

the Availability Digest™

Volume 12
Issue 11

--- achieving 100% uptime

November 2017

The digest of topics on Continuous Availability. More than Business Continuity Planning.
BCP tells you how to *recover* from the effects of downtime.
CA tells you how to *avoid* the effects of downtime.

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Writing

The articles you read in the Availability Digest result from years of experience in researching and writing a variety of technical documents and marketing content. It's what we do best, and we provide our services to others who value high-quality content created by IT specialists. [Ask us](#) about

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Software Development – No Longer Custom

Years ago, when I started The Sombers Group, most software was written to address a specific problem. Software packages to support a range of needs were not available. My team created several software packages, including a payroll package that led to my forming another company, MiniData Services, which specialized in payrolls for small organizations (we advertised that we would do a fifteen-person payroll for \$9).

We also wrote a totalizator package for handling wagering at the Aqueduct, Belmont, and Saratoga race tracks in New York and created our middleware product NetWeave. Sadly, the need for custom software changed, as described in our article in the November issue entitled "The End of Custom Software."

This article and our other stories are examples of what we write for the Digest and for others. If you have an article, a case study, or a white paper that you would like written, we encourage you to contact us. We also provide consulting services and seminars on high- and continuous availability.

Dr. Bill Highleyman, Managing Editor

Case Studies

The End of Custom Software

Back in the 1970s and 1980s, one of my companies, The Sombers Group, specialized in writing custom software packages for customers. Today, software-implemented packages are available to meet almost any computing need. But back then, there was a paucity of such products. The need for software solutions to problems kept about a dozen of our people busy serving a half-dozen customers at any one time.

We programmed primarily using the basic assembly languages of the machines on which we worked. The only alternatives at that time were COBOL and FORTRAN – Java had not yet reared its wonderful head. Most of our work was done on Digital PDP-8s and PDP-11s and on Tandem systems (now HPE NonStop systems).

Sadly, the need for custom programming has passed into history. Existing software packages exist for just about every need. True, thousands of programmers are still kept busy. However, they are working on the packages upon which everyone now depends rather than custom, one-off software projects.

[--more--](#)

Never Again

\$280 Million in Cryptocurrency Lost Due to Bug

Almost \$300 million of cryptocurrency has been lost. However, the money wasn't deliberately taken. It was destroyed by accident. A series of bugs in a popular digital wallet service led one developer to accidentally take control of and then lock up the funds.

The cryptocurrency that was lost was Ether tokens. Ethereum, using the Ether token, is now the second largest cryptocurrency after Bitcoin.

The lost Ether tokens were kept in digital wallets created by a developer calling himself 'Parity.' As Parity was fixing a bug in his wallet, the modification inadvertently left a second flaw that allowed one user to become the sole owner of every single wallet created by Parity. A user, 'devops199', triggered the flaw by accident, giving him possession of \$280 million in Ether tokens. When he realized what he had done, devops199 attempted to undo the damage by deleting the code that had transferred the funds. However, this action simply locked all the funds permanently in the wallets. \$280 million were now frozen, and users were unable to move their funds from these wallets.

Experts predicted that this loss was roughly 20 percent of the entire Ethereum network.

[--more--](#)

Best Practices

California Fires Destroy HP Archives

An archive of historic documents created by Hewlett-Packard founders William Hewlett and David Packard was destroyed by a devastating fire in Sonoma County, California, in early October, 2017. The documents included over 100 boxes of correspondence, speeches, and other documents. They represented the heart of HP historical activities. There were no archival backups.

The collection had been valued at USD \$2 million in 2005. They were part of a total archive worth USD \$3.3 million at the time.

Hewlett-Packard was founded in 1939 in a one-car garage in Palo Alto by Bill Hewlett and David Packard. The garage is now an historical landmark noted as the birthplace of Silicon Valley. It serves as a private museum.

HP initially produced a line of electronic test equipment. In fact, all the test equipment in my electronics lab when I was a teenager bore the HP label. In the early 2000s, HP started producing PC systems. From 2007 to 2013, HP was the world's leading PC manufacturer until Lenovo passed them.

[--more--](#)

Availability Topics

Fire Extinguishers Can Cause Data Center Outages

There have been many cases in which a fire-extinguishing system has caused a data center to fail, even when there was no fire. The problem occurs when the system undergoes a test. The noise of the sirens can be loud enough to damage hard disk drives.

Clearly, fire-extinguishing systems are needed in our data centers. But what can we do to prevent the kind of problems that we describe? In this article, we look at examples of such outages, delve into the underlying problems, and suggest ways to mitigate the damage that a fire-extinguishing test can cause.

[--more--](#)

Tweets

@availabilitydig – The Twitter Feed of Outages

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.

Now with our Twitter presence, we don't have to feel guilty. This article highlights some of the @availabilitydig tweets that made headlines in recent days.

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