

MACHINE MEMORIES

BY SEAN GALLAGHER

The technology industry is like a goldfish. It somehow manages to advance itself through the water from year to year, but it seems to lack any memory. How else do you explain phrases such as traditional

Web application, or marketing people who talk about virtualization as though it were something VMware invented last Tuesday at a wild coding party?

Everything in information technology is derivative. And so, it seems, are the reasons why technology companies fail. A quick survey

of advertisements from Federal Computer Week's first two years of publication is like a walk through a graveyard of bad business decisions, technology dead ends and corporate hubris.

But technology companies never really die. They just get acquired and become someone else's legacy problem.



View an online slide show of vintage advertisements from 20 years of Federal Computer Week issues at www.fcw.com/specials/ads.



Now you can do more—anywhere. Because the LORAL 3100T COMPAQ PORTABLE 286* possesses capabilities beyond most desktop personal computers. It has the power and speed that power users need. It complies with NACSIM 5100A standards. And it reflects the innovation and mark of quality characteristic of COMPAQ.

Because it has the powerful 80286 microprocessor, no other portable computer runs the most popular business software faster. In fact, you get features and performance beyond the IBM® PC-AT™—their most powerful desktop. So it runs complex pro-

grams with ease, especially number-intensive programs when you choose the optional 80287 math co-processor. And because it comes with a handle, you get the utmost in full-function portability.

In its TEMPEST Accredited configuration, there are *three* internal storage devices. Along with a 1.2-Megabyte or a 360-Kbyte diskette drive, there's also a *removable* 20-Megabyte fixed disk drive—that's twice as much removable storage as you can get on most TEMPEST desktop computers. So it's perfect for handling large databases or complex engineering programs, with

room left over for other applications. And because the fixed disk drive is a removable, self-contained unit, it can be put in a secured location when not in use. The third storage device, an internal fixed disk drive tape backup system (*exclusive* to our portable), protects data on pocket-sized cartridges that hold up to 10 Megabytes. By simply purchasing extra fixed disk drives and cartridges, several users can share the computer without sharing their data.

Interfaces for a parallel printer and asynchronous communications are built in, as is a 110/220 voltage switch. Such

The world's most powerful portable personal computer is now TEMPEST Accredited

Introducing the LORAL 3100T COMPAQ PORTABLE 286 Personal Computer

design is clear evidence of thorough COMPAQ engineering.

Need more evidence? How about compatibility with the most popular hardware and software written for IBM Personal Computers. High-resolution text and graphics so you don't need a second monitor. And shock-mounted storage devices to help prevent data loss.

The LORAL 3100T COMPAQ PORTABLE 286 is so versatile you'll ask yourself how you ever managed without it. But you'll never question its reliability. It has the same ruggedness and strength present in all COMPAQ Computers. Plus, it's TEMPEST



Accredited and possesses the features required by security-conscious users. And you get the uncompromising quality that makes COMPAQ the world's leading maker of full-function portable personal computers.

The LORAL 3100T COMPAQ PORTABLE 286 Computer is listed on the Preferred Products List (PPL) under the name LORAL Electro-Optical Systems.

For a free brochure or the name of the Authorized COMPAQ Computer Dealer nearest you, call toll-free 1-800-237-4074 and ask for Operator 24D.

LORAL 3100T
COMPAQ
PORTABLE 286®



It simply works better.

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THE COMPAQ/LORAL TEMPEST-APPROVED PORTABLE

If you knew what to look for, it was easy to spot Compaq Portable users in the late '80s. They had one arm slightly longer than the other from toting the closed contraption some of us came to know as Satan's Sewing Machine.

The Loral-modified Compaq Portable 286, like the Compaq Portable II it was based on, stretched the definition of the word portable. At almost 30 pounds and with no battery, this device got lugged only as far as from one desk to another—or if you had an extension cord, not even that far.

