

Volume 8, Number 5, 1999

THE HP Palmtop Paper

U.S. \$7.95



HP Discontinues 200LX Nov. 1, 1999
Palo Alto, California. July 6, 1999

NEWS Flash!

200LX LIVES!

*"Reports of my death have been greatly exaggerated."
-Mark Twain*

New Software, New Upgrades Keep Coming!

BACKLIGHTING

...a progress report



PLUS...

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- **PROFILE: Using Your Palmtop to Achieve Financial Independence**

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Editor's Message



Eulogy for A Palmtop

On July 6, Hewlett-Packard announced that it would cease production of the HP 200LX and HP 1000CX computers as of November 1, 1999. We anticipated that HP would pull the plug on the Palmtop sooner or later, but we hoped that the announcement would come later rather than sooner.

Nothing lasts forever and, in the computer business, software and hardware seldom lasts for more than a couple of years. It is to the credit of the HP Palmtop that it lasted for seven years. During its product life-time it led to the creation of at least a dozen third-party companies, countless users groups and an active online community. It provided material to fill fifty issues of *The HP Palmtop Paper*, a book, and almost a hundred disks and CDs full of information and programs that stretched the machine to its limits and beyond.

The only thing that has passed away is Hewlett-Packard's presence in the Palmtop market. What endures is the Palmtop itself. Thaddeus Computing plans to continue to support the machine and its users for at least three years.

The word "eulogy" means to speak well of something. So this issue of *The HP Palmtop Paper* like every issue of PTP is a eulogy for the Palmtop. We continue to speak the praises of those who designed the machine and brought it to market. Even more so, we eulogize the hundreds of people who have added value to the Palmtop with new software and hardware. We eulogize those who contributed their time and expertise to make the Palmtop a "true personal computer."

In this issue, I introduce the topic of Artificial Intelligence on the Palmtop. This is something that has not been mentioned in the context of a handheld computer but it seems like a natural place for this kind of application.

Robin Clarke's article on using XTreeGold on the Palmtop shows that there is yet another tool to manage all the files on our favorite machine.

Paul Merrill, a former editor of *The HP Palmtop Paper*, tells how he uses his Palmtop in his occupation of renovating older dwellings and then putting them back on the market.

In his User to User Column, Hal Goldstein writes about the first attempt to put DOS software in a Windows CE machine and offers the brightest idea yet for the Palmtop: backlighting!

Ed Keefe

The HP Palmtop Paper

Increasing Your Personal
Power By Expanding Your
Palmtop's Potential

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The Beginning of the End of an Era

Hewlett-Packard will stop production of the HP Palmtop on Nov. 1, 1999.

By Ed Keefe

In June, a memo appeared on the HPLX-L mailing list and, from there, went out to all the members on the list. The memo said that Hewlett-Packard planned to discontinue production of the 200LX and 1000CX as of Nov. 1, 1999!

Palmtop users anticipated that the announcement was coming but HP had indicated, in private communications, that they would not make this decision before the end of the year.

Needless to say, the memo generated a rash of responses from long time Palmtop users. Many of the people who read the memo responded with letters to HP arguing that it was not in the best interests of the company to pull the plug on the only available DOS Palmtop.

In spite of arguments to the contrary, HP made the announcement official on July 6 in a press release posted on the HP Web site at www.hp.com/jornada/news/discontinue200.html (see sidebar on page 4).

On July 7, the New York Times featured an article by Steve Headlam on the demise of the HP 200LX. The article referred to the Palmtop as a "cult classic" and quoted the remarks of several Palmtop users including Hal Goldstein, publisher of *The HP Palmtop Paper* (see sidebar on page 3).

At about the same time CNet News posted a story about HP's decision to stop producing the Palmtop which, they mistakenly claimed, had

been on the market for only 2 years (see sidebar on page 5).

Reactions from Palmtop Users

Within hours of HP's posting of the press release, the news spread throughout the Palmtop community. The responses from users ranged, in tone, from grudging acceptance to outright anger: in other words, the classic reactions people experience at the death of a friend. For a sample of some of these reactions, see the end of this article.

What Does It All Mean?

After a flurry of reactions, the online user community admitted that the announcement really didn't matter in the short run. Life goes on and so does the Palmtop.

In the short term, it means that HP will not be producing an upgrade to the HP 200LX. The hoped-for successor to the HP Palmtop, a small PC with more than an 80186 processor, more memory, backlit screen, etc. will not be forthcoming from HP.

In the short run, the announcement means that, if you intend to use the Palmtop for several more years, it would pay to order a second (or third) machine that can be tucked away where it will be safe and ready to go. Granted the HP Palmtop you have will probably last for several more years of normal use. However, consider what your choices of palm-sized computers would be if your Palmtop were lost,

stolen or irreparably damaged. If you want to buy a new Palmtop, now is the time to do it before the supply runs out. Used, like new, Palmtops should be available for the next three years.

In the long term HP wants you to buy one of their Windows CE machines. The announcement from HP indicated that HP 200LX users would want to "upgrade" to one of the "great" handheld devices in the HP Jornada line.

This upgrade appears to be a sensible choice for a casual user of the HP Palmtop. Most casual users of the HP 200LX run their machines in much the same way that they ran their HP 95LX. They get good mileage out of the Appointment Book and Phone Book. They typically do not venture into the realm of custom databases, elaborate spreadsheets, electronic mail or add-on DOS and System Manager programs. Few have used HP Calc beyond an occasional foray into the TVM application. In short, their investment of time and effort in the HP Palmtop is minimal. This is as it should be, given that most people who bought an HP 200LX are busy people who may have little computer knowledge. The Jornada handheld would let them do much of what they do with their Palmtop and they could connect to the World Wide Web and send and receive e-mail "out of the box." They might also enjoy the eye-catching, color screen.

However, for power users, the suggestion that a Windows CE machine is an "upgrade" is ridiculous. Most power users have spent time, money, and effort to push the Palmtop into areas where it was not meant to go. Consider something like Software Carousel that will let you have up to 12 versions of the Palmtop in one machine. Consider that the Palmtop community has gathered over 1500 programs that are known to work on the machine. Consider that you can now have up to 96 MB of disk space in the machine. Consider that others have spent hundreds of thousands of dollars for custom designed, vertical market software. Stockbrokers, realtors, insurance sales people, railroad conductors, engineers and people in the medical profession have all come to rely on their HP Palmtop. Many of their specialized applications will not run on a standard WinCE machine. A full upgrade would mean additional expense and a long delay in coming up to speed yet again.

Can Others Pick Up the Ball Dropped by HP?

The idea that there will never be an upgrade for the Palmtop inspired several users to start designing such a machine on their own. The HPLX-L mail list has gathered a "wish list and several members on the list are looking at costs. The eventual outcome could be a "request for proposal." There is no promise implied that such a machine would ever be built. It does show that there is an interest in an advanced machine for people who want a truly personal computer and not just an attachment to Windows and the Internet.

How Will This News Effect Thaddeus Computing?

We, like a lot of Palmtoppers, realize that we have benefited from the best "personal" computer that has ever been built. We have yet to see anything like the Palmtop's PIMS in any other machine—be it a desktop or handheld PC. Nowhere else in the

Comments on the New York Times Article: Hewlett-Packard to Shut Down Production of a Cult Favorite

We were unable to secure permission to freely quote the full text of the article by Steve Headlam. In place of the article we offer, here, selected portions of the article and a commentary on what the author wrote about the demise of the HP Palmtop.

Steve's opening remarks compared the incredulity of HP 200LX fans, at the news that the Palmtop would soon be gone, to the incredulity of some Elvis fans. Like fans of the King, Palmtop fans just can't believe that the King is gone. (Ed: *I've known the Palmtop and I've lived with the Palmtop for six years and, trust me, the Palmtop is not Elvis. Yes, HP will soon be withdrawing from the market, but the Palmtop will live on.*)

Steve quoted Kevin Havre, Hewlett-Packard's technical marketing manager for North America who said "I haven't had to work to sell one in two years. It has one of the most loyal followings I've ever seen. The Palmtop was designed to work as a sole computer, not as an appendage to a desktop. It's the smallest PC. The Palmtop was a PC. A full PC. Period." (Ed: *To me this is the most revealing quote in the article. From the lips of an HP manager, we now have an admission that HP did little or nothing to market the Palmtop. If they had, you would probably not be reading this article.*)

The NY Times article also quoted Hal Goldstein, publisher of *The HP Palmtop Paper*: "The Palmtop's size and versatility made it so popular, particularly among doctors, engineers and brokers. The applications were brilliant. You could customize the

database so easily." Its fans created what he described as a "Linux-like library of hundreds of applications" (www.palmtop.net), including a drug formula program for doctors and another that allowed users to turn the horizontal screen on its side to read a book page.

Yet another quote came from Jeff Johns, a deputy sheriff with the Jefferson County Sheriff's Department in Birmingham, Ala. Jeff claimed that besides doing business with his Palmtop, e.g. running criminal checks on his 200LX, he rigged it up to an antenna made of coat hangers, then to his police antenna, to talk to the Mir space station. "How many policemen do you know who exchange messages with cosmonauts while driving around in their squad car?" (Ed: *Like the HP Palmtop, the MIR is also being put out of business. However, it's being replaced with something equally, or more, useful. Would that we could say the same thing about HP's commitment to "true, personal computing."*)

The final quote in the article came from Walter Francis, an assembly line operator in Kentucky, who described his Palmtop as "a computer that can do everything a desktop can do. It fits in your pocket and runs for weeks on two AA batteries." He was less magnanimous about Hewlett-Packard's decision to discontinue the line. "Most users of the DOS LX Palmtops abhor the Windows CE interface. For us, there is no comparing our sleek and fast interface with the eye candy interface Win CE provides."

handheld market is there such a flexible and powerful database program and a standard spreadsheet. Nowhere else is there the equivalent of HP Calc with its Solver function.

When we stop to think about it, the HP Palmtop line of personal computers has provided us with enough insights, tips, tricks, reviews, and pro-

files to fill 50 issues of *The HP Palmtop Paper*. When we consider that most of the material for the newsletter came from enthusiastic and knowledgeable users, we realize that Steve Headlam may have been right. We've seen the makings of a cult. However we'd like to change the word "cult" to "subculture." The Palmtop subculture

stands for excellence in personal computing and the idea that smaller is indeed better.

Sad to say, the computing world in general, and handheld computers in particular, have become part of the culture epitomized by fast-food restaurants and television shows. That culture can be summed up in two words: "consistent mediocrity."

We fear that we will lose this subculture as the Palmtop era fades. To forestall that eventuality, we plan to continue supporting the HP Palmtop with repairs, upgrades and the sale of new and like-new, used Palmtops for as long as Palmtops and parts are available. We anticipate, based on our experience with the after-market for the HP Portable Plus laptop, we should be able to provide this service for three years or longer.

In the ever changing world of computers we hope that, by then, someone at HP will decide that it's time to return to a quest for excellence rather than meddling with MS mediocrity.

Users' Reactions to the Announcement:

A Sad Day

If HP headquarters were nearby, I'd protest by melting down a Jornada on their steps and recasting it as a fishing weight (on 2nd thought maybe the recasting is unnecessary), while wearing my 200LX serial cable wrapped as a black armband.

—Longden Loo
Longden_Loo@CANDLE.COM

Thanks for the Great Ride!

Wherever Everett Kaser (design team member and onetime spokesperson for the HP Palmtops) may be, I send him thanks for the technological marvel that he and his team produced at Hewlett-Packard. And I think we owe a debt of gratitude as well to Hal, Ed, and their colleagues at Thaddeus for picking up the slack in HP's support for this machine, and

Text of HP's Announcement: Hewlett-Packard Company to Discontinue DOS-based Palmtop Series

The HP Jornada Family Provides a Great Windows CE Color Handheld alternative for discontinued DOS-based Palmtops

Hewlett-Packard Company today announced that its line of DOS-based Palmtops (the HP 200LX and the HP 1000CX) will be discontinued effective November 1, 1999 as HP migrates its line of Palmtop PCs to the more powerful and flexible Microsoft Windows CE operating system.

We encourage existing DOS-based Palmtop users to upgrade to the HP Jornada family of Handheld PCs, which use Windows CE. These color devices offer a broad array of features and opportunities to develop and run applications.

For customers transitioning from a DOS-based HP Palmtop PC to the Windows CE-based Jornada line, HP offers tools to assist in this migration*. Windows CE more easily integrates into a Microsoft Windows 95/98 and Windows NT computing environments.

To make the migration process a breeze, HP has some tools for cus-

tomers and developers:

- You can Purchase the HP 200LX still at the HP Shopping Village or through Normal Resellers
- HP PIM Translation utility to transfer your HP 200LX data effortlessly to an HP Jornada handheld! *
- DOS developers, check out Windows CE developers' resources.
- Need to know more about the Jornada family?
- Still have questions? Check out our Q&A.
- Not available for some regions outside North America please check with your local HP Office.

