

the Availability Digest

www.availabilitydigest.com
[@availabilitydig](https://twitter.com/availabilitydig)

@availabilitydig – Our June Twitter Feed of Outages

June 2014

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.



Nasdaq says making progress on system that led to August outage

Nasdaq OMX Group has made changes to the system that caused a three-hour trading halt in Nasdaq-listed stocks last summer. The system will be more robust, and possible future outages will be limited to 10 minutes.

<http://t.co/locJ7s4lhR>

Here's what Twitter looked like when Facebook was down this morning

On June 19th, Facebook suffered a global outage that lasted about a half hour. The failure drove thousands instantly to complain about the loss of Facebook access on other services such as Twitter. *"Either Facebook is down or Mark Zuckerberg just set everything to PRIVATE."*

<http://t.co/s69QLxiMrs>

Stop fixing every equipment failure in the data center

As the number of servers, storage arrays and network equipment continues to grow, equipment failure is unavoidable. IT pros must consider different ways to come to grips with this guarantee of failure. The next generation of data centers could use a fragile IT methodology -- knowing that equipment will fail but architecting to accept that failure with minimal human intervention.

<http://t.co/u9L9SujhCD>

IBM's New HyperSwap a Head Scratcher for Some

One of the new features that IBM added to its PowerHA suite with the launch of IBM i 7.2 is HyperSwap. It allows a production IBM i LPAR to be moved from one DS8700 SAN array to another and restarted almost instantly. While HyperSwap protects against the failure of a SAN in a single data center, its inability to work in a geographically dispersed manner had led some in the IBM i HA community to question its usefulness in a true disaster.

<http://t.co/ODLs8Y3dHP>

With 'The Machine,' HP May Have Invented a New Kind of Computer

"The Machine" is basically a brand-new type of computer architecture that HP's engineers say will serve as a replacement for today's designs, with a new operating system, a different type of memory, and superfast data transfer.

<http://t.co/5ByPdIe7YV>

Availability Digest Oldie but Goodie: "HP's Active/Active Home Location Register."

The HP Home Location Register is a NonStop active/active system that provides mobile subscriber location and profile information to the cellular network. This system is used by 36 service providers on five continents serving 200 million subscribers.

<http://t.co/ZUqG3s1G63>

Google Using Machine Learning to Boost Data Center Efficiency

Google has built a computer that knows more about its data centers than even the company's engineers.

<http://t.co/Ppdp7jTy5y>

Resiliency: How Superstorm Sandy Changed America's Grid

More than a year and a half after crushing the East Coast electric grid, Superstorm Sandy has proved to be one of the most influential events in the history of the power sector.

<http://t.co/4cq5t8K9V8>

Malicious Advertisements on Major Websites Lead to Ransomware

Malicious advertisements on domains belonging to Disney, Facebook, The Guardian newspaper and others are leading people to malware that encrypts a computer's files until a ransom is paid.

<http://t.co/9GpOOsHROj>

Why the new Obamacare website is going to work this time

A small cadre of young geeks from Silicon Valley and President Obama's election campaign parachuted into the federal bureaucracy to salvage the botched creation of thousands of technocrats employed by 55 different contractors. Officially dubbed Marketplace 2.0, that team now is creating core features of the next generation of HealthCare.gov.

<http://t.co/Mjf9cXCAw8>

The Availability Digest recommends "Flash Boys: A Wall Street Revolt"

Flash Boys: A Wall Street Revolt, authored by Michael Lewis, describes how the once stable and predictable U.S. financial markets became predatory by feeding on the ordinary investor and how a group of dedicated individuals set out to correct the situation.

<http://t.co/iVWqxioCBf>

Bandwidth needs may put a stretched cluster out of reach

When it comes to server virtualization, failover clustering is a mechanism for preventing a physical server failure from resulting in an outage. But what happens if an entire data center fails? Both Microsoft and VMware offer the ability to fail over VMs to a secondary data center via a stretched cluster. However, there are factors that you must consider before you can build a stretched cluster.

<http://t.co/tZkQ65F6Gh>

It Only Takes One Bozo To Kill Your Cloud Data

Think all your data is safe and sound in The Cloud? Yesterday, a system administrator at a cloud service data centre accidentally rebooted every single server at once by accident. The problem wasn't just that some system operator pressed the wrong button but that there wasn't even a "shut it all down right now" button in the first place.

<http://t.co/OioKRwkA9k>

Fat-fingered admin downs entire Joyent data center

Cloud operator Joyent went through a major failure when a fat-fingered admin brought down an entire data center's compute assets. For those not familiar with the cloud, a data center-wide forced reboot on all servers is just about the worst thing that can happen to a provider aside from the deletion of customer data or from multiple data centers going down simultaneously.

<http://t.co/Kh9vshCxRI>

Availability Digest Managing Editor Bill Highleyman presents "Help! My Data Center is Down!" at Korea NonStop User Group, 3 July, Seoul, S Korea.

Data centers are often taken down for hours or even days by events that could never have been imagined. Many of these outages are described, and the use of active/active systems to protect critical applications during such outages is explained.

<http://bit.ly/ThLmEV>

XP still used by one in four PC users

Data from NetApplications - analysed by the Business Insider newswire - reveals that very few Windows XP users have actually upgraded their operating systems despite WinXP going end-of-life in April.