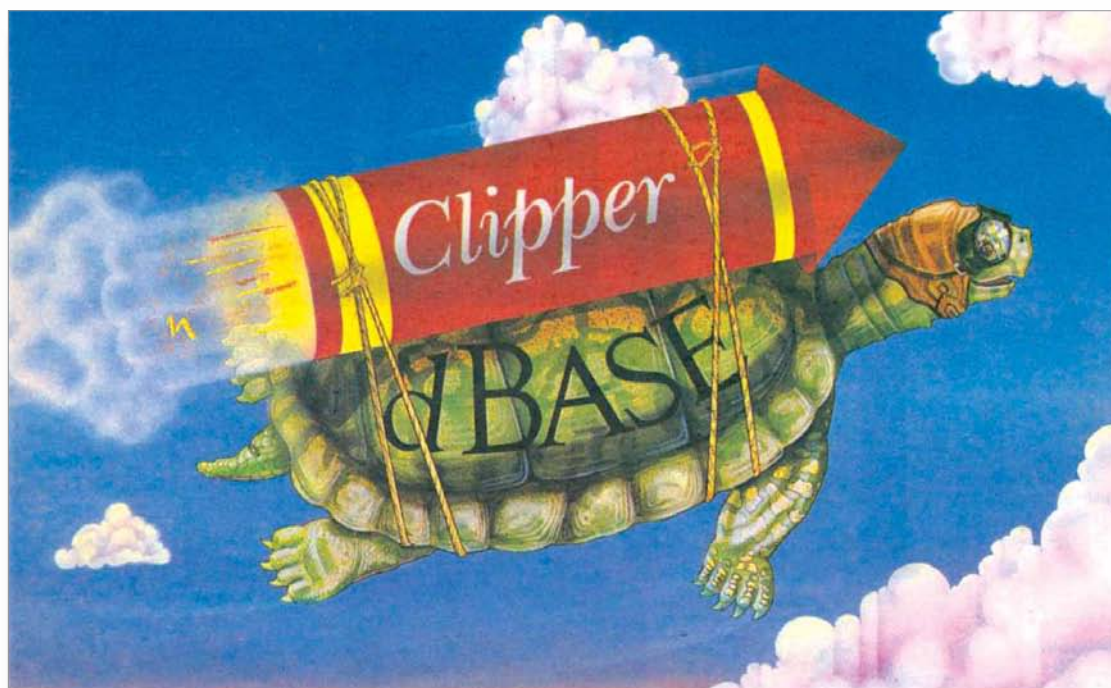
But the Compaq Portable wasn't intended for light office work. With its integrated 9-inch monitor, this was a machine for serious engineering work. And in 1987, it wasn't much of a stretch of the truth to advertise that a 20M hard drive would be ideal for large databases or complex engineering programs.

NANTUCKET'S CLIPPER DBASE COMPILER

Just the word Clipper is enough to send me into fits of nostalgia. I had dabbled in programming before being introduced to Ashton-Tate's dBase database software and the pseudocode compiler that a band of escaped Ashton-Tate developers had devised. But it was Clipper that turned me into a developer. Before Microsoft's Visual Basic, PowerSoft's PowerBuilder and Borland's Delphi, the dBase and Clipper combination brought rapid database application development to the world.

It wasn't made for multiple users and the dBase programming language was a bit eccentric. But when I built my first trouble-ticket tracking system with Clipper, none of that mattered. All I knew was that it was better than having to buy a dBase III license for every person who used a database and worrying about someone inadvertently getting to the dot prompt instead of running the program.

Computer Associates – now just CA – acquired Nantucket, and Clipper became CA-Clipper before fading into the background. But for die-hard Clipper fans, it lives on in a number of open-source and commercial tools.



Turtle Souped

If it seems that the more you have to do, the slower your database wants to do it, there's a very simple solution.

The Clipper™ compiler from Nantucket.

Just run your dBASE™ applications programs through Clipper and watch them fly. Then as your business grows, Clipper

will grow with you.

Clipper already includes far easier networking and there's no extra charge.

It has an extended language that makes applications easier than ever before. We've included commands for quick menus, fast screens, arrays, more fields and memory variables and other enhancements. Or if that's not enough, with Clipper you can even define your own functions and customize dBASE so it does exactly what you want it to do.

And once your programs are compiled, you can distribute as many copies as you like with full source code security and no licensing or runtime fees.

Database users are saving time and money with Clipper at 3M and Touche Ross, Exxon and TRW, and tens of thousands of businesses around the world.

To find out more, contact:
Nantucket Corp., 12555 W. Jefferson
Blvd., Los Angeles, CA 90066.

Or call (213) 390-7923 today.

Clipper can put you on the fast-track today.



 nantucket®

© Nantucket Corporation 1987. Clipper is a trademark of Nantucket Corporation; dBASE is not. In Europe: Nantucket Corporation (Europe) 2 Bluecoats Avenue, Port Street, Hertford, Herts SG14 1PB Telephone 0992 554621.

If you were in the Defense Department in the late '80s and early '90s, you couldn't go three feet without tripping over a Z248. Aside from a little problem with the monitors spontaneously combusting, the things were nigh indestructible. Well after they had become obsolete – and after Zenith had sold its computer business to Groupe Bull – those rugged metal boxes remained stacked in many a passageway, waiting for some poor soul to figure out how to get rid of them.

One thing I distinctly remember about my introduction to Xenix and SCO in those days was that SCO had the best hold music of any phone support line I had called at the time. And it was a good thing, because I spent a lot of time listening to it.



UNLOCK ITS FULL POWER WITH SCO XENIX - NOW!