* EDITOR'S NOTE: HP PIM Translation Utility (for HP devices ONLY). This utility imports personal information manager (PIM) data (contacts, calendar, and task data) from an HP 100/200LX Palmtop PC or HP OmniGo Organizer into Microsoft Schedule+7.0a on your desktop PC. This allows transfer of PIM data from your older HP Palmtops to your HP CE handheld PCs. Refer to your user guide for more information.

enriching our appreciation of it year after year. Also, to the Webmasters — every one of them; the shareware and freeware authors who added enormously to the already vast body of DOS software available to run on the 200LX; the late and lamented ACE Technologies, and all the other after-market providers; the leaders of the Palmtop forum on AOL; and the members of HPHAND and the HPLX List.

We are the winners here, because we have a stable piece of equipment that will last us for years and continue to serve many useful purposes. You simply cannot say that about a lot of the hardware and software that has come and gone. Let the bigwigs at

HP pursue their ill-advised marketing concepts. Let Micro\$oft have this round. They are no longer relevant to us. Forget about them. The world is too much fascinated by trivialities as it is. We are powerful. We are productive and happy people. We are satisfied that we have the best that the industry has offered to us thus far. I cannot think of a better place to be.

—Roger Feinman
Feinmanr@AOL.COM

Reincarnate the Palmtop but Make it Better

Is anyone really that surprised? This day has been coming for about two years. But to me, it comes as a

note of freedom.

Released from the shackles of active service, the 200LX will be even more free to evolve on its own away from its parent company. People now know that there will never be a factory-supplied backlight, or more internal RAM, or a motherboard upgrade. Therefore, we can sink the money in ourselves. We won't be competing with HP.

This freedom also means responsibility. If you want to continue enjoying your Palmtops as long as possible, it will mean money. I suggest the founding of a Project Magic-like fund that will keep R&D going in companies like Thaddeus and Times2 Tech. Things like 486 motherboard upgrades and backlights are ready for the final stages of development but are limited by money. Why not donate to the cause? It has the potential to help all of us.

We must also work together on software. I have started the sys|x project (details on news.hplx.net) which will provide a common software base.

System Manager, which will provide the programming freedom required to produce programs for large-scale word processing and Internet connectivity. Sys|x will, if completed, eliminate the System Manager and obsolete PAL, making things faster and more efficient in the process. We need open source, free software to make this happen. Most of all, we need to pull together. HPLX-L, it seems to me, is a very loosely knit bunch of people. We need distinct areas of expertise to immortalize this Palmtop. Programmers must unite and write sys|x and its support applications. Hardware vendors must come up with the funds to complete their upgrade projects. And users must be willing to realize the delicate position the Palmtop maintains as a result of the hardware and software. Unite!

Programmers specifically should come to news.hplx.net's group "hp200.programmers.asg" for details

Text of CNET News Article:

Two Portables Fall Victim to New Trends

Two early versions of small, handheld computers are being discontinued, products of the ongoing struggle to design the perfect ultra-portable.

Hewlett-Packard and Toshiba said this week that they are phasing out the 200LX Palmtop PC and Libretto mini-notebook, respectively. They will be replaced by newer, faster, and better-looking systems, the companies say.

The demise is part market forces, part changing technology.

Many of today's handheld computers are miracles of industrial design, often featuring large color displays and near notebook-size keyboards. But it wasn't always that way. Early versions of these mid-size handhelds often sacrificed function for weight, sometimes resulting in awkward devices that were difficult to use.

Hastening their demise are plummeting component prices. As a result, former luxuries such as large screens are increasingly becoming standard.

Designing any portable device is fraught with potential stumbling blocks: It is no easy feat to cram most of the components of a full-featured notebook computer into a device half its size without sacrificing function. Moreover, it is difficult to predict which design will catch on with consumers. Franklin's credit-card size Rex device has failed to live up to the hype surrounding its release and the company has said it is considering discontinuing the product. Palm Computing's PalmPilot, on the other hand, has struck a consumer nerve and soared in popularity.

Adapting to the latest version of an operating systems also takes its toll. As Microsoft has upgraded Windows CE — the company's stripped-down system for handhelds,

TV set-top boxes, and other devices—to support larger and higher-quality displays, the original versions of "clamshell" portable computers have suffered from lackluster sales.

Products released last year, for example, offering large color displays and keyboards resembling those of notebook computers, have outsold these earlier devices, analysts say.

"What we try to do is take the technology that is available at the time and build the best possible ultra-portable that we can," said Mike Stinson, vice president of product marketing for Toshiba, which will begin phasing out the Libretto this fall. "We feel like the Libretto was very successful."

Instead of the Libretto, Toshiba will tout its Portege system, which is more often used as a full "desktop replacement" system than the Libretto, Stinson said. Toshiba customers prefer the 3-pound Portege, with its larger display and touch-typeable keyboard, to the 2-pound Libretto, he said.

As for HP, although it will continue to market "clamshell" or mid-size Portable computers, they will now only run on Windows CE, rather than other operating systems. "That's why they're phasing it out," said Jill House, an analyst at International Data Corporation.

HP will phase out the 200LX palm-size PC beginning November 1, about two years after it was introduced.

on the sys|x project. We need all the help we can get — and we no longer have any reason to wait.

—Ian Butler
ian@hplx.net

Disappointed but Still Hopeful

I am disappointed, albeit not entirely surprised that HP has chosen to discontinue production of the HP 200lx Palmtop. IMO (in my humble opinion) this was the last of the truly innovative HP products.

While it is appreciated that HP is making some special offers available for 'upgrading' to the Windows CE platform I will most likely decline. I have already owned a number of these (and other companies') Windows CE offerings and have not found a single unit which I can make use of.

I do, however, have a couple of suggestions which may prove helpful in your future design efforts.

First, is battery life!!! Above all else battery life needs to be improved in

your Windows CE offerings. The average battery life I have been able to squeeze out of any WinCE unit is barely greater than your typical notebook. Considering I change batteries in my 200LX seasonally this is a major drawback IMO. If your handheld isn't powered and ready to go when you need it you end up not bringing it along which kind of defeats the purpose.

Second, in your offerings for previous HP Palmtop users it may be beneficial to include a copy of the excellent XT-CE software which is a PC emulator for Windows CE. Among other things it supports the HP 200LX Int5 graphics mode enabling a large body of HP 200LX software to be run within the emulator (www.xt-ce.com). This would provide a better upgrade path for many users than an extra battery (pointing out a weakness in battery life) or an extra organizer (REXX).

So in closing... It's been fun. I will continue to use my 200LX and await the day when someone will release

another true handheld with enough battery life to actually carry for a few weeks without being tethered to an AC outlet. Maybe that handheld is yet to come from HP? if so they will once again get my business... if not, someone else eventually will.

—Dan Ridenhour
dridden@stlnet.com

Looking to the Future and Feeling Lost

As I have read the posts from those searching for alternatives to the 200LX and from those seeking to campaign HP to change I have thought about it and concluded the following:

- HP isn't going to bring the 200LX back. Their collective mind has been taken over by Micro\$oft and they are not the company that they used to be. As we say goodbye to the 200LX, we also bid farewell to the venerable old Hewlett-Packard Company. Get your backup machine ASAP!

- Presently, there is no replacement for the 200LX. We are the last of a dying breed. If we are seeking an alternative, perhaps we should look in the direction of the PalmPilot and a good notebook computer (especially now, with the demise of the Toshiba Libretto, also).

- Linux has a long way to go in order to be a viable, mainstream alternative to DOS/Windows/etc. It is just too Unusable. The command line commands don't make much sense and the GUIs are still somewhat primitive. Solaris has possibilities, but they both lack widespread hardware and software support. People used to say that DOS was too hard to use. DOS is easy, Linux is hard to use! As much as I hate M\$, I have to give them credit for giving DOS and Windows a consistent user interface, and making it easier to use than many other OS's. I would not bother with a Linux/Unix-based Palmtop.

So, those are my thoughts on the subject(s). Please keep in mind that I may be wrong, and I really don't care. I am just getting tired of the computer industry and it's all-too-constant

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change. I'm tired of lies, greed, marketing hype and lawsuits. Remember, folks, it's just a computer, a tool. You can't take it with you.

Richard Smith
rsmith@ENOL.COM

Long Live the Palmtop

HP is NOT making a big mistake by discontinuing the 200LX any more than your girlfriend did when she dumped you for the nerd with pots of money.

It's their choice and their problem. We don't have a problem.

- HP200s are robust & long lasting. Yours will serve you well for years to come. Replacing it in 5 years time with the spare you buy now is a lot cheaper than upgrading a CE machine every 6 months.

- Most, if not all niggles are known about and fixable.

- Even "asteroid hitting the earth" style problems like the hinge crack are fixable with a little care.

- They work – and work well. They are more useful now than ever before thanks to well-written, functional 3rd party software.

- There will be (wishful thinking?) an inexhaustible cheap supply when the corporations who were using them in vertical applications flood the market as they dump them for a modern, supported machine. Tens (hundreds?) of thousands were made. Hundreds/- a few thousand still want to use them. Nice ratio. Just keep telling people how crap they were and that they're practically worthless ;-).

Chris Randle
chris@AMLOG.DEMON.CO.UK

Japan Users Start Campaign

Many 200LX users in Japan have started conducting a signature campaign against the termination of the HP Palmtop. To them, CE machines are not the successor of 200LX. To me, a Psion 5 seems to be a successor if many excellent 200LX applications including the PIM can run on a Psion 5/Epoc 32. I would be pleased to see if *The HP Palmtop Paper* starts an article of

how to program the 200LX applications on Epoc 32. Another reason that I like a Psion/Epoc is that we, Ericsson support the Epoc and NTT DoCoMo, the biggest Cellular phone operator in Japan, will introduce the Epoc terminal.

Toshio Konishi (NRJ)
Toshio.Konishi@nrj.ericsson.se

Long Time User

I have never written to *The HP Palmtop Paper*, but I wanted to let you know my feelings toward its discontinuance.

The HP200LX has become my trusted and valued companion. I don't use all its functions, but I could not be without its Appointment Book and phone functions. More importantly, I now rely on its 32 meg memory and its 2X speed, as well as the built-in fax modem for my email.

Most important is the HP financial calculator functions with a separate keypad. I am a real estate analyst and this tool is indispensable to me, especially with its ergonomic location.

What in the world could HP be thinking in changing this feature? I want you also to know that I have been a subscriber to the PTP for a number of years, and will continue as





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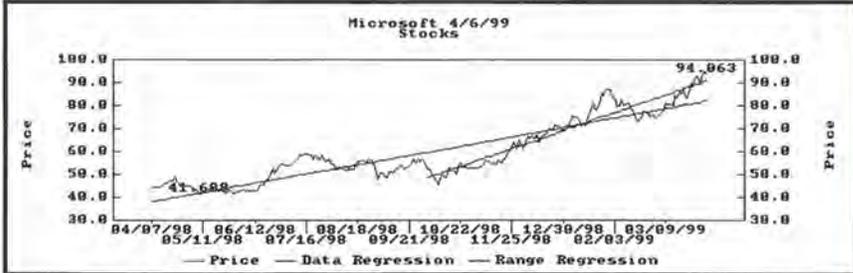
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long as it's published. You are very much appreciated. Your articles are timely, informative, and your editorial content is, shall we say, "right on".

Harmon Garrin
hgarrin@worldnet.att.net

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User to User: Backlighting!

Hal announces a bright idea for the Palmtop, backlighting, and gives his appraisal of a DOS emulator for WinCE machines.

by Hal Goldstein

Farewell HP 200LX? Not Yet.

In April someone from HP contacted me indicating that although nothing officially could be announced, it looked like the HP 200LX would be discontinued. He was concerned about my business. I told him that I thought HP's decision was a real shame, but we would still have a strong HP 200LX business for some years to come. Here's why.

Most importantly we have a strong customer base: many people still find the HP 200LX tremendously useful and see no compelling reason to switch machines. Frankly, I have been surprised how strong our HP 200LX business remains and how slow our *Handheld PC Magazine* for users of Windows CE has been to catch on.

In the next six to nine months we hope to make large buys on used HP 200LX's and HP 1000CX's. There are many companies throughout the world that use the HP 200LX for a single vertical application. Examples include Coca Cola field reps in Brazil, Dutch train conductors, Korean insurance sales people. A number of factors including discontinuance of these HP machines and no support for DOS software will force these companies to adopt a different platform. (If you represent any such company, please contact me at hal@thaddeus.com. We are interested in purchasing your machines).