<http://t.co/2KV6Pz8K9v>

Asset managers warned on legacy systems

A study of more than 500 investment managers found that nearly 25% were still reliant on legacy systems. Many of these legacy systems are unable to meet the regulatory reporting obligations demanded by Dodd-Frank, Solvency II, the Alternative Investment Fund Managers Directive (AIFMD), the European Market Infrastructure Regulation (EMIR) and UCITS,

<http://t.co/HBGV7ZG7T5>

\$15m computer shows quantum effects

Scientists says they have obtained the best evidence yet for an important quantum physics phenomenon inside a \$15m computer built by a Canadian firm.

<http://t.co/njchTSc1fh>

IE Exploit Allows Remote Code Execution

Security firm FireEye recently discovered a zero-day vulnerability in Microsoft's Internet Explorer web browser. A zero-day vulnerability is one in which the first attack is made before the developer has become aware of the vulnerability. The vulnerability affects IE6 through IE11. This is significant because these browsers represent 55% of all browsers worldwide.

<http://t.co/NMkM3fNZ3Z>

On world stage, Brazil faces power system weakness

As the World Cup approaches, Brazil faces serious challenges with its power supply. Over half its energy is hydroelectric, and the worst drought in roughly 40 years has left reservoirs dangerously low.

<http://t.co/FO0P1zs4Ch>

We Need to Get Better at Coding

Forty seconds after it launched into the skies of French Guiana in 1996, the Ariane 501, an enormous rocket carrying four satellites, exploded. The catastrophe was caused by a few lines of faulty code that tried to convert a 64-bit number into a 16-bit memory space (the digital equivalent of trying to park a semi truck in a broom closet). We rely on code like that in nearly every aspect of our daily lives.

<http://t.co/wmcxzfzY1>

Unrelated UPS Failures Cause Three NYC Outages for Internap

In an unfortunate series of unrelated equipment failures, Internap recently experienced three outages at its Manhattan data centers in one week's time. All three were caused by component failures in uninterruptible power supply systems.

<http://t.co/zyHLx6Sukk>

Australian Web Host Crazy Domains Irretrievably Loses Customer Data, Offering \$100 Credit to Affected Accounts

In May, according to web host Crazy Domains, an "unforeseen incident in a storage upgrade" resulted in the irretrievable loss of customer data. The company tried to recover the data but maintains that data backup is the responsibility of the customer. While this may be true and is likely something in the user agreement's fine print, it may not be something the less technically savvy customer would be aware of.

<http://t.co/uO6Ce32ble>

Whatever happened to the IPv4 address crisis?

In February 2011, the global Internet Assigned Numbers Authority (IANA) allocated the last blocks of IPv4 address space to the five regional Internet registries. Experts warned that within months all available IPv4 addresses in the world would be distributed to ISPs. Three years later, the American Registry for Internet Numbers (ARIN) is still doling out IPv4 addresses in the U.S. and Canada.

<http://t.co/KIz6a8B6iV>

Researchers find large global botnet of infected POS systems

Security researchers uncovered a global cybercriminal operation that infected with malware almost 1,500 point-of-sale (POS) terminals, accounting systems and other retail back-office platforms from businesses in 36 countries.

<http://bit.ly/1lcSsWI>

Co-op Bank failed IT project beset by management weakness, claims Kelly report

A series of significant management failings were to blame for spiraling IT costs that contributed to the Co-operative Bank's £1.5 billion capital shortfall, according to a damning report from Sir Christopher Kelly. The report highlights the problems encountered as the bank attempted to replace its core banking systems with Infosys' Finacle platform.

<http://t.co/fkQ8ph64QC>

RBS completes batch processing separation to prevent further IT failures

Royal Bank of Scotland has completed the separation of batch processing systems across the individual parts of its business as it seeks to increase the resiliency of legacy IT in the wake of a series of high profile technology failures.

<http://t.co/qGvdNVX8zM>

National Weather Service Kinda, Sorta Explains Its Major Data Outage

The U.S. National Weather Service (NWS) issued a memo detailing the likely causes and lessons learned from the major computer disruption on May 22nd. The disruption knocked out the central automated system through which the agency issues life-saving severe weather warnings. It was triggered by an upgrade to the weather data dissemination system itself, specifically a modification to a network firewall.

<http://t.co/lGfVytLFPr>

Pentagon Police Hit By Catastrophic Network Outage

The agency that manages the Pentagon Police Department and also runs its networks and computers experienced a "catastrophic network technological outage" on January 3rd, and repairs may not be complete until January 2015. A U.S. Defense Department spokesman attributed the outage to the failure of a legacy component.

<http://t.co/8ykpkviUwy>

Bitcoin startup runs your miner for less than you might pay for electricity

Interested in running your own Bitcoin miner? Hashplex runs a data center that will host and operate your hardware for a price little more than the average U.S. resident pays for electricity.

<http://t.co/SXVgMNUYFw>

Big Technical Difficulties at the National Weather Service This Afternoon

On Thursday, May 22nd, the U.S. National Weather Service briefly lost the ability to communicate severe weather warnings and radar data throughout its nationwide system. The outage lasted approximately 32 minutes.

<http://t.co/npKH3RJ9BN>

EBay Discloses Cyberattack, Working with Law Enforcement

E-commerce giant eBay announced in May that cyberattackers hacked into a small number of employee log-in credentials, allowing unauthorized access to the company's corporate databases. As a result, the online marketplace urged customers to change their passwords..

<http://t.co/9x9v219vnk>