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DATA GENERAL

The Boston Red Sox may have broken the Curse of the Bambino in 2004, but another kind of curse was put on Massachusetts' Route 128 Corridor in the late '80s and early '90s. The technology giants of the Boston beltway – Data General, Digital Equipment, Wang Laboratories and Apollo Computer – were overtaken by the humble PC.

By the time Data General placed this ad in 1988, the writing was on the wall for the company. It had missed the boat on the microcomputer revolution, and Unix workstations were making its 16-bit minicomputers obsolete. DG made its own Unix workstation play in 1989 with the release of the AViiON line and revolutionized disk storage with its CLARiiON disk arrays.

But in the end, it didn't matter. EMC acquired DG, and all that remains of the company's legacy is the CLARiiON brand name on storage arrays and the dg.com domain name.

**"The
Data General
difference:
they give
me more."**

**Data General offers
a real understanding of the special needs
in government systems.**

Data General gives you more in computer systems for government.

A wide range of powerful and highly reliable mini-computers, that are fully compatible. A truly open architecture, with industry-standard languages, communications, and compatibility in multi-vendor environments.

Off-the-shelf systems and applications to help increase productivity without wrecking your budget. Custom solutions from prime contractors and systems integrators, to give you more flexibility. Superior service and support across the board.

And in these times of fiscal restraint, our tradition of leadership in system price/performance means with Data General you can do more for less. Whether you have 4 users or 4000. From word processing and organizational productivity to C/I and embedded systems, talk to Data General.

To find out how Data General can make a difference for you, send us the coupon below. Or call: 1-800-DATAGEN.

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☐ Prime contractor ☐ End user ☐ Systems integrator

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Schedule C GSA Contract: GS00K87AGS5862

HAYES SMARTMODEM

Back when the Internet was still called ARPAnet by the few people who used it, we had modems. Some of you might still have them in your laptops. One agency site I worked at in 1991 had shelves filled with nearly a hundred Hayes modems configured to support remote connections to its terminal servers.

Hayes was a technology leader in the realm of modems. The company invented the command set that is used with most modems today. At about \$1,100, the Hayes V-series Smartmodem 9600 was the Cadillac of modem technology in 1988, offering 9,600 bits/sec in both directions at the same time. This was what modem geeks like me called full duplex.

As Hayes started to lose its edge in the business and modems became more of a commodity, the company made a bet on the next big thing in data-comm – ISDN. In the early '90s, that seemed like a pretty good bet. But ISDN never took off in the United States, and Hayes never recovered its footing. Killed by DSL, the company went bankrupt twice before it was finally liquidated in 1999.



A MODEM THAT IS TWICE AS GOOD AS IT LOOKS.

It says 9,600 bps. But for this modem, transmitting data at 9,600 bps over dial-up lines isn't the half of it.

Its built-in data compression can boost throughput to 19,200 bps. While error-control prevents loss of data.

With no effort on your part – no selecting

protocols, no compressing files.

A V-series Smartmodem 9600™ can even take the place of two modems. Because it communicates in either synchronous or asynchronous mode.


All of which makes our 9600 at least twice as good as it seems. Or, looking at it the other way,

more than double your money's worth.

For GSA schedule information, call the Hayes Government Sales Office at 202-624-7214 for the name of the Hayes Authorized GSA Reseller nearest you.

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Hayes



It's
time
we shed
a little
light on
what
we're up
to.

For years you've known VM Software as "The VM Experts"—the #1 source of data center management software for VM environments.

Today we're more committed than ever to the needs of VM users. And we're exploring a whole new range of ways to help—both inside the data center, and outside.

Some of these new directions have even taken us beyond VM itself, to the complex world of multi-operating-system networked environments. As these environments become more common, the need for new kinds of systems management tools becomes critical. And we are now providing the first of these tools, with many more to come.

What lies ahead? A continuing stream of innovation across four product areas with crucial implications for VM and networked environments: Data center management. Relational technology. Network data movement. And network management and administration.