If we can buy enough of these Palmtops, we will be able to resell and repair Palmtops for some years to come. Further, it is now theoretically possible to put a 486 motherboard in

a HP 200LX case. If the technology is developed, and we could get enough of these Palmtops, we might be able to introduce new operating systems in the Palmtop form factor. For example, we might be able to offer 386 DOS, Windows, or Unix-like Palmtops. Of course, all this is speculation. If we have something to report, we'll publish it here and in our catalog. While we are speculating, I'll report on the latest on backlighting the palmtop.

Palmtop Backlighting - We're Still Working on it

One of the reasons this issue and catalog are a bit late, is that I wanted to be able to announce backlighting before HP stopped producing the HP 200LX. However, the pieces just didn't come together in time.

Prototype looks good

Backlighting the HP 200LX makes it possible to read the Palmtop in low or no light conditions, conditions that normally make the HP Palmtop unusable. Our first prototype fulfills this promise. In addition, improved reflective characteristics of the upgraded screen mean that the display is more readable in lower light conditions without backlight. The backlight turns on and off with a hotkey - Fn B on my prototype. Preliminary tests have shown about a 25-30% reduction of battery life with backlighting on all the time. That should translate to under a 10% degradation depending on usage.

To keep the backlight as low current, and because of size constraints, it is not as bright as a laptop's back-

light. Even so, the Palmtop backlighting in the prototype works well. Initial testing shows this backlighting as quite useable.

Technical Details

The backlight is an internal, low-power electroluminescent (EL) backlight that takes its power from the Palmtop. It converts low voltage from the internal Palmtop power supply to alternating high voltage that drives the EL panel. The high voltage excites phosphorous in the EL panel, which discharges photons on the zero point of the alternating waveform. The high voltage is very stable and alternated fast enough so, to the eye, the panel looks like it is constantly emitting light.

Fortunately, there are some normally unused I/O lines. That makes it possible to control the on/off switch of the inverter board using the I/O of the Palmtop micro controller. Consequently, no additional circuitry is required. The user will be able to turn backlighting on and off with software.

What's the Holdup

Several factors prevented us from making the announcement. The upgrade process itself is quite involved. At this time it could take a tech as long as an hour. It requires a disassembly of the LCD display and removal of the existing reflective polarizer. The polarizer is replaced with a transreflective polarizer. Then the tech installs the EL panel and a small inverter circuit board on the motherboard.

One of the biggest concerns is the danger of destroying screens during

this delicate process. Screens are expensive and hard to come by. A related concern involves warranty. There is a large subjective element concerning what makes a good readable display. If even 10-15% of our customers returned their units for the original screen, the project could become prohibitively expensive. We definitely want to keep the cost under \$200.

For more background read David Sargeant's article in the July/August, 1999, issue of *The HP Palmtop Paper*.

Please Don't Call

If you want to be kept up to date on the progress of backlighting, visit our website at www.palmtoppaper.com or email us at backlight@thaddeus.com. We would very much appreciate it if you did not call just to ask the progress of the backlighting. We have a small phone staff, and it puts a lot of pressure on them, forcing them to put other customers on hold. As soon as we are ready we will announce it in this publication, in our catalog, and on our Web site. Also, despite our best efforts, there still is the possibility that backlighting won't be feasible. Stay tuned.

Palmtop Paper Archives Online

We have had many requests to put archives of *The HP Palmtop Paper* on our Web site at www.Palmtoppaper.com, and to put this Web HTML version on our annual *HP Palmtop Paper* CD InfoBase. A number of users have volunteered to help Ed Keefe in this effort. By the time you read this, the project may be well under way. However, we still may need your help. Email ed@thaddeus.com and copy me at hal@thaddeus.com if you can assist.

Future of The HP Palmtop Paper

It is hard to believe, but the next issue completes our eighth year of publishing *The HP Palmtop Paper*. Ed Keefe and I have spoken frequently about its future. Since not many new HP 200LX's are sold, most of our subscriptions are renewals. That means our paid subscriber base has dropped quite significantly over the past two

years. Ed wants to move the publication to the Web where the articles would be more current and the time needed to go from idea to readable material would be faster than two months. My feeling is that many people (myself included) like and often prefer information in a physical magazine format.

My thinking is that we can have the best of both worlds. We could publish on the Web and take the best of that material, clean it up, and continue with *The HP Palmtop Paper*. To do so, we need you to renew. (If we decide to stop publishing the print version of *The HP Palmtop Paper* and you have renewed, we will offer you credit from our catalog or a refund). What do you think we should do? E-mail me (hal@thaddeus.com).

Palmtop software on Windows CE Handhelds

There is an emulator available at www.xt-ce.com that allows DOS and even some 200LX-specific software to run on Windows CE handhelds. XT-CE is an 80188/80186 PC Emulator, which makes Windows CE handheld PC (H/PC) run like an older PC using an Intel x86 processor. The setup is not difficult, but a bit confusing. You need to install a version of DOS on top of the emulator. You can download Caldera's Dr DOS or you can create a DOS system disk from a pre-Windows 95 unit. Once properly installed, you can get to a DOS prompt by clicking from a shortcut that appears on the Windows CE desktop.

I tested the emulator on the Jornada 820. I made my HP 200LX's PC Card, which contains a lot of DOS and Palmtop software, the "C drive." Then I tested programs with varied results.

Fortunately, DBV works. It is a useful program for the Palmtop that we have written about in the past. It allows for fast loading and searching of database files. That means that I was able to run DBV and view all my PHONE book entries, as well as NoteTaker and Database files. However, DBV only reads these files,

it does not allow for new entries or editing of existing information.

In general the emulation seems a little slower than my double speed Palmtop although that varies depending on the software and on how fast the processor on the Windows CE handheld. Unfortunately, the screen gets refreshed often when running some DOS software. The effect of the refreshing is that it seems slower than it is, and it looks a little strange. Some keys needed in a DOS system might not be on an H/PC. To solve this, f1-f10 plus Ins, Del, Scl, CAP, Hm, End, Pup, and PDn are labeled and placed on the top row above the DOS screen. To access these keys you need to point, or used the mouse device on the H/PC.

In preliminary tests many DOS programs worked and some HP Palmtop-specific programs ran. Approximately 70% of the Super Software Carousel programs worked. Ian Dean is still working on improving XT-CE. He has been experimenting with getting the HP Palmtop Connectivity Pack to run. If he proves successful, then the built-in 200LX applications (minus Lotus 1-2-3 and Pocket Quicken) would be available for Windows CE users.

All in all XT-CE is a laudable start. However, there is a way to go before the convenience of running DOS and built-in 200LX software is truly available on a Windows CE machine.

Turkish Quake Relief

I received the following from Ahmet Ozisik a long time Palmtop Paper subscriber and contributor from Istanbul, Turkey (<http://members.xoom.com/OZISIK>):

"If you or your friends want to send aid to the disaster area in Turkey but are not sure what to do, here are some tips:

You can direct aid or donations to the Turkish Consulate, Turkish Airlines or, in the U.S., Gokhan Uner and his wife who are collecting medical aid with their vehicles in order to give to Turkish Airlines. Their numbers are 847-878-5882 and 847-885-6368." ■

New Products

New PalEdit-related PIM Program, Outlook synchronization, Database corruption tester, IR desktop-Palmtop data transfer.

By Ed Keefe

If you're looking for a different set of programs to track appointments, todo's, telephone numbers and notes (PIMs), take a look at the latest version of the PalEdit (PE) program. Not only is PE a top-flight editor for the HP Palmtop but now it also serves as the driver for a set of PIM applications.

If you're willing to invest a bit of time and effort to learn how to use this product, you'll wind up with a highly efficient productivity tool that you'll depend upon.

PalEdit and PIM are copyrighted freeware by D&A Software, written by Andreas Garzotto. The package includes documentation files, which hopefully will get you started using the programs. If you have further questions, please post them on the HPLX-L mailing list. You can get the latest version at www.dasoft.com.

Stereo Shell Without a Nag Screen

Many Palmtop users favor the Stereo Shell (StS) file manager program when they are working outside of System Manager. StS saves a lot of typing when all you want to do is open a ZIP file or copy a few files from one directory to another. Like Filer, Stereo Shell can be used to run DOS programs by pointing and clicking.

Stereo Shell is an integral part of the full installation of Super Software Carousel from Thaddeus Computing.

Currently, Stereo Shell can be distributed only as shareware. The unregistered version of StS is identical to the registered version except for an opening shareware screen and a short, sign-off message. However, in the past couple of years, if you tried to register the software, you would have discovered that the normal channels for doing so had vanished. The author, Emery Wooten, stopped supporting the program several years ago.

Now, thanks to the "detective work" of fellow user, Jeff Johns, the registered version of Stereo Shell is available upon request at no charge.

Jeff contacted Emery Wooten and secured permission to distribute the registered version of StS to his friends. To honor Emery's request, the registered version may not be posted in any public forum. The only way to get a copy for personal use is to send an e-mail to Jeff Johns (jeffj@scott.net) and ask for it.

If you are not familiar with Stereo Shell, we suggest getting the unregistered version, try it out and see if you like it. Like many file manager programs, such as Norton's Commander, XTree, Volkov Commander, etc. StS takes some getting used to. It has almost all the features of other file manager programs with the advantage of using only 40K-70K bytes of disk space. If you have the unregistered version already configured for

your Palmtop, the installation is easy: just replace the unregistered version with the registered version of StS and you'll be ready to go.

New Version of Synching Program

Curtis Cameron has recently updated his Palmtop-Outlook conversion program (OLC2LXinst.EXE). The version number is 3.01.

The new version has the following features.

- Synchronize a Palmtop file with an Outlook folder. Both will then have exactly the same set of data.
- Support of any format PDB or GDB Palmtop file.
- Support of Outlook 97, 98, and 2000, although the latter has not been tested.
- Multiple Outlook fields can be assigned to each LX field, so in case an Outlook field is blank, it will go to a second or third to find data to put in the LX field.
- You can separate Outlook's multi-line street address fields into their first, second, or third lines and assign them separately to LX fields.
- Field mapping is stored for each different Palmtop file you use, so you can have several different ones and it will remember the mapping for each.
- If you pass a Palmtop file name on the command line, that Palmtop file, along with all its mapping info, will be loaded when it starts.

- If you also pass the string `"/run"` after the file name, then the conversion process is started automatically.

- Extended characters are converted correctly (both directions as of version 1.90).

- Uses a Windows DLL, courtesy of Mack Baggette, to do the LX importing and exporting.

Version 2.01 may be downloaded directly from the following Web site.

<http://cameron.hplx.net>

Preventing Back Up Woes with DBCHECK

Most Palmtop users are faithful in backing up their data files on a weekly if not daily basis. Many have automated the process using system macros and/or batch files that are attached to an Appointment Book item.

The only problem with this is that if a database file is corrupted, the backup will also be corrupted.

How can you tell if a database, Appointment Book, NoteTaker, or PhoneBook file is corrupt? The way to find out is to open the file in the appropriate application and try viewing all of the items in the file. If you get an error message, for example, a message that tells you that a record is not found, then you know that something is wrong. However, such a procedure is both time consuming and can't be automated.

To solve this problem, Curtis Cameron has created a special program that will race through almost any System Manager file and look for possible errors. If no errors are found, you can proceed with a safe backup. The DBCHECK program is copyrighted freeware and is directly downloadable from

<http://cameron.hplx.net>

You can use the DBCHECK program in a batch file or you can run it alone at the DOS prompt. The program will check most of the Palmtop's data files, including ADB (appointments), PDB (phone), GDB (database),

NDB(note taker), and WDB (world time) files but not Lotus 1-2-3 files or Pocket Quicken files.

Many programs, including DB CHECK, return a result code that can be accessed with the ERRORLEVEL variable in a DOS batch file.

Here's a sample batch file that will perform all the necessary checks and let you back up safely. You will have to modify it to suit your own Palmtop setup.

```
@echo off
rem SafeBkup.bat
dbcheck *.?db >dbcheck.log
if errorlevel 2 goto error
rem All is OK, so back them up
copy *.?db a:\
goto end
:error
echo Warning! A possibly corrupted
file was detected!
echo Files were not backed up.
:end
```

If there is an error in one or another of your ?DB files, a message will be recorded in the DBCHECK.LOG text file. Hopefully you will not find such an error message but, if you do, you can recover from a safe, backup file or try to correct the error and run the backup procedure again.

HP 1000CX Users: Get Control of Your Palmtop.

The HP 100/200LX have the System Manager Setup program to adjust such things as screen contrast, sound volume, etc. None of these features are available on the HP 1000CX since it does not contain the System Manager suite of programs.

Now, HP 1000CX users can gain more control over their Palmtop with the freeware CXCTL program by Nils M. Holm nmh@dialup.nacamar.de

The program will perform the following operations and more:

- adjust the display contrast
- adjust the beeper volume
- set the video mode and zoom mode
- set the power off timeout

enable/disable the COM port

Another Program to Enhance the HP 1000CX

Since the 1000CX does not have the HP 200LX Appointment Book, users need to install their own reminder or "tickler" program. Granted, a program like Borland's SideKick+ will serve this purpose but such programs generally take up a lot of disk space and are often hard to find.

