the Availability Digest

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@availabilitydig – Our December Twitter Feed of Outages

December 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.

SpaceX takes a "revolutionary" step toward reusable rockets

A Falcon 9 first stage makes a controlled landing 10 minutes after launch. On December 21st, SpaceX gave us a "revolutionary moment" when the first stage of a Falcon 9 rocket landed upright on a converted launch pad at Cape Canaveral, just a few miles from where it had taken off 10 minutes earlier. It was the first time a conventional rocket returned to Earth intact after delivering payloads (11 small satellites) to orbit. (Blue Origin's New Shepard, which made a similar soft landing last month, is not an orbital vehicle.)

https://t.co/FfLk9BVYZY

Bitcoin Mining Data Center Update

Much is happening in the bitcoin mining data center world, and not all of it is good. While two major players in the space, BitFury Group and KnC Miner, announced big expansion projects, another player, GAW Miners, is going down in flames, the latest in its story being official fraud accusations by the SEC, which called GAW a "Ponzi scheme." While some bitcoin mining data center capacity is leased from traditional data center providers, most of the world's blockchain servers run in massive warehouses quickly outfitted with high-capacity power and cooling systems but not nearly as much redundancy as that designed into regular data centers.

https://t.co/6qjWjufM7x

Case Study: Data Center Infrastructure in Detroit

The Detroit Water and Sewerage Department (DWSD) completed a $6 million data center modernization project that consists of highly automated standardized infrastructure from which applications and data will be deployed and provisioned based on workload demand. Read what the DWSD did and how they did it.

https://t.co/2RAfUeCWBv

The Problem of Inefficient Cooling in Smaller Data Centers

The data center on campus operated by a university IT department; the mid-size enterprise data center; the local government IT facility. These facilities and others like them are data centers about which anybody hardly ever hears. But they house the majority of the world's IT equipment and use the bulk of the energy consumed by the data center industry as a whole. They are usually the ones with inefficient cooling systems, which can guzzle as much as half of a data center's entire energy intake.

https://t.co/ZES5EH8Ne8

Turkish banks & government sites under 'intense' attacks on Christmas holidays

Turkey is suffering from a wave of cyber-attacks on financial and government websites. The attacks intensified over Christmas, reportedly resulting in the temporary disruption of credit card transactions. A video released this week and attributed to Anonymous vowed retribution for Ankara's alleged ties to ISIS. Isbank, Garanti and Ziraat Bank were among the targets.

https://t.co/kNpHYbQagE

No Internet for thousands of iiNet users in WA after 'major' fault'

More than 45,000 customers of Internet provider iiNet have been without services in Western Australia since at least Sunday evening. While updates have been provided through the company's website, no estimated time of restoration has been given.

https://t.co/ResxD7RUJH

RECOVERY TIME CALCULATOR - EVALUATE YOUR RECOVERY TIME (RTO) AND RECOVERY POINT (RPO) OBJECTIVES

This tool can be used to evaluate your recovery time objective (RTO) and recovery point objective (RPO) and provide you with an estimated cost of downtime based on your recovery time.

https://t.co/7PdiEABCZI

Focus shifts to customer outcomes

The pace of change in the enterprise IT space this year has perhaps been more pronounced than ever before, with IT teams across the board recalibrating their positions as the fundamentals of the game change. One key driver of this change is that IT is no longer a skill set cultivated to keep the nuts and bolts of your operation running smoothly in the back end. Instead, it's plugged in directly to customer outcomes and service delivery.

https://t.co/PXrpaRUfq8

From the Availability Digest: "Protecting Big Data – Erasure Coding"

Big Data has changed the landscape of data storage. A company's data is always precious, and the loss of any of it can be devastating to the IT functions upon which the company depends. With Big Data being stored on hundreds or even thousands of disks, how does one protect that data from loss? Erasure codes are the answer.

https://t.co/NrlN6pXKwa

Myths and facts about backup, restore and disaster recovery

With the rise of digital data, changing technology, and common usage of personal devices, the IT world has become ever more complex, with new challenges around every corner. In the wake of such quick changes and complexity, many individuals end up exaggerating the difficulties found within these new systems and thereby begin spreading some major falsehoods within this vast IT sphere.

https://t.co/nkRlyDe49h

Exclusive: MH370 Was Crippled by Sudden Electrical Failure

New data reveals a runaway power outage doomed the 777, supporting the theory that a fire in the cargo hold turned the jet into a flying zombie.

https://t.co/75wMHKzpbW

Google: Our quantum computer is 100 million times faster than a conventional system

Ever since quantum computer manufacturer D-Wave announced that it had created an actual system, there have been skeptics. The primary concern was that D-Wave hadn't built a quantum computer as such but instead constructed a system that happened to *simulate* a quantum annealer — one specific type of quantum computing that the D-Wave performs — more effectively than any previous architecture. Earlier reports suggested this was untrue, and Google has now put such fears to rest. The company has presented findings conclusively demonstrating the D-Wave does perform quantum annealing and is capable of solving certain types of problems up to 100 million times faster than conventional systems.

https://t.co/MuM3SU83Wm

RBS turns away savers in latest glitch

Royal Bank of Scotland has encountered another setback in its efforts to draw a line under a series of scandals after the state-backed lender turned away thousands of savers seeking to access their cash. About 4,500 RBS customers with inactive accounts were told mistakenly that the bank did not hold their funds. The bank is sending out letters of apology this month, and City regulators have been informed.

https://t.co/ohxjhdLZuT

Join the conversation - Continuous Availability vs Zero Downtime - Continuous Availability Forum on Twitter

In the Availability Digest, we talk about "continuous availability." However, we now are seeing the term "zero downtime" more frequently. Is there a difference between the two terms? Which term do you prefer? Join the discussion. We are at 729 members and counting.

https://t.co/BjygkjAcHn

What Should CFOs Ask Their IT Departments For Christmas?

