the Availability Digest

@availabilitydig – Our July Twitter Feed of Outages
July 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.

The Making of United's Summer From Airline Hell

United and Continental closed their merger in 2010 and created what was then the world's largest airline. Fifty-seven months later, executives are still working to integrate United Continental Holdings into a single company — and struggling with some high-profile operational and customer service problems.

http://t.co/jYQnumjdH

IBM's machine-learning crystal ball can foresee renewable energy availability

IBM has developed a computer system that can learn about weather from thousands of data points and predict days -- even weeks -- in advance how much power from solar and wind farms will be available for the U.S. power grid.

http://t.co/6UDfR2BoO4

T-Mobile to pay $17.5 million to settle U.S. 911 outage investigation

T-Mobile US Inc will pay $17.5 million to settle a U.S. investigation of two 911 service outages last year, marking the largest such fine by the Federal Communications Commission. The FCC said that better safeguards in T-Mobile's 911 network architecture would have prevented the outages, which affected almost all of the wireless carriers' 50 million customers nationwide.

http://t.co/kvH0sNNxkA

A Digest Oldie but Goodie from The Geek Corner: 'The Cost of RPO and RTO'

The purpose of availability analysis is to determine how to limit downtime and data loss. Both cost a corporation money and reputation. But improving them also costs money. Improvement generally means adding redundancy to the corporate systems. How does one balance the cost of availability improvement against the savings of reduced downtime and lost data? For every application, the company should set certain objectives for lost downtime and lost data. The objective for lost downtime is called the Recovery Time Objective, or RTO. The objective for lost data is called the Recovery Point Objective, or RPO.

http://t.co/mkNt2XYYWT

CNMI declares emergency

The Commonwealth of the Northern Mariana Islands' acting Gov. Ralph Torres recently declared the CNMI in a "State of Significant Emergency." The declaration allowed the U.S. commonwealth to do what was necessary to respond to and recover from the effects of service interruptions stemming from an undersea fiber-optic cable break the previous week.

http://t.co/iBAWIoLN3P

United pays miles to hackers who spotted IT-system flaws

Two hackers have scored a million frequent-flier miles each on United Airlines for finding security holes in the airline's computer systems. The awards were made under a security program that United started in May. Technology companies have offered so-called bug bounties, but they are unusual in the transportation industry.

http://t.co/pgxRS8m8Wn

The Really Big One

Most people in the U.S. know just one fault line by name: the San Andreas, which runs nearly the length of California and is perpetually rumored to be on the verge of unleashing "the big one." That rumor is misleading. The Cascadia subduction zone, discovered only 45 years ago, runs for seven hundred miles off the coast of the U.S. Pacific Northwest. If the entire zone gives way at once, an event that seismologists call a full-margin rupture, the magnitude will be somewhere between 8.7 and 9.2. That's the very big one. Odds of it happening in the next 50 years are increasing.

http://t.co/AY95tVEqif

United Airlines Grounded By 'Network Fault'

United Airlines has confirmed that a network connectivity issue was responsible for the grounding of many of its aircraft on Wednesday. The network problem resulted in thousands of US passengers suffering delays to their journeys and once again highlights the issue of aircraft security as more and more software and other technology is introduced into air travel systems.

http://t.co/uByrA8DVVU

A software update led to Wednesday's NYSE problem

An incompatibility with a software update and subsequent attempts to fix it were the root cause of a glitch that forced a nearly four-hour-long suspension of trading on the New York Stock Exchange on 8 July. The exchange traced the problems back to an update applied to a single system.

http://t.co/AJ4tBmPknE

NYSE explains why it went down Wednesday

It all comes down to a botched software update. The exchange was prepping for a July 11 industry test that would test the platform's SIP timestamp requirement. As per standard practice, the software update was rolled out to one trading unit. However, the update didn't go as planned; and the communication issues proliferated.

http://t.co/dib0Cqsrls

Participate along with HP and VSI engineers in the monthly OpenVMS Engineering Conference Calls

Conference calls are held with OpenVMS Engineering from both HP and VSI once a month on the third Thursday of the month.

http://t.co/NnoSaT0VjR

Trading Halted on New York Stock Exchange (NYSE)

The Dow Jones Industrial Average took a triple digit hit Wednesday, 8 July, after trading on the New York Stock Exchange (NYSE) was halted for three and a half hours. Exchange officials blamed the shutdown on a "configuration issue" with their systems.

http://t.co/BrIomWqCQg

Register for the Mid-Atlantic Tandem User Group (MATUG) Meeting, Sept. 17, at HP HQ, Herndon, VA.

HP will present the HP HW/SW Product Roadmap, including the latest on SDD storage, NonStop X, YUMA (NonStop/Linux Infiniband integration), and new software features.

https://t.co/WHWBwOiIGp

From the Availability Digest: "A Massive Hack on the U.S. Government"

Starting in mid-2014, a sophisticated cyberattack began siphoning sensitive personal information from the computers of the U.S. Government's Office of Personnel Management computers. By the time the attack was discovered one year later, analysts estimated that the personal information of millions of current and former federal employees had been compromised.

http://t.co/3ZqO8gTMGA

Colt Data Centre Suffers Fire and Power Outage In Milan

Colt's Milan data centre suffered a power outage in early July, knocking its cloud services out for nine hours. Photos from a publishing company affected by the outage showed smoke rising from the building and firefighters on site. The week had seen temperatures in the northern Italian city hit 36C, a factor which could have led to power problems in data centres as the cooling systems worked in overdrive to regulate server temperatures.

http://t.co/7FX6taWDqW

CNMI phone, Internet, banking connections go dark

In early July, a break in an undersea cable disconnected the Commonwealth of the Northern Mariana Islands' phone, Internet, banking and other communications with Guam and the rest of the world. There was no backup system in place. The outage also disabled credit-card purchases, ATM withdrawals, health-care teleconferencing, and all other communications that go through CNMI's only fiber-optic cable connection to the outside world.

http://t.co/jAPmtmtfj3

United flights grounded by computer problem

United Airlines flights resumed on Wednesday morning, July 8th, after they had been grounded worldwide for more than an hour due to a computer problem. United issued a statement saying it suffered from "a network connectivity issue this morning" and apologized to customers for any inconvenience. United said that 4,900 flights were impacted.

http://t.co/2rooxtAnpJ

The Availability Digest has created a series of online & onsite seminars covering a range of topics. Check them out.