Now you can have a small tickler file (approximately 1 Kbyte) that will help you keep track of important dates.

DIA.COM (copyrighted freeware by Jorgen Dybdahl) is a UNIX-like calendar program that scans through a text file called C:\CALENDAR and displays the results on the screen. The output can also be sent to a text file.

You have to build the CALENDAR data file using the conventions given in the DIA.TXT instruction file. Once you have it set up and running, you can put the DIA.COM command in an AUTOEXEC.BAT file. That way the tickler information will appear each time you restart the Palmtop.

The program should also work on the HP 100/200LX. Even if you're satisfied with the Appointment Book, you might find that DIA is useful for things like reminding you about birthdays, anniversaries or other fixed events.

By the way, DIA stands for DIARY.

Enhance Filer's View Function with QuickView

The System Manager Filer program will let you view text files by pointing at the file name and pressing the F8 (View) key. It will not let you look deeply into an .EXE or .EXM file to look for text material. This is often helpful when you've forgotten what a particular program is supposed to do. Up to now, you could leave Filer and use a hex editor to view the file. (This can be dangerous. One slip of the finger and you risk corrupting the file.) Alternatively you could use a program such as Vernon Bueg's

Continued on page 31

MUPs

More unusual Palmtop prose from the Most Unusual Places.

By Linda Worthington

Yellow MUPmarine

I am sitting in a C-BUG, actually the only one in the world. This "Controlled Buoyancy Underwater Glider" was built in the US and currently is in use here on Isla de Roatan, Honduras, Central America. The two-man submarine is designed to go to depths of over 600 feet (183 meters) and daily takes passengers deeper than 500 feet here in The Cayman Trench.

It is comfortably cool at 500 feet, adequate light and good visibility. Life abounds, even at this depth. The most amazing sight is the Sea Lily, a stalk crinoid that has lived without any evolutionary changes for 200 million years and was thought extinct. It looks like a plant but is actually an animal that can get up and change locations. Fish and other creatures are curious and come close to inspect the sub as it hovers silently.

The boat carries an oxygen tank and a CO2 scrubber and Karl, the owner/operator, monitors the oxygen level carefully. The boat stays dry inside so 'Stanbags' are not necessary. And yes, the submarine is painted a bright yellow.

Larry Nielsen

A Two-on-One MUP:

Steve: John Combs and I are here at the Tech Museum of Innovation in San Jose. My wife is over buying the

tickets, so we're doing the MUP. (for later transmission from 'home').

John: I'm typing on Steve's 200LX (and finding it hard going, as it doesn't have Buddy on it!) It's hours later. We ran rampant through the Tech Museum until they kicked us out. We shot lots of pictures, but only John's are in digital format. I'll let him jump later. Right now we're waiting to catch the free shuttle over to the Winchester Mystery House.

John again: We're sitting in the lobby of the DoubleTree Hotel. The Tech Museum of Innovation was pretty neat, but we didn't have time to go through all of it. We rode the light rail system downtown and back (the light rail is essentially an above-ground subway system — no need to put it below ground where it doesn't freeze, snow, or even rain much).

*Steve Van Dyke [KC], 70611,2147
and John Combs*

A Cool MUP for a Hot, Summer Day

Greetings from the Timberline Lodge on Mount Hood Oregon. As I told my wife earlier when I look out

the window the snow is at eye level — and my room is on the first floor! Quite a bit more snow here than I was anticipating. The temperature outside when I arrived was hovering around freezing and falling.

Well it is now Sunday; I was too tired to send this yesterday. The Lodge was built c.1937 and it claims to be the largest entirely handcrafted building built this century anywhere in the world. Everything including all the furniture, carpets, curtains, etc. were handmade specifically for the lodge.

There are some high, thin, cirrus clouds but the sky is mostly blue. Looking at the cloudbanks beneath us though I know that most of the rest of Oregon is having yet another gray day. Off in the distance I can see another peak jutting out of clouds. It appears to be almost due north and so is probably Mount Adams.

*Gary Spiers,
74603.3001@compuserve.com*



ABOUT THE AUTHOR

Linda Worthington is a native New Englander living in Maryland. She is a fly fisherman and loves hiking, photography and computing. Linda's company, LOW-TECH, is designed to help people choose and use portable computers. She also uses computers to do extensive volunteer conservation-related work for several organizations.

The XTree Alternative

To Filer, X-Finder, Norton Commander, Stereo Shell, add one more file manager program. A veteran user of XTreeGold extols its benefits.

By Robin Clarke

I have used the XTree file manager program for as long as I can remember; yet I have seen little reference to it in Palmtop literature. I hope that my enthusiasm for the program will come across in this article and encourage you to recover a copy of XTreeGold 3.01 from your DOS archives and try it on the Palmtop. If you don't have a copy of XTree, skim this article to see if the program does something that you like. Then add an item to your ToDo list to look for a copy of XTreeGold on the World Wide Web. The program occasionally will come up for sale. However the "for sale" sign turns to "sold" usually within a couple of days. It's still a popular application.

The Symantec Corporation holds the rights to XTreeGold, but no longer sells or supports it.

A Little Background

In 1985 Executive Systems introduced the first version of XTree. The file manager program used a new, for that time, "graphical" directory tree presentation. It was one of the first programs that tried to save computer users from the dreaded DOS prompt.

Over the next eight years, Executive Systems added more and more features to XTree and changed the name to XTreeGold 3.01. In 1993 the parent company merged with Central Point Software which, in turn, was gobbled up by Symantec.

In 1994 Symantec introduced XTreeGold, version 4.0 but that ver-

sion was only for Windows. Since then, there have been no new versions. However, the Xtree style still lives on in Windows 95/NT where Norton Navigator and Norton NT Tools File managers can be configured to run in "XTreeGold mode".

In essence, XTreeGold (XTG) is a powerful and easy to use file manager with a multi-window display. XTG lets you create, view, edit files and run programs. It also lets you extract and view files from compressed archive files.

Like Lotus's Magellan, XTG has a lot of "viewers" for looking at documents from various word processors. Also like Magellan, most of these viewers are out of date and not very useful. However, the default, generic viewer is quite capable and can be configured to make almost any file viewable. The viewer can enforce word-wrap and filter out high-order (garbage) characters. You can also set up the program not only to view but also edit both text and binary files with the built-in hex editor.

File-list and view windows may be simultaneously displayed for rapid search through the contents of numerous files. It has an undelete function and can use its own or an external file editor. For example, I have PalEdit

set up as my preferred editor.

One of the best features of XTG is its application launcher. This operates through a menu system that lets you perform any number of different operations on a file.

Although a complete installation of XTree is quite large in Palmtop terms, you can get by with about 300 Kbytes and still have 90% of all the functions of the program.

XTree will run under System Manager, however, it will only perform the simplest of tasks when used this way. If you ask it to do more than the memory of the computer will allow, XTree will gracefully advise you that it doesn't have enough memory to do what you want. A simple solution is to use XTreeGold in conjunction with Maxdos or in a separate Software Carousel session.

XTree Lets You Have It Your Way

XTree is highly configurable. However, the default, basic screen will look somewhat like Screen 1.

The largest window is a directory tree. In this configuration you can view only the root directory and its subdirectories. The window at the bottom of the screen shows the names of the files in this directory. There are only four files shown since the option

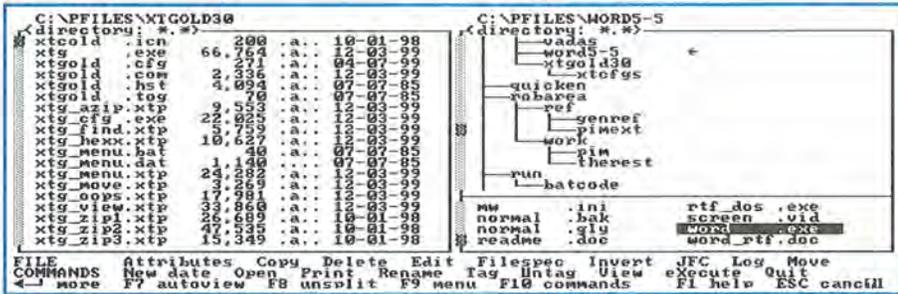


ABOUT THE AUTHOR

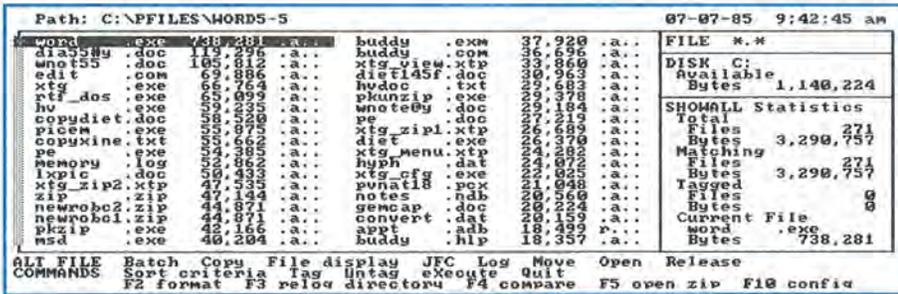
Robin Clarke is a physicist working with CSIRO, the Australian Government Research Agency where he is involved in the thermal performance of buildings and thermal insulation testing. His interests are computing, photography and snow skiing.



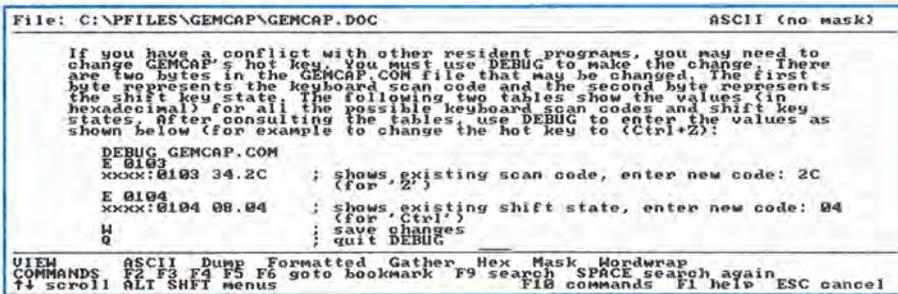
Screen 1: XTreeGold's default opening screen shows a directory and a whole lot more.



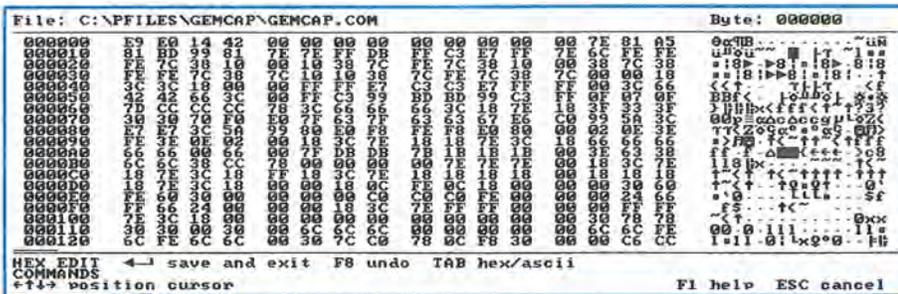
Screen 2: File management options appear either at the top or the bottom of the screen in XTreeGold.



Screen 3: XTree uses ALT and CTRL keys for various types of copying and moving of files.



Screen 4: An example of a full screen view in XTreeGold.



Screen 5: XTree comes with a hex editor built in.

to show all the files' details is in effect. You can change this to show more file names with fewer details.

The window on the right gives disk statistics. This introduces the first XTree curiosity. Only files which have been "logged" are part of the statistics data. In this case the logged files are those in the root directory. This screen shows the pull-down menu having been activated revealing the options under "Volume".

If the pull-down menu is not activated, file management options are displayed at the bottom of the screen, as in Screen 2.

The options presented with these commands represent the heart of XTree's personality. They allow single-letter commands, visible as the capitalized, first letter. Different shading reinforces this but the shades of grey did not survive the screen capture process. Screen 2 demonstrates much more about XTree. It shows the optional split view of two different directories. On the right is a fully recursed view of the directory tree along with the files in one directory. Since the files show no additional data you can squeeze eight file names into the window. On the left is a "large" file view. This shows the full contents of the XTree directory that fortunately just fits here. Another personality feature of XTree is that successive pressing of the Enter key cycles between cursor-in-a-directory-window, cursor-in-a-small-file-window and cursor-in-a-large-file-window, as in the left-hand screen. This may take some getting used to, but it constitutes a very quick and convenient way of navigating about. You can change or eliminate this feature if you don't like it.

XTree uses the Alt and Ctrl keys to expand the number of options that are accessible with single-letter commands. Pressing the Alt key brings up the options shown in Screen 3. Actions such as Copy and Move appear to be duplicated on both screens but there are differences. On the main screen, these operations apply to the highlighted file only.

