. states, and trapped thousands in transit.

https://t.co/JgVtvJsZef

The Mainframe Is a Vampire

If you looked at the recent IBM numbers, which were pretty painful but in line with what generally happens when a company is adapting to a major industry change, you saw one bright light: IBM's mainframe business was growing faster than the server segment in general is growing. The mainframe was declared dead 30 years ago. And there is only one creature, mythological or otherwise, that comes back from the dead more powerful than it was before it "died" - a vampire.

https://t.co/Q3l4055TJQ

ProtonMail coughs up $6000 to stop DDoS attack, DDoS carries on anyway

ProtonMail has learnt an expensive lesson -- just because hackers demand a ransom to stop an attack doesn't mean they will vanish after you pay up.

https://t.co/sHzcDnU3ty

Is The United States Prepared For A Massive Cyberattack?

As a child of refugees in London, journalist Ted Koppel witnessed the Blitz. Traveling the world as one of America's most distinguished television reporters, he lived through the Cold War and witnessed combat up close from Vietnam to Iraq. In his new book, Lights Out: A Cyberattack, A Nation Unprepared, Surviving the Aftermath, he argues that the threat posed by cyber warfare is more complicated to defend against, potentially more deadly than traditional warfare, and we are absolutely unprepared for it.

https://t.co/aGNyk4LKoG

The Internet has a weakness which could shut it down for months

Not many people realize that undersea cables transport nearly 100% of transoceanic data traffic. These lines are laid on the very bottom of the ocean floor. The reality is that the cloud is actually under the ocean. Even though they might seem behind the times, fiber-optic cables are actually state-of-the-art global communications technologies. Fewer than 300 cable systems transport almost all transoceanic traffic around the world. And these often run through narrow pressure points where small disruptions can have massive impacts.

https://t.co/nDpMYbA8K0

Argos web meltdown 'deletes customers' Christmas shopping'

Thousands of furious Argos customers fear they may not get the Christmas shopping they paid for after the company's computer system crashed. The IT meltdown threw the catalogue chain into chaos on one of the first major shopping weekends in the run-up to the festive period. Shoppers had flocked to the firm's stores and website after it advertised huge discounts on children's toys and electrical goods. But the IT glitch caused pandemonium as the company's website shut down for much of the weekend, leading to missing payments and unfulfilled deliveries.

https://t.co/YgV6appUPM

Man vs. machine: In a network outage, who's to blame?

Downtime is often chalked up to human error. But several high-profile outages this year were blamed on faulty technology. Which is more dangerous to your network?

https://t.co/P0OhswcTjb

PayPal and eBay's Outage Proves Costly

On 29 October, PayPal experienced an hours-long outage that proved quite costly for eBay sellers and other online platforms using PayPal to process payments. During the PayPal outage, eBay experienced an outage of its own at one of its data centers. This, combined with the outage from PayPal, was a financial nightmare for sellers that had auctions ending during that time.

https://t.co/JOGIBn7D71

HP Inc. and Hewlett Packard Enterprise seek relevance through spinoff

Now that Hewlett-Packard has split, the challenge for Meg Whitman's HPE will be attracting corporate buyers. At Dion Weisler's HP, research and development is the priority.

https://t.co/w74Fqg57uN

Expired certificates cost businesses $15 million per outage

The average global 5,000 company spends about $15 million to recover from the loss of business due to a certificate outage and faces another $25 million in potential compliance impact. These estimates, based on a Ponemon survey of about 2,400 global respondents, include remediation costs, loss of productivity, lost revenues, and brand image damage. This past April, for example, Instagram forgot to renew its security certificate, causing security warnings to pop up for its website visitors.

https://t.co/FavX7ij61Q

First National Bank warns of large data breach at unidentified national business

A large data breach at an unidentified national business recently prompted First National Bank of Omaha to reissue new debit cards to customers in seven states. First National's own security was not compromised in the incident, a spokesman said. Its connection to the breach is limited to customers who may have done business with the company that was the target of the attack.

https://t.co/Bkvyy1jV3e

Barclays customers unable to access money after technical issues

In late October, the second fault in a week hit Barclays Bank, which cited "technical issues" that prevented customers from accessing their accounts. The computer system failure came ahead of a planned update to coincide with the end of British Summer Time. Days earlier, a similar incident prevented customers from withdrawing cash from ATMs or making payments. That time, an "internal infrastructure failure" was complicated by Barclay's scheduled maintenance.

https://t.co/M46trfK8GC

No ATMs, no Eftpos, no service

During the evening of 29 October, an ANZ Bank of New Zealand glitch caused all of its major services to go down for almost three hours. It was not the first glitch to frustrate ANZ customers last month.

https://t.co/fOnS1QrUvC

PayPal Goes Down Worldwide: 5 Fast Facts You Need to Know

PayPal went down worldwide in late October. The online payment service reported an outage at a data center, but some customers find it worrisome that it only took one data center to take down such a huge service.

https://t.co/e8GtvwOact

How to use containers for continuous operations and zero downtime

When a new technology comes along, those who operate continuous operations systems may have little understanding of the value it can bring or how it should be managed and maintained. The use of containers is a prime example. Organizations that pursue the use of containers in continuous operations may face challenges with existing platforms and tools, lack of skills, and cultural resistance. In some instances, continuous operations may even be the wrong choice, depending on the amount of change that needs to occur and the willingness of the organization to change.

https://t.co/GGfvbAwnFk

Calculating the Cost of Data Center Downtime

Downtime isn't a one-size-fits-all figure. There are a range of variables that can contribute to the cost of downtime, meaning the actual price will change depending on the business and what factors impact its operations.

https://t.co/rywU36nf2K

Pew: Grid Outages Way Up Since 2000

There has been a six-fold increase in grid outages in the United States since 2000, according to a study by the Pew Charitable Trust. The number of disruptions has risen from two to 18 per month.

https://t.co/kq8obGr9Pc

Military blimp breaks loose, lands in Pennsylvania, causing power outages

A U.S. Army surveillance blimp broke loose from its ground tether at a military base in Maryland on 28 October and drifted over central Pennsylvania. About 18,000 power outages were caused by the blimp's tether line, which dragged across the ground and took out power lines along the way.

https://t.co/hZOvZy1abQ