We offer the seminars either online or at your facility anywhere in the world. The seminars are presented by Dr. Bill Highleyman, who has presented papers and seminars on high- and continuous availability and has written extensively on the topics. Dr. Highleyman holds several patents in the core technologies required to implement active/active systems.

http://t.co/TUHfFk69bv

Myths and Realities of Data Center Certification

The first thing any data center operator needs to ask when it comes to attaining a Tier III or IV certification for high-availability data centers is how much actual financial risk do the application workloads running in that environment represent.

http://t.co/1IEO5ORHKL

FBI Searching for Mystery Vandal Who Keeps Cutting Internet Cables

The U.S. Federal Bureau of Investigation is investigating a mysterious string of attacks on fiber optic cables in the San Francisco Bay area, including a recent one that severely disrupted Internet service at numerous businesses and residential buildings. At least 11 physical attacks on these cables have occurred in 10 Bay area cities over the last year.

http://t.co/5pdWQtOTfc

Leap Second Causes Sporadic Outages Across the Internet

June 30th's Leap Second addition caused "sporadic outages" in more than 2,000 networks that link machines across the Internet.

http://t.co/WNHwb70dAX

Why the Navy still pays millions for Microsoft's Windows XP

Microsoft stopped supporting Windows XP in April 2014, but the product is still a moneymaker. That's because some customers just can't let go of it. The United States Navy's Space and Naval Warfare Systems Command (SPAWAR), for instance, inked a $9.1 million contract with the Redmond, Wash.-based tech giant in June to keep its XP-based systems afloat.

http://t.co/vJmuVybbny

This is still the hardest space weather problem, and it's a huge threat to our infrastructure

Space weather forecasters have always struggled with predicting the strength of a geomagnetic storm. Why is this the hardest problem? Not only is the source of the eruption 93 million miles away, but geomagnetic storms themselves are one of the most serious threats to our critical Earth infrastructure.

http://t.co/Ga2ODtvXDn

Thirsty California Data Centers Focus on Water Use

California has more than 800 data centers, the most of any U.S. state. Based on that and estimates for water use, the state's data centers consume roughly as much water in a year as 158,000 Olympic sized swimming pools.

http://t.co/9KEUVTW0EF

Why Time Will Stop For a Leap Second

Just as leap years keep our calendars lined up with Earth's revolution around the sun, leap seconds adjust for Earth's rotation. This kind of fine-tuning wasn't much of an issue before the invention of atomic clocks, whose ticks are defined by the cycling of atoms. Cesium-based clocks, one kind of atomic clock, measure the passage of time much more precisely than those based on the rotation of our planet, so adding a leap second allows astronomical time to catch up to atomic time.

http://bit.ly/1fzSM1x

@AvailabilityDig Enjoyed Dr. Highleyman's presentation on Smart Cards at N2TUG! Most interesting and informative!

Thanks, Joan!

http://availabilitydigest.com/seminars.htm

How Do You See Mainframes Faring in the Future?

Read Stratus Technologies' Paul Green's excellent response to our discussion thread in the Continuous Availability Forum on LinkedIn.

http://t.co/I3abbXhQYa

Radar failure in New Zealand temporarily grounds all flights

All of New Zealand's international and domestic flights were temporarily grounded Tuesday afternoon, 23 June, after authorities reported that the nationwide radar system had failed.

http://t.co/2qSpgthAUR

2015 OpenVMS Boot Camp - Sept 27 - 30, Nashua NH

HP OpenVMS engineers and executives, OpenVMS practitioners, analysts, consultants, and other industry professionals will gather in Nashua, New Hampshire (USA) for four days of technical content and peer-to-peer networking.

http://t.co/To0SY1OcYv

Reacting to Chinese hack, the government may not have followed its own cybersecurity rules

In response to China's massive hack of federal personnel data, the U.S, Office of Personnel Management sent e-mail notifications to hundreds of thousands of federal employees and suggested that staff click on a link to a private contractor's web site to sign up for credit monitoring. But those emails were met with alarm by recipients, who worried that the communications were a form of "spear phishing" used by adversaries to penetrate sensitive government computer systems.

http://t.co/1vQmLwhLJn

How a keyboard glitch left 600 million Samsung smartphones at risk of being hacked

More than 600 million Samsung mobile devices, including the Galaxy S6, are vulnerable to a security breach that could allow hackers to take control of the device.

http://t.co/WFJqyTd3Ua

U.S. visa system will be offline until at least next week

A computer problem that has brought down a key State Department system for issuing visas and passports at U.S. embassies worldwide won't be fixed until at least next week. Note: system back online on June 23rd.

http://t.co/0ZV0FPv7y0

Cyberattack deals crippling blow to Canadian government websites

A cyberattack crashed federal government websites and e-mail for nearly two hours on Wednesday,17 June, an incident that raises questions about how capable Ottawa's computer systems are of withstanding a sustained assault on their security.

fw.to/wkw7Vpe