Helpful Add-ons to XTree

Word 5.5

I don't travel with a laptop and I find that much of the work I do on my Palmtop is word processing. Although both Memo and PalEdit are fine as editors, they are very average word processors. Like many other users, I've found that Word 5.5 for DOS works very well so I put up with the 900 Kbytes of disk space that it consumes on the Palmtop. Where possible I use margins that allow the 64-column Palmtop zoom mode to be used for improved readability. I use a number of macros to make version 5.5 emulate Word 97 on the PC as much as possible (such as Ctrl-X/C/V for Cut/Copy/Paste). Microsoft offers a free utility, WDSUPCNV.EXE, that adds extra file conversion features to Office 97 and allows documents to be saved in Word 5.x and other less-used formats. Obviously many features of Word 97 are lost but simple formatting is preserved. I also use Word 5.5 in DOS on the PC so it is my universal format. A bonus is that it reads and writes RTF files but the downside is that it compulsively writes BAK files. I access Word 5.5 from a batch file that deletes all BAK files upon exiting.

CuteMouse on the Palmtop

Most applications for the Palmtop, including those under System Manager, don't use or support a mouse. However a mouse improves productivity in both XTree and Word 5.5 so I occasionally use one. My favorite mouse driver is CUTEMOUSE by Nagy Daniel. It can be obtained from his Web site at www.vein.hu/~nagyd/. When using a mouse, I generally reconfigure XTree to call a mouse-supported text editor, usually Microsoft's Edit. It has a very small footprint, only 7 Kbytes. I have found that some mice do not work on the Palmtop so you'll have to experiment. Use the cable and the 9-pin crossover

adapter from the Palmtop Connectivity Pack to connect to a standard 9-pin mouse cable. This is quite unwieldy - recommended only for testing. I have cannibalized an LX serial cable connector shell (slit it down one side) and rebuilt it with new 10-pin insert connecting to a Logitech mouse with only 18 inches of cable. This is shown in the accompanying photograph. It was not particularly easy to do and is not recommended for the non-adept. The mouse is labeled "10 mA" and in fact it adds about 6 mA to the standing current under DOS when it is loaded. This is not a great burden to the Palmtop, which generally consumes anywhere between 20 mA and 80 mA depending on what it is doing. I use a simple batch program, shown in screen 8 to load and unload the mouse driver. Physically removing the mouse cable while the driver is loaded can lead to your Palmtop consuming a constant 80 mA, presumably due to a confused serial port.

Read More About It

There have been several books written about XTree. I can recommend Official XTree by Beth Slick (IDG Books Worldwide, Inc, published 1992) which is comprehensive and clearly written.

The easiest way to discover more about XTree is to visit the "XTree Fan Page" site maintained by Matthias Winkler at <http://xtfp.arkanda.net>. Matthias discusses the many XTree clones and successors, including ZtreeWin, under active development for Windows 95. Part of the reason for these clones is that XTree is no longer available from or supported by Symantec. Unfortunately this limits the appeal of XTree both within the Palmtop community and more widely. Further exacerbating this situation is the fact that only versions 3 and later support the current versions of Zip (PKZIP2.04g).

With Ctrl they apply to all tagged files and with Alt they also apply to all tagged files, but will copy/move the path as well. XTree is interactive. It describes what it is about to do and asks for confirmation. If you don't like this, you can change it.

The operational focus of XTree is on files. Operations on directories, for example trying to preserve a directory structure as you move and copy files, is not an XTree specialty. If XTree has an Achilles heel, this is it. For these operations, Filer in System Manager is a better choice.

Screen 3 also demonstrates the

"Branch" command that displays all logged files in a branch. In this case I've selected the root directory and told XTree to show a two-column display with the file sizes and to sort the list on the size from the largest to the smallest file. This is a quick way to find any unwanted, space-hogging files!

Screen 4 is an example of the XTree full-screen view. It shows part of the README file for GEMCAP, the program that I used to capture these screen images. The text in this screen serves as a useful illustration of the power of the alternative hex view/edit, which is presented in Screen 5. It

shows Gemcap.com displayed as hex on the left and ASCII on the right. The README file describes a tricky process for changing the "hot-key" in the GEMCAP program. Typically you'd have to use the DEBUG program, but with XTree I only had to locate the relevant bytes in GEMCAP (42 followed by 00 on the first line) and edit them as hex values. The Tab key toggles the cursor between the hex and the ASCII work areas. You can use this editor to write ASCII text if you like, but it is not recommended!

Screen 6 shows the XTree menu system, accessed by the F9 key. The

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Screen 6: XTree also has a very customizable menu system for launching applications.

menu presents a list of the available operations, each of which has an associated script of up to 17 lines. The scripts are essentially DOS batch commands. However, XTree uses its own interpretation of the batch language's "%1" parameter. In XTree "%1" represents the current file, "%2" stands for the directory and "%3" stands for the path. With this interpretation, you can, for example, select the image viewers PICESM and LXPIC to display a file or to open in file-list mode in the chosen directory. In addition to the menu, every file extension can be associated with a particular batch file. This lets you select a file with a .DOC extension and call the PalEdit program whenever you issue the "Open" command in XTree.

The utility of the XTree application menu is evident from the range of applications listed in Screen 6. Apart from opening Word, HV or the Palmtop icon editor (ICON200), you can run compression programs like Diet and XINE on chosen files. The XTree menu allows you to Diet and Undiet in seconds. XINE is on the Palmtop's D: drive. HP chose it to expand other files on the D: drive such as the KEYBEZ "kit" files. XINE is bi-directional and recognizes whether the file on which it is to operate is normal or already compressed. It also achieves a quite reasonable compression, though not competitive with PKZip, and is incredibly small at less than 2 Kbytes. However, it is slow!

XTree also handles existing ZIP archives. When a selected ZIP archive contains directory information, the contents are initially presented in a

Zip-version of the usual XTree dual-window display with fully recursed subdirectories above the small file window. If no directory or path information is present in the archive, zip-file contents simply come up in the large file window. Creation of (or addition to) existing ZIP archives is handled separately within the standard XTree windows. XTree does not directly support any other compression formats but most operations with these could easily be written into application menu scripts. Earlier versions of XTree could handle PKZip 2 files in a similar way.

Conclusions

Several people have petitioned Symantec to offer XTreeGold as "giveaware" as Lotus has done with Magellan. Pending a reply from Symantec, you can try an evaluation copy of the earlier XTree 2.0 program, available on the XTree Fan Page on the World Wide Web. Let me mention, however, that version 2.0 is not the same as XTreeGold 3.01. It is limited, not configurable and does not handle the standard PKZIP 2.04g files. (In this regard it is very much like Magellan.) Furthermore, the color enhancements in version 2.0 can't be changed which makes it difficult to use on the Palmtop. I recommend that you use a program, CGAHELP to convert the colors to grey or black when you run XTree 2.0 otherwise you'll wear out the [ON] [/] keys trying to adjust the colors. Also without CGAHELP you might miss the exit prompt that asks you to press Y to leave the program. If you can't see the prompt, you might think that the

Palmtop has frozen.

Applications such as XTree, Magellan, Stereo Shell, and System Manager's Filer provide an enormous enhancement to DOS which otherwise is a bare-bones command language. Each program has similarities but they each do things in their own unique way. My preference for XTree is partly historical and partly due to the fact that it offers a continuity of approach with my preferred NT Tools File Manager on the desktop. By all means consider alternatives which suit your own style. ■

Shareware/Freeware mentioned in this article

XTree 2.0, **WDSUPCNV.EXE** and **CUTE-MOUSE** are freeware programs that are available on this issue of *The HP Palmtop Paper ON DISK* and on the Web at www.palmtop.net.

Diet and **Gemcap** are freeware programs available on the 1999 CD InfoBase from Thaddeus Computing.

FM31.ZIP is a freeware clone that is available for download from the XTree Fan Page on the Web as well as from www.Palmtop.net. It is also available on this issue of *The HP Palmtop Paper ON DISK*. This is a faithful emulation of XTreeGold 3.01. HOWEVER, the documentation and program interface are all in German.

Through The Looking Glass: Add Some Intelligence to Your Palmtop!

Ed examines several artificial intelligence programs and expert systems that work as DOS applications on the HP Palmtop.

By Ed Keefe

The field of artificial intelligence (AI) has been around almost as long as have computers. The dream of AI experts has been to turn a pile of wires and switches into something that mimics human intelligence.

In the 1960's and '70's, AI was pretty much the domain of computer scientists. People like John McCarthy and Marvin Minsky at the Massachusetts Institute of Technology (MIT) refined the concepts of AI and developed Lisp, the premiere, programming language of AI. They even built computers that were optimized to use the language.

In the mid-1980's, PC programmers tried adding small amounts of AI to already existing programs.

Word processors, with AI, were supposed to eliminate the need for typists. Decision support and expert systems were touted as replacements for middle managers in factories and offices. Doctors could use AI programs to help them diagnose diseases. Financial managers and stockbrokers could feed their ticker tapes into AI-enhanced programs and then head for their favorite golf course.

Software marketing people started to use the catch phrase "artificial intelligence" in their advertisements. According to the ads, AI was supposed to revolutionize the computer industry. However, in 1987, the US stock market suffered a spectacular

crash, later called "Black Friday." The media blamed the crash on "computerized trading" which they linked with AI trading programs. From that point on the phrase "artificial intelligence" fell into disfavor.

However the field of AI is still alive and doing quite well. You interact with AI every time you stomp your ABS-brakes. However you won't hear Ford, GM or Daimler/Chrysler claim that their cars possess "artificial intelligence." To do so might imply that their cars were headed for a crash.

You can also see traces of AI in Fourth Generation programming languages (4GLs) such as Borland's C++ Builder, MS Access, Excel and Lotus 1-2-3. Much of the "intelligence" hides in the background. You tell the program what you want to do. The "intelligent" code-builder tells your computer how to write the program you want. In application programs, some artificial intelligence may come to the foreground in the form of Wizards and context sensitive help screens. After you've looked at a couple dozen Wizards, you'll probably agree that this so-called "intelligence" is somewhere between the intelligence of a slugworm and a housefly. It's still pretty primitive.

What is needed for the full realization of AI is a Fifth Generation computer. Such a computer would accept the natural language statement

of a problem and figure out both WHAT to do and HOW to do it. Given such a computer, the first problem I'd pose would be "tell me how to acquire all the wealth in the world," which, on second thought, makes me wonder if a leading software company doesn't already have such a 5GL computer in operation.

We'll see more artificial intelligence in future Palmtops. Pattern recognition, a branch of AI, will eventually give us speech and handwriting recognition that actually works. You probably won't need a password since your Palmtop will only respond to your voice and your face. Instead of using a spreadsheet and a database to analyze a new car purchase, you'll just tell your Palmtop to look at your driving and spending patterns for the past two years and list three automobile choices that will work best for you. If the information isn't available in your Palmtop an AI, software agent will know enough to connect to the Internet and find what it needs.

For today's Palmtop, artificial intelligence is limited to what can be done on a DOS-based machine. It's not a whole lot, but there's still enough to keep an experimenter busy for several months if not years.

The remainder of this article describes several programs that will let you explore AI on your Palmtop. Once you see what the programs can

Sources for AI Software

In the field of Artificial Intelligence, the name Joseph S. Weintraub appears again and again, often in the context of his having won the Loebner prize for AI, conversational programs. The first such program, called ELIZA is a computerized counseling session with a robot. Joseph Weintraub didn't write the program. However, he took ELIZA to the next level and gave it a larger vocabulary and a better way to handle input from the user. He called his program "PC-Therapist" and entered it in the Loebner contest. He started working on his contest entry in 1986 and entered it in the 1991 competition. To win the \$100,000 prize the AI program had to convince ten judges that they were communicating with a living person rather than a computer. Joseph won first place but not the full amount since his program only fooled five of the ten judges. He won first place in 1992 and 1993 but, again, the big money eluded him.

His one-person company, "Thinking Software," offered some of the best AI software for DOS-based PCs in the past ten years. Most recently "Thinking Software" has fallen on hard times and has gone out of business. Even though it's possible to find portions of the company's former Web site on Prodigy, the link to the home page is broken.

The best, current source for DOS based, Artificial Intelligence is a Web-based company called Mind Media. Its address is www.mind-media.com. The company offers many older, DOS, AI programs that will run on the HP Palmtop. These programs sold for between \$150 and \$300 but are now sold for \$15 each or \$50 for a bundle of 5 programs.



Joseph Weintraub

Mind Media is where I found copies of the PC-Therapist IV for DOS and PC Therapist V for Windows. Sad to say, neither version will run on the Palmtop. PCT4 will start on the Palmtop but quickly dies when it's called upon to display graphics. Apparently an EGA screen is required although this is not mentioned in the documentation.