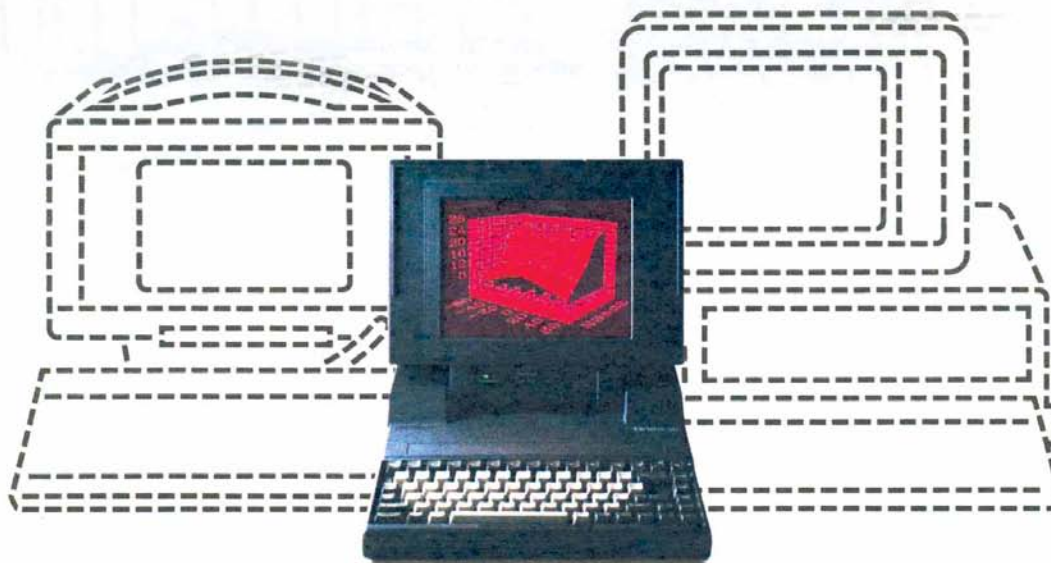
We believe these directions are in sync with your own evolving needs. As those needs continue to evolve, rest assured that we will be there with products and technology you can count on. For more information write or call VM Software, Inc., 1800 Alexander Bell Drive, Reston, VA 22091, (703) 264-8000.

VM SOFTWARE

When companies run ads such as this — "It's time we shed a little light on what we're up to" — and don't mention any of their products, it's a sure sign that they aren't quite sure themselves. With the world running as quickly as possible away from mainframes, VM Software found itself in just that situation.

VM Software made data center management software for IBM's VM mainframe environment, including storage and backup management tools. Its VM:Backup and VM:Director were — and still are — well-regarded technology. And with IBM finding all sorts of ways to keep the z Series systems and VM kicking — even handling virtual Linux sessions — there's a whole new set of uses for such products.

Although VM Software's products are still alive, VM Software itself has gone to where it seems all niche technology companies go when they die — into the belly of CA. This ad mentioned the company's efforts to move into multioperating-system networked environments, but VM Software didn't quite survive the move because it couldn't compete with companies such as CA or Tivoli.



Finally. A Portable Designed To Break The Mold, Instead Of Your Back.

Portable computers fit a predictable pattern. The more powerful they are, the less portable they are.

With one magnificently small exception. The T3100/20.

It's the best shape power has ever been in. A smaller, slimmer profile that's tailored to you, instead of the other way around.

Yet inside this sleek 15-pound package are 640KB of RAM and a built-in 20MB hard disk. All driven by an 80286 microprocessor, the same CPU that sparks the IBM® PC AT.*

Its gas plasma screen is so bright, it looks like a full-size CRT display. Which, by the way, you can easily plug into the T3100/20's standard RGB color port.

MS-DOS® 3.2 is standard. So are parallel, serial and 5¼" external drive ports. And a soft carrying case.

With every T3100/20, we'll include free copies of Lotus® Symphony** and Lotus Metro*, two of the world's most popular programs, for the world's

most popular portable computer.

You can also add a 1200 bps Hayes®-compatible modem, a five-slot IBM-compatible expansion chassis, 2 megabytes of extended memory, and a numeric keypad.

The T3100/20 is backed by Exceptional Care,** our promise that if we have to fix your computer, we'll fix you up with another one while you wait.

All of which leads one to a small dilemma. How to regard a machine that changes forever the way the world thinks about portable performance.

You could think of it as a desktop on a crash diet. Or the muscle of an AT without the bulk. Or simply as *PC World* put it: "A small miracle."

Call 1-703-790-8080 for the Toshiba computer and printer dealer nearest you. He can show you how to enjoy all the advantages of power.

With none of the burdens.

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In Touch with Tomorrow
TOSHIBA

Toshiba America, Inc. Information Systems Division

TOSHIBA

In 1988, selling anything with the Toshiba name to the U.S. government was a challenge, to put it mildly. In 1987, Toshiba was charged with selling technology to the Russian Navy's shipyards to make their submarines' propellers quieter and harder for U.S. sonar to detect. Some estimated that Toshiba's perfidy would cost the United States more than \$30 billion to restore its strategic edge.

Two senior executives at Toshiba were arrested, and the U.S. government imposed sanctions on the company. The Defense Department froze all its existing contracts with Toshiba. The House passed a resolution that banned the sale of Toshiba products at base exchanges, and several members of Congress held a Toshiba product-bashing party.

Toshiba undertook a massive campaign to apologize for the company's transgression, and the attention of politicians swerved elsewhere.

However, given the institutional memory at many government agencies – especially at DOD – even now it's not exactly a level playing field. But at least Toshiba is still in business.

Gallagher is editorial director of TechTarget's Channel Media Group.