Christmas is a time for giving, so perhaps IT teams will give their CFOs a bit of extra help this year. But with what should CFOs ask for help? Here are some ideas.

https://t.co/tJN6KOVuuM

Digest Mng Editor Bill Highleyman was chief developer of one of the very first modems. A little bit of history. Read "Modem Memories" here.

Data communication has come a long way since AT&T (American Telephone and Telegraph) first introduced it in the late 1950s. Digest Managing Editor Bill Highleyman was recently taken on a nostalgic trip back to those early days while touring the Computer History Museum in Mountain View, California. At Bell Telephone Laboratories, he supervised the development group that designed one of the very first modems (modulator/demodulator) for the transmission of data over telephone lines – the DataPhone 103. He was amazed to see a DataPhone 103 in a display case in the Museum, and the memories returned.

http://bit.ly/1IctoHk

Is Big Data causing huge downtime in enterprise?

By 2020, Gartner expects that there will be 25 billion connected 'things' in use; and organisations need to ensure their technology infrastructures are able to handle the loads that come with big data. The rise of the Internet of Things is providing businesses with enormous opportunities to gain insights like never before, but companies need to make sure they can handle it.

https://t.co/UDm8Vb3LwU

Banking on Change

Sweeping changes in technology are forcing Nigeria's major banks to realign ICT strategies. After years of big investments in ICT to bolster profits by improving efficiency and productivity, they're now stepping up spending on emerging technologies to enhance customer service, strengthen security, and open new markets. But can financial institutions keep up?

https://t.co/XYlddr2sEw

The 911 System Isn't Ready for the iPhone Era

In 1999, Congress established 911 as the nationwide emergency number and called for a system that would use the best technology available to deliver emergency assistance. Now, 16 years later, our emergency response system faces an emergency of its own in the form of outdated technology.

https://t.co/sX2Ym2erxz

Causes of failure

Data centers are failing too often because the root causes of those failures are being kept secret.

https://t.co/rAg2H3mz7j

Top 5 Most Catastrophic Computer Glitches in Recent History

The article includes the stories of Nasdaq/Facebook, Knight Capital, Tokyo Stock Exchange, the Flash Crash of 2010, and the Black Monday of 1987.

https://t.co/FXRFDteu8v

Target's Website Crashes on Cyber Monday, Locking Out Some Users

Target Corp. struggled to handle a surge of e-commerce traffic on Cyber Monday, its biggest day for online sales, and it made the website inaccessible to some users. Target.com offered 15 percent off almost everything on Monday. It brought a flood of traffic that was twice as high as its previous busiest day.

https://t.co/VEBP3YzzbC

How One Line of Text Nearly Killed 'Toy Story 2'

Writing in his book *Creativity Inc*, Pixar co-founder Ed Catmull recalled that in the winter of 1998, a year out from the release of *Toy Story 2*, somebody (he never reveals who in the book) entered the command '/bin/rm -r -f *' on the drives where the film's files were kept. The object of said command is to remove everything from a given location and to remove it quickly. It did its job. 90% of the film was gone, erased "in a matter of seconds." And it got worse. A plan was quickly hatched to restore the data from a regular backup, which meant that only half a day of work would have been lost. But the backup system had failed. Pixar, incredibly, did not have a copy of the *Toy Story 2* files on its servers. "To reassemble the film would have taken thirty people a solid year."

https://t.co/fAiddzGv7b

FedEx Website Goes Down on Nov. 24

It's a busy time for shippers, making it quite possibly the worst time of the year to have an outage; but that's what happened to FedEx for several hours on November 24th.

https://t.co/inxGvELT4i

How to manage the Internet of Things

From smart buildings to intelligent production lines, organizations are rapidly adopting Internet-connected devices to improve performance, reduce costs and transform customer experience. However, there is a massive gap in expectation and language between IT and operational teams deploying the Internet of Things (IoT), not least that these IP-connected devices must be continuously available – in contrast to the five nines break-fix approach to corporate networks. So how can organisations create a single, secure, connected environment?

https://t.co/cFdIx7PvYV

IBM LinuxONE Provides New Options for Linux Deployment

In August 2015, IBM announced LinuxONE. It is anchored by two new Linux mainframe servers that capitalize on best-of-class mainframe security and performance and that bring these strengths to open-source-based technologies and the Open Source community. The move creates greater choice for Linux applications in enterprises where IT is under constant pressure to provide breakthrough systems in areas where the IBM z System mainframe excels, such as analytics and hybrid clouds.

https://t.co/dxyiYtL333

Stay Out of the Dark: Applying Predictive Analytics to Generators

Data centers may be considered the "brain" of a company; but in the event of a power failure, generators are key to keeping that brain running and reliable. The generator is what holds the whole building together during a utility failure, and it is arguably the most critical piece of equipment in a mission critical facility. Despite the significance of generators, some studies suggest generator failure plays a 45 to 65 percent role in unplanned data center power incidents.

https://t.co/hhqNGDebIh

EXCLUSIVE: Russell Simmons Speaks Out on RushCard Glitch

Russell Simmons hasn't slept much since news broke in mid-October that users of his RushCard couldn't access their own money and were locked out of their accounts due to a computer glitch, leaving some unable to make rent payments, pay utility bills or buy groceries for their families. Users began experiencing problems when Simmons' company switched to a new transaction-processing provider, something that he said they've done successfully at least four times.

https://t.co/US0PQd9lFh