A competing program to PC Therapist, called The Explorer, is also available from Mind Media. If you want to converse with your Palmtop about your feelings, problems and aspirations, Explorer will work but I don't promise any "break throughs" as a result of using it.

Other programs offered by Mind Media claim to help you brainstorm ideas (Brainstorm) and write term papers just by loading your research in the Palmtop and pressing a single key. (Autowriter). Both programs use a database search engine to pull sentences from text files and string the sentences together. Sorry, folks, this isn't what I would call "generating a report" or "brainstorming." However, if you become intrigued with the field of AI, Bruce Ehrlich at Mind Media is now the keeper of the flame for shareware and inexpensive software. If he doesn't list a program you're looking for, he may be able to find it in his off-line collection. ■

engineer you could develop a troubleshooting program that will save you time and frustration down the road. If you're an investor you could try something like the IMPshell program to see if it will help you make better investments. If you're an insurance salesperson, you could put your expertise in your Palmtop and have it handy for those really tough selling tasks. Most of the programs to be mentioned will be included in this issue of *The HP Palmtop Paper ON DISK*. They will also be available on the S.U.P.E.R site with the keyword "intelligence" in the description of the file. That will make it easy to get all the programs in one pass. Just connect your computer to www.PalmtopPaper.com and click on the "Downloads" icon. In the download screen, type the word "intelligence" (without quotes) in the search field and click Fetch! This will bring up a list of the relevant files on the S.U.P.E.R. site and you can proceed to download them from there.

For Those New to AI

If you know little or nothing about the topic of artificial intelligence, the place to start is with a few, short articles. The AI-Tutor file contains four text files: FUTURE.TXT, NATURAL.TXT, NEURAL.TXT and EXPERT.TXT. These files present what was known about expert systems, neural networks, robotics and natural query languages in 1991. It's not the most current information but it's still a good introduction to the topic. The archive also contains a file viewer program that will run on the Palmtop. However, the four text files are all you need. You can either print them out or read them on the Palmtop using Filer or Memo. The other two text files in the AI-Tutor archive give some information on how to use a new PC and how to get in contact with Thinking Software. See the sidebar for more information about this company and its founder, Joseph Weintraub.

do, you may be able to figure out how to modify the programs to suit your

problem domain. For example, if you're a programmer or a network

Expert Systems

To get a hands-on feel for one area of AI, I recommend taking a look at the files that deal with Expert Systems (ES). To get an idea of what an expert system is, think of it as a database, but use the terminology "knowledge base".

Most databases have a search engine that will let you look up information based on keywords or phrases. The search engine for a knowledge base is called an "inference engine" that lets you find information based on your answers to a series of questions. The simplest questions are those that expect a Yes/No response or questions that ask you to pick from a multiple-choice list. The more sophisticated inference engines are those that will let you type a question in "natural language." The engine will parse your question or problem and try to answer or solve it with the information in its knowledge base. Users of the Q&A database program will already be familiar with this technology.

The files that are available include:

The Amateur Reasoner: an early attempt at creating an expert system using the Pascal language. One sample knowledge base tries to predict how long you'll live and the other sample figures out an animal you may be thinking about. The file is called AMATEUR.ZIP.

Automotive Diagnosis: over 200 windows full of technical information for those who want to see how an expert system can help with their automotive problems. The information may be out of date and the online updates may no longer work. However the program will give you an idea of what's involved in creating a knowledge base. Filename: AUTOS.ZIP.

ES Shells

An Expert System Shell is simply the brain and the input/output tools for an expert system that you will build. The only thing missing is the knowledge base and the set of rules that will guide the search for information. Most of these ES shells come with

a built-in editor and information viewer. Here is where the challenge begins.

Suppose you wanted to create an Expert System that would solve most of the problems that users have with their Palmtops. You would begin by collecting all the knowledge of Palmtop experts over the past six years. The next step would be to categorize all the problems that users have posed. Once you had that information you could begin to build both the knowledge base and the set of rules that would link the questions to the answers.

If you decide to accept this challenge, you'll soon discover that the task is too much for one person to handle. You'll also begin to appreciate why "knowledge-based" programmers were earning hundreds of thousands of dollars for their work even in the 1980's. To create a medical or financial expert system demanded that the "knowledge worker" have the equivalent of a Ph.D. degree in the subject, be an expert at researching answers and be a whiz at logic. It also helped if the person knew how to program a computer. You may also understand why companies that marketed such expert systems had to

carry liability insurance. Such programs could not be offered "as is" with all the responsibility for their use resting with the user. If the expert system produced inaccurate or misleading results it would be a field day for lawyers who would probably use their own expert system to assess damages and develop strategies to use in the courtroom.

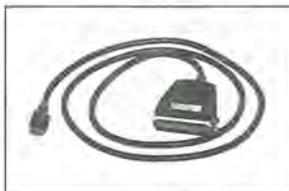
The files that contain ES shell programs are:

ESIE stands for Expert System Inference Engine. With ESIE you can put some "smarts" into your personal computer. You can build custom "knowledge bases" that help make decisions or to make our computers "more human."

The Expert System Toolkit presents, for the first time, a simple menu driven approach to generating your own rule-based backward chaining expert system. When it is complete, your Expert System will ask you (or the user of your system) a series of questions (QUERIES) to be answered on a scale of 0(No) to 10(Yes). At the conclusion of the consultation the Expert will draw a graph of the User's responses, and finally display the correct solution (GOAL).

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IMP Shell is a Expert System development environment. It contains all the utilities needed to develop and test new Expert Systems, and run them when they are finalized. All functions are menu driven and appear in Windows. IMP Expert Systems are rule based, backwards chaining systems. They are very fast and not limited by an artificially small number of rules.

XXXPERT is an Expert System development facility that includes an editor, file manager and Expert Systems inference engine packaged together in one integrated environment. You can use XXXPERT to develop Expert Systems that use rules you write in an English language syntax. You can develop Expert Systems that will aid you and others in doing things that you would not be able to do consistently as well without XXXPERT. XXXPERT allows you to define expert knowledge just once then apply it repeatedly time after time.

Beyond Shells

If someone else's ES shell program doesn't do what you'd like then it's time to create your own. Many of the early ES shells were written in C so you'd need to have a working knowledge of the C programming language and a fairly good idea of how an inference engine works.

Some of the later ES shells were written using the Prolog programming language. The advantage to using Prolog is that the language is designed to process logical commands. The disadvantage is that it's a high level language and, invariably, it won't do exactly what you want it to do. The result is that you'll wind up creating add-ins, usually written in C.

There have been various Prolog development kits that have come to market and just as quickly have faded away. For example, Borland's Prolog was a commercial program that worked on the Palmtop. For a while it was my favorite. However, once I began to use it, I realized that it was only a subset of the full Prolog pro-

gramming language. The full language programs were very costly. Now, however, there's a free version of standard Prolog on the CD InfoBase from Thaddeus Computing in the ONDISK directory for Mar/Apr, 1996. It's a very good 16 bit implementation of Prolog that will work on the HP 200LX.

Other AI Avenues to Explore

The field of artificial intelligence doesn't end with Expert Systems. In the past decade the scope of AI has widened and now includes such topics as "neural networks" and "fuzzy logic" among other things.

Neural networks (NNs) are a fledgling attempt to get a pile of wires and transistors to emulate the human brain. NNs are good at examining and comparing patterns and "learning" from their mistakes. This technology may be the answer to speech and handwriting recognition in future computers. The downside is that such technology takes more processing power than can be supplied in the current HP Palmtop.

Fuzzy-logic isn't something practiced by a cuddly version of Star Trek's Mr. Spock. It's a refined version of the logic you studied in school. Household appliance manufacturers have already adopted the technology to make their washers and dryers more efficient and easier to use. Microsoft has applied fuzzy-logic in its context-sensitive help screens in programs such as Excel and Word. If you're stumped with how to do something in Excel, you're supposed to be able to click on the Office Assistant icon and get a choice of help screens that deal with your problem. That's the theory anyway.

Here are some files that will let you explore this technology on the Palmtop.

The Brain is an advanced neural network simulator that is simple enough to be used by non-technical people, yet sophisticated enough for serious research work. Based upon the back propagation learning NLQ algorithm, The Brain allows you to train the computer to learn what you want it to learn. The Brain gives you a glimpse

into the future (Filename: Brain12).

The Neuron Expert disk from MindMedia is a commercial package that will let you develop Expert Systems using neural network technology. The package sold originally for \$195 but has been discounted to \$15 which is less than the cost of most shareware. The package comes with StockNet, a neural network that helps you pick winners in the stock market. Just answer 33 questions about a stock and Neuron Expert IV will give you a buy or sell signal proven more accurate than any other method of stock market prediction. This might be an interesting program to play with, if you understand the jargon of the stock traders.

FuzzyOne provides an excellent way to gain a complete understanding of fuzzy logic. You can specify inputs and outputs, add and modify shapes, formulate rules, then test the system through simulation. If the output is not what is expected, only a few keystrokes are required to change the input conditions. The new data can immediately be simulated. To aid in the design of the system, a learn mode can be activated. The program sends data it is working with to a file for your review. Once the design is proven, an application can be created containing everything needed to implement your system. ■

Commercial Products

Neuron Expert, PCTherapist, The Explorer, Brainstorm, Autowriter — (\$15 or less); Mind Media: (800) 818-9445, Fax: (408) 426-8519; Web: www.mindmedia.com

Shareware/Freeware

AMATEUR.ZIP, AI-Tutor.ZIP are available on this issue of *The HP Palmtop Paper ON DISK* and at www.palmtop.net
AUTOS.ZIP, ESIE.ZIP, EXSYS.ZIP, IMP-INF5.ZIP, XXXPERT.ZIP, BRAIN12.ZIP, FUZZY202.ZIP available at www.palmtoppaper.com (In the Downloads page. Search for Intelligence to find them all.)

Using Your Palmtop to Achieve Financial Independence

Can your Palmtop help you achieve financial independence? According to one Palmtop User the Answer is... "Yes!"

By Paul Merrill

What images do the words "financial independence" bring to mind? The casino at Monte Carlo? gleaming Ferraris, champagne and caviar? The definition of financial independence to Joe Dominguez and Vicki Robin, co-authors of the book "Your Money Or Your Life," is having enough money to meet your daily needs (enough so you don't have to work unless you want to) — and a little bit extra.

To me it means having "time" - time to write novels, to draw cartoons, study guitar, learn Spanish, travel and pursue meditation and yoga. For the last three years I have focused the majority of my time and energy on making financial independence a reality in my life through the purchase and rehabilitation of rental real estate. For these same three years my Palmtop has been helping me on the way, one keystroke at a time.

Buying Rental Property— Buying an Income

When you buy a rental property you are buying yourself a potential income stream — hopefully for life. My financial independence mentor and guide, Curly Smith, suggested I use rental real estate as my vehicle because I already had carpentry skills and, well, not much else.

I am convinced now that the way is not complicated and doesn't require brains or money. What it requires is

that you do it. To my delight, two months after my first talk with Curly, I bought my first two small houses. At this writing three years later, I have four houses, three of them completed, and can finally see the light at the end of the tunnel.

Here's how my Palmtop keeps me organized, on track and in the right frame of mind along the way.

Looking For A House

After three years I still have a repeating appointment in ApptBook that signals me monthly to call my various real estate agents and remind them that I am still here, waiting for them to call me about a property.

I also cruise the streets when I have the time, recording addresses of houses I might be interested in. This is what I'm looking for — unkempt houses with tall, unmowed grass, cars on blocks, with peeling paint and hopefully some well placed litter — in a nice neighborhood. As they say in all the real estate books, there are three important things to consider when buying property: location, location and location.

I record addresses and pertinent

information into a hand-held recorder, then, at home, I transfer this material to my Palmtop's DataBase in a file called "houses.gdb." I created the fields I need for this information, such as: Address, Owner, Owner's phone, Date last sold, Problems, etc.

Later I will take these addresses to the courthouse to look up the owners' names, addresses and phone numbers. After contacting the owner, I move the entry to the "Dead pile" or hopefully set up an appointment in ApptBook to get together with him or her.

The other way I use my Palmtop at this stage is to keep in touch with the people who will be assisting me when things get going. This, and every other business I know of, is a relationship business. Just like a salesman, I contact the people I will be dealing with — advisors, real estate agents, other landlords with whom I swap tools and advice — to wish them a happy birthday, happy anniversary or just to chat about my latest toy. "Hey, Dick, you've got to see this auto-feed sheet rock screw gun I just bought. It's really cool!"

For birthdays and anniversaries I use a repeating appointment in

ABOUT THE AUTHOR

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ApptBook that pops up monthly telling me to check them for the month.

I have customized my PhoneBook to have a check box for every month of the year. When I know a person's birthday or anniversary, I enter it in the appropriate field, then check the corresponding month's check box. On the last day of each month I create a subset for that month: (F6) (Subset), (ALT) (Define), (Fn) (UpArrow) to the correct screen, (TAB) to the appropriate check box, select it by pressing (SpaceBar), (F10), name the subset, (F10) (OK), (F10) (OK). This way I bring up the PhoneBook listings for the people I need to call.

I also use my Palmtop during this time to stay positive. I have three repeating Events that appear daily at the top of my ApptBook screen, that contain affirmations (e.g., "I don't need anything I don't already have"), knowledge (e.g., "A sincere compliment works wonders") and rules (e.g., "Don't make unnecessary calls, answer the phone or otherwise procrastinate after 8:00 p.m. or you must donate \$10 to charity").

Negotiating

The 100 House Rule (from the book "Think Like A Tycoon," by Bill Greene) says to get the information on the last 100 houses that have sold in the area you are looking at. You can get this list from your local real estate agent. What you are after is the address and selling price, not the original asking price. Don't make an offer until you have looked at 100 houses. At this point, you are an expert at valuing houses in that area and you can make an offer on every house that fits your criteria.

Never make an offer based on the asking price of a house. Make your offer based on what you feel is a good deal for you. Sometimes that may be much lower than the asking price. To figure my initial offering price I open up HP Calc's TVM (Time Value of Money) function. I enter the information I need, working backward to

figure out how much I can pay for the property, given the interest rate I know the bank will charge me and the rent I think I can get, adding \$150/month minimum profit. Then, since sellers and buyers expect to compromise on the offer, I lower my bid accordingly.

Next I list the price I want in an appointment in ApptBook that I keep moving forward into the current day. This way I can know instantly, without having to redo my figures each time, how high I can go and still make the purchase work. Also, I list other houses I am looking at in the Note field of this same appointment to remind myself that this is not the only deal out there, not to get too attached to it and to stay with my numbers. At the bottom of the Note field I list promises made on the listing sheet or by the real estate agent such as "and of course, you get to keep the a/c units, piano, stove, etc." I date these promises using (Fn)(Date), (Fn)(Time) at the bottom of the Palmtop keyboard.

I must say, sometimes I sympathize with the real estate agents I work with. For example, my last purchase originally listed at \$35,000, far above its unkempt value. My first offer was at \$15,000. I set a repeating appointment in ApptBook to call my real estate agent every month to present a new offer. First I presented the offer verbally. If that was rejected, I presented the same offer in writing one month later. Here's how it went:

Asking price	\$35,000
Paper offer 6/17/98	15,000
Verbal offer 7/20/98	15,000
Paper offer 8/29/98	16,000
Verbal offer 10/6/98	17,000
Paper offer 10/17/98	18,000 accepted

Once I have done my job, namely getting a signed offer on a house I am excited about, I bring in the big guns, the experts. These are my real estate advisors and I want their final seal of approval. If there is a problem that I didn't notice in the begin-

ning, I want their knowledge. At this point I can still cancel the contract using one of the "escape" clauses I have built into the contract. (If you do your homework using the 100-house rule, you should never need to "escape" out of a contract. I never have, but this kind of clause allows me to sleep at night during the negotiating process.)

Due to the damaged state of some houses, I have been forced to borrow money from private lenders at exceedingly high interest rates. I will use TVM again when I have fixed the house up and need to refinance it, working backward in TVM to figure the interest rate and number of periods (time span of the loan) that I want, based on the income the house is bringing in.

Closing

To follow the closing process I set a series of alarmed appointments in ApptBook. This is a critical time and I like to check with my real estate agent and attorney to see that everything is progressing smoothly. If they need some information or a document, I volunteer to get it for them. They usually decline my offer but it lets them know that their speed is important to me.

It is very important to have all the facts and figures of the deal at your fingertips at all times. In your Palmtop you want the phone numbers of all parties concerned: attorneys, real estate agents, back up lenders, pest inspectors, knowledgeable friends in the field, insurance agents, real estate mentors, utility companies, etc. I also keep the numbers of local lumberyards, plumbers, painters and electricians. You may have nagging last minute questions or need to get bids on necessary repairs that you weren't expecting. Once I got a message from my insurance agent one day before closing telling me that he wouldn't insure the house I had just signed off. Boy, did I scramble!

Fixing It Up

Palmtop/real estate tip — Every

so often go into your real estate database (where you keep your "Errors I have made in the past" list and remind yourself of past mistakes and possible future pit falls. For example, one of my notes reads "Only tear off a small section of the roof at a time if the weather is iffy!" I can still hear the plaster falling off the ceiling in big chunks during the night.

Now comes the real job of fixing up the property. I get out my Palmtop, go to PhoneBook and call for a dumpster to be dropped in front of the property. When you deal with a dumpster company or any other company, here is something I've found invaluable. In PhoneBook's Note field for that entry, always list:

1. The company or store's hours for the week
2. The department manager's name
3. The names of helpful employees
4. The amount of your contractor's discount. (Once you are on your second house, you are worthy of a contractor's discount.)

Next, in my real estate database, I make an entry for the house and enter:

1. Day of week for garbage pick up
2. Loan information (the payment, percentage, duration, the loan number, future balloon payments, etc.)
3. Names of the next door neighbors
4. Property tax amounts
5. House color information (it's the same for all my houses) — body color, exterior, interior, trim color, etc. My last house had wood columns that I matched with Sherwin-Williams Plum Mahogany stain. That information will be invaluable if ever I need to touch up a worn spot.

Palmtop/Real estate Tip —

The most important fix up items for a rental house seem to be:

1. Beautiful colors — critical, inside and out. Spend the time and money necessary to pick the right ones and stay with them.
2. Fancy light fixtures — I buy close-outs, brass or crystal.

3. A tasteful mailbox — I put up a vertical one, mount it on the wall next to the front door and paint it the same color as the accent trim.
4. Fancy brass numbers — Spend the time and money necessary to pick the right ones.
5. An elegant, brass, lighted door bell.

This information and any pertinent prices, item numbers, etc., I enter in my database under the house in question.

Avoiding Lists of Clutter

In ApptBook, I create an appointment for the new house (e.g., "(DO NOW!) 510 E. Adams INSIDE JOBS LIST - info below"). I roll over this appointment one day to the next. In the Note field I list the items to be fixed and delete them as they are completed. Hopefully I will decide some of them are not critical and can be moved to my "To Do In the Future" list in DataBase. This is my Palmtop "round file" for non-real estate ToDo's as well as real estate ones. As it is said, "out of sight, out of mind." It's amazing how really pressing items like "make new labels for spice jars," never seem to bother you when you move them to your DataBase's round file. And though I will probably never look at these items again, having them "somewhere" inside my Palmtop makes me feel better than deleting them. Human psychology, I guess.

Record Keeping

Record keeping during fix up is CRITICAL! You will be referring back to your check register in Pocket Quicken many, many times. This could be to see if you've paid a mortgage due, to check a rent deposit, to see how much your last utility payment was or any of a myriad of reasons. So, when you buy items for two different houses, use Splits (F3) to get to Pocket Quicken's Transaction Splits screen, then keep the amounts separate. For each item, you can enter the Project name (I use the house address

- e.g., 510). Don't forget to enter something in the Memo field. You need all your information to be as complete as possible since you might have to look back at this entry years later if the IRS audits you.

I have set up a handy way to move backward through my Pocket Quicken check listings by month. I create a new listing on the first day of every month (F2) (Add), and enter "ZZZZZ" in the Payee field. I list the Transaction Type as a deposit and leave all the other information blank. This way if I want to go back a month at a time, I simply press (Z) when I am in the main screen.

Remember that rehabbing a house is a big project. Don't forget to take some time off along the way. I take a half day every Sunday afternoon and get out of town, away from the phone and the cell phone, and into nature. I don't take my Palmtop. I've found that spending three hours redesigning my PhoneBook does not classify as a "day off."

Finding A Good Renter

Finding a good renter is important. Bad tenants will create a desire in you to end your career in real estate fast. To help me do this I list any "qualified" people who have expressed interest in renting a house along with their phone numbers. When I get a vacancy I call them all.

Here are some good rules of thumb when picking a tenant:

1. Don't jump at the first tenant that comes along because you need the money. It's better to lose a few weeks rent than to have to ask an irritated 6 foot 4 inch, 275 pound tenant to move out.
2. Never say "Yes" to a prospective tenant while they are standing in front of you. Go home and think about it when you can be somewhat objective.
3. Go with your gut. Trust your instincts. If your mind says, "Yes,"

Books I Read and Recommend

The following tools of the trade proved to be priceless:

Your Money or Your Life by Joe Dominguez and Vicki Robin. A book that will surely turn your head around and change your thinking about money in a positive way.

How To Get Out of Debt, Stay Out of Debt and Live Prosperously by Jerrold Mundis. How to stop the downward spiral of being in debt.

The Richest Man in Babylon by George S. Clausen. Common sense laws of gaining wealth written as a series of short entertaining stories.

Think and Grow Rich by Napoleon Hill. A book to make you aware of the power your own thinking plays in your success or failure.

As a Man Thinketh by James Allen. Same comment as above.

How I Turned \$1,000 into \$5,000,000 In Real Estate by William Nickerson. Done by the author parttime while he worked another job. This book deals more with apartment buildings rather than single family homes, but still has a lot of good information.

but your insides are doing summerraults, go with your feelings first.

On Being an Organized Landlord

In my PhoneBook I have a field for e-mail addresses. This will come in handy when I am in Argentina and need to e-mail my bank to check rent deposits or e-mail a friend to ask him or her to call a plumber in response to an e-mail I just got from a tenant.

You can keep track of similar rent amounts deposited in your bank account by assigning each house a slightly different rent amount. For example, the rent for my 200 E. Madison is \$375.01. For 510 E. Adams, the rent amount is \$375.02. This way, which deposit has been made can be easily identified.

How To Save Money With Accelerated Payments

You can save a lot of money by making accelerated payments. Compare the payments on a particular loan based on a 30 year, 15 year, or 10 year amortization schedules. For example:

1. The payments on a \$50,000 loan amortized over 30 years at 8% interest are \$366.88 per month (principal and interest).
2. The payments on the same loan

amortized over 15 years are \$477.83 per month (principal and interest).

3. These payments amortized over 10 years are \$606.64 per month (principal and interest).

This is especially pertinent to landlords like myself who live in the mid-West. The house referred to earlier, purchased for \$18,000 has a mortgage on it of \$13,500. It currently rents for \$375. The difference in payments by length of term on this mortgage (at 8.25%) is:

- 30 year — \$101.42 per month
- 15 year — \$130.97 per month
- 10 year — \$165.58 per month

With the cash flow it currently has, I chose the 10-year amortization. I cut off 20 years of payments to the bank.

Another way to save money is to pay your mortgage bimonthly. I have eight repeating appointments in ApptBook reminding me to pay my mortgages bimonthly on my four houses. This is a trick that my mentor Curly showed me. The first time you pay your mortgage you make your normal monthly payment plus 50% of that amount. From then on, starting 15 days later, you pay half of the monthly amount on the scheduled day of the month, and another half

month's payment on the day that falls 15 days later. This simple manipulation, Curly tells me, cuts your loan term by approximately 25% while you pay the same total amount of money per month. I thought my bank might object to this idea since they would be losing interest money, so I called them about it. They didn't care one way or the other. As long as they received their money on time, they told me, everything was fine.

Life on the Riviera

I can't say my life has actually landed me on the Riviera yet. But in the mean time, one of my favorite games is to go into HP Calc's Currency Conversions application (MENU) (Applications) (Conversions) (Currency), play with different rates of exchange and dream. Joe says never pay for a vacation when you are financially independent—donate your time to a charitable organization in the country you want to visit and let them pay for your travel and expenses.

Since I am single, my target "rejuvenation" (I don't like the word "retirement") amount is \$1,000 per month. Whenever I tell someone this, the usual response is, "No one can live on \$1,000 a month!"

But it can be done easily. Again, the concept comes from *Your Money or Your Life*. My plan is to teach English as a Second Language or do volunteer work (travel with expenses paid) for six months a year. While I'm gone, my \$1,000 per month income will be adding up in the bank. This way, for the six months a year when I am home, I will have an effective income of \$2,000 per month, and this I know I can comfortably live on. I will have the time to ride my bicycle rather than drive and I know how to find great deals on the things I will want or need.

What about future opportunities to make money? According to Joe and Vicki they are easier to spot when you don't spend all of your day working. ■

••• BASIC TIPS •••

Unless otherwise noted, the Basic Tips are by Ed Keefe.

APPOINTMENT BOOK

Days to Y2K

Several local TV stations have been displaying the number of days until Jan. 1, 2000. That may be useful for the rest of the viewing audience but we Palmtoppers already have a Y2K countdown timer built into the Palmtop. Look on the right side of the second line in Appointments. It will show something like 200/165, which means that 200 days have passed and 165 days are left in the current year.

GENERAL

Hiding Sensitive Information

If you have information such as Personal Identification Numbers for ATM cards, the registration code for commercial software, or health information, you could store this in a Memo file and secure the file with a password. However, if some hacker wants to get at the information, they often can break the password protection. So, to further protect your information, rename the Memo file to something like DIRECTORY.COM or FILER.EXM. If a hacker uses a hex editor or a file viewer to look inside the file, the password protection will have turned the text into "garbage" which looks a lot like a typical .EXM or .COM file. A hacker might not guess that this is not an executable file and may give up. It's not a perfect solution to protecting sensitive data but it does keep it away from the casual hacker.

*Philippe Lewis
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POCKET QUICKEN

SYNCH PQ With Quicken for Windows

Here's a batch file that will let you

synchronize Pocket Quicken files with Quicken for Windows.

Assuming that you have the HP Connectivity Pack on your Windows 3.1 desktop computer, type the batch file into NotePad and save it as PQ_SYNCH.BAT in the same directory as the Cpack software.

```
Rem PQ_SYNCH.BAT
rem ** Connect with LapLink, and
rem wait for connection
lira1
lira2
lira3 /c
wait
lira_env /w
if errorlevel 1 goto wait
rem ** Backup my LX files
xcopy /m/s f:\*.* d:\user\backuplx
rem ** Start the LX emulator from
rem HP Connectivity Pack
tkernel
cg
rem ** Sync. Quicken file at
d:\user\quicken\qdata.qdt
rem ** with Pocket Quicken file at
rem **
d:\user\backuplx\quicken\qdata.pdt
rem ** for details, see sample file
from HP Connectivity Pack
pp /s d:\user\quicken\qdata.qdt
d:\user\backuplx\quicken\qdata.pdt
q
c:\tmp\qdata.log 1 -1 1
rem ** Unload LX emulator
cg
un200
rem ** Copy the synchronized file
rem back to the LX
copy
d:\user\backuplx\quicken\qdata.pdt
f:\quicken\qdata.pdt
```

You will also have to modify the drive and path parts of the batch file to suit your own setup.

*Paulo Custodio
Paulo.Custodio@alcatel.de*

DATABASE

Editing the Notes Fields in Any Database

The Notes fields in all the database programs for the 200LX (i.e., Appointment/ToDo, NoteTaker, Database, WorldTime, PhoneBook) are somewhat unique in that they allow up to 32K bytes of information to be stored in each note field. The Notes fields are great for storing information: not so great for editing the information contained in them. There are very few shortcut keys to edit a note. Here are the shortcut keys that do work:

CTRL+FN+END : jump to the end of a note,

CTRL+FN+HOME: jump to the start of a note.

CTRL+Right/Left ARROW: jump forward/backward to the start of a word.

There are no shortcut keys for such common tasks as deleting whole words. The best you can do is highlight a word or phrase by holding down the Shift and pressing the Arrow keys. Then press the DEL key. There is no shortcut to highlight whole words or

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paragraphs.

The best technique for editing large amounts of data in a Note field is to use the F2 key to Save the note to a disk file and then open that file in Memo or another editor such as PalEdit or VDE. When the editing is finished and you've saved the file back on the disk, you can switch to the Notes field. Press the F4 (Clear) key and then press the F3 (Insert) key to bring the text file into the field.

GENERAL

Be Careful When Trying New Flash Cards

There are a lot more PC Cards on the market nowadays than when the HP 200LX was introduced. Some of the older cards are beginning to enter the "used" market at bargain-basement prices. The prices make them very tempting.

However, look closely before investing any money in a PC Card. The most critical number to look for is the current needed to run the card. HP designed the 200LX's card slot so that it would provide a maximum of 150 milliamps (mA). Some PC Cards require 300 or more milliamps. to work. They probably won't work on the battery power supplied by the 200LX.

Some users have found, however, that these cards will work if you plug in the Palmtop's AC adapter.

THIS IS NOT A GOOD IDEA! In other words, don't do this. You may get the PC Card or modem to work but you risk destroying the PC Card port on the HP 200LX: not something you want to do. It's difficult to repair and may have a domino effect in destroying other parts of the Palmtop.

Consider the following analogy.

Drawing 150mA of electric current through the PC Card port of the 200LX is like letting sand fall through the opening in an hourglass. If you wanted to speed up the hourglass you could hook a suction pump to it. The sand would probably move through the opening a little faster but,

after a while, friction would heat things to the point where the glass would break. Kiss the hourglass goodbye. A PC Card that draws more than 150mA acts much like an overpowered suction pump. It might work for a while, but it will eventually suck the life out of your Palmtop.

CALC

Solver and 1-2-3

To get help on using HP Calc and Solver with Lotus 1-2-3 look first at the help screens in Solver (CALC, CTRL+S, F1). The help screen will give you a short introduction to the technique of using 1-2-3 as a "back-solving" tool. Look also in the TVM function of CALC for help on using 1-2-3 as a place to store an amortization table. (CALC, CTRL+T, F2(Amort), F1(Help)). If the help screens are not enough, try the User's Guide. It contains some good examples on how to use these two applications synergistically. For more examples of how to use these two built-in applications together, get a copy of the SLVR_HLP.GDB database file from the CD InfoBase or from the SUPER site and select the Subset that deals with 123Stuff.

General

Use Key200 to Load Database Files

Many users have explored a way to load Database, NoteTaker and PhoneBook files by highlighting the file in Filer and pressing Enter. The method involves the use of FILER.INI along with a keyboard stuffing routine.

Here is another way to do almost the same thing using the HP 200LX's built-in KEY200 program. Users of the HP 100LX can use the add-in KEY100 program available on the CD InfoBase. The advantage to this method is that you click the Filer key once to open a Database file and double click it to open a NoteTaker file. To open Filer itself, however, you'll have to get used to pressing CTRL+Filer. The disad-

vantage is that the Database or NoteTaker program will only open the currently active file. You can't use this method to automatically open a different Database file.

The KEY200 program calls for a text file that will remap the keyboard. Key in the following text into Memo and save the file as C:_DAT\DNB.TXT

```
Ctrl Filer : ^Ctrl Ctrl ^Ctrl Filer ^Filer
^Filer Filer : Ctrl Memo ^Memo ^Ctrl
Filer : Ctrl Phone ^Phone ^Ctrl
```

Remarks-The first line sets the CTRL+Filer keys to open Filer. The next two lines toggle between the Database and NoteTaker application.

To activate this file, put the following command in your AUTO EXEC.BAT file somewhere before the command that starts System Manager (i.e., 200 or 100).

```
D:\BIN\200 C:\_DAT\DNB.TXT
```

If you're using KEY100 on the 100LX, you'll need to change the first part of the command to reflect this. If you're using Software Carousel, put the command in the batch file that starts the System Manager work area.

Once everything is in place you can press CTRL+Filer to open Filer or press Filer to open your Database program or double click Filer to open NoteTaker.

If you don't use NoteTaker, you can modify the DNB.TXT file to open the PhoneBook by omitting the Ctrl and ^Ctrl words from the Filer: line.

If you like KEY200 as a way to make your Palmtop behave, here's another line you can add to DNB.TXT.

```
^More More : More ^More Menu
^Menu A ^A T ^T
```

This line will let you double click the More (&...) key to open the Application Manager and Terminate All applications and put you at the DOS prompt. You may prefer that to pressing More Menu All Terminate. ■

... QUICK TIPS ...

All Quick Tips are by Ed Keefe unless otherwise noted.

DATABASE

Importing Database files into Excel

We have received several requests for software that will transfer database files to the Microsoft Excel spreadsheet or Access, the MS database.

There is no software that performs this task because the task does not require additional software.

You can handle the task by converting a database or Phonebook file to a Comma Delimited Format (CDF) file using the built in Smart Clip function. Once you have that accomplished you can transfer the CDF file to your desktop computer and use the File Open command in Excel and it will walk you through the process of separating the various fields in the database into different columns in the spreadsheet. As with many Windows' applications, don't expect to get it right on the first try. It may take several attempts before you learn how to do things the Microsoft way.

The process is a little more complicated if you're trying to import the file into Access but, again, there are enough help wizards in Access to get the task done.

To expedite creating the CDF file you can use the XLATE/MERGE program in the HP Connectivity Pack.

The only caution is that Notes fields in the database files will be truncated to about 2 Kbytes. If you have notes that are greater than 2 Kbytes in length you may have to export them to text files on the Palmtop and import them separately into an Access Note field.

DOS

Small Enhancements for the DOS batch file Language

If you've ever tried to create a com-

plex batch file, you'll recall how difficult it was to develop an "IF... THEN...ELSE" statement. The normal IF command in DOS can only test for three things: 1) the existence of a file, 2) the equality of two strings or 3) an Errorlevel value returned at the end of a program. IFF40 is a small program that will let you enhance the DOS "IF" command in several useful ways. The program is a standard DOS program: not a TSR. It may be used at the DOS prompt or put inside batch files. It returns a range of Errorlevel numbers that can be interpreted by the normal IF ERRORLEVEL batch command. The various things that IFF40 will test for include the following:

- A - Actual RAM Available
- C - sCan a whole disk for a file
- D - has the Date been reset?
- E - checks for Empty drives
- L - checks the Label of a disk
- M - lets you build a simple Menu similar to one that uses the DOS Choice command.
- P - Prompt is a variation on the M (Menu) option.
- Q - Question allows for Y or N response.
- R - seaRch will let you search for multiple files in a list
- S - Size tests for the space left on a disk
- X - tests for eXpanded (EMS) memory by pages.

Some of the functions in this program are duplicated by other DOS commands but the RAM test is unique as is the test for Date. The latter test could be most useful on the Palmtop where the occasional hard reset alters the system date and messes up the Appointment Book. The IFF40.ZIP archive contains about 10 sample batch files to get you started. IFF40 is the work of John Knauer, Jr. CSI 75236,1466 and is freeware.

GENERAL

Fixing the Date with DATETEST.EXE

The HP 200LX's built-in calendar suffers from some of the same problems that effect the calendar in other computers. On occasion, if the machine crashes or you are forced to do a hard reset (CTRL+Shift+ON), the date may be reset to Jan. 1, 1980. When this happens, you typically have to reset the calendar to the current day and update the Appointment Book by pressing the F5 (Goto) and F4 (Today) keys.

The DATETEST.EXE program can help alleviate some of these reset-hassles.

To use the DATETEST program simply transfer it to the Palmtop and include the command DATEST 1999 in your AUTOEXEC.BAT file. The next time you restart the Palmtop, DATETEST will check if the value of the year that pops up is less than the value of the year indicated on the DATETEST command line. A hard reset is most likely to reset the date to 1980. In this case the DATETEST program would find that 1980 is less than 1999 and the program will then ask you to enter the correct date from the keyboard. The DATETEST program is the work of Lihu Avital / Pitron pit@actcom.co.il.

All About Backing Up

Over the years we've often reminded Palmtop users to back up their software and data. With the availability of 32, 64, and now 96 MB RAM disks as well as mammoth flashcard drives, backing up is becoming more of a necessity and more of a challenge.

Users have risen to the challenge. Here are some of the methods that Palmtop owners have devised to save their data and, on rare occasions, save their sanity, when the Palmtop decides to obey Murphy's Law.

An Automated System Macro

To backup a C: drive to the A: drive on a daily basis, use the following System Macro. Set the macro to run automatically at 4:00AM or whenever you're not likely to be using the Palmtop.

```
{Filer}{Menu}q{Filer}{F5}c:{Enter}{Down}{Menu}fba:c_backup{Date}{Left}{Left}{Left}{Left}{Left}{Del}{Right}{Right}{Del}{Enter}y{Menu}q{Appt}{Left}{F4}||3{Enter}{Enter}{Alt+D}+{F10}{Menu}q
```

Here is what the macro does.

{Filer}{Menu}q. — Wakes up Filer and then quits it.

{Filer}{F5}c:{Enter}{Down} - Open Filer again and go to c:_dat.

{Menu}fba:c_backup{Date} — Use the Filer Backup command to put all the files in A:\C_backup\ within a dated subdirectory.

Modify the next part of the macro to temporarily change the date format in Setup to Julian, then use it. Then change back to what you normally use.

{Left}{Left}{Left}{Left}{Left}{Left} — This edits the date format MM/DD/YY and takes out the “/”.

{Del}{Right}{Right}{Del}{Enter}y{Menu}q — Confirms the name.

{Appt}{Left}{F4}||3{Enter}{Enter}{Alt+D}+{F10} Goto Appointment. Set the day for the previous day and Find the “||3” macro item. Advance the date of the item by one day and save it.

To use the macro as an appointment, set the time to say 4AM and put “||X” (no quotes) in the description field where X is the macro number.

Using PKZip to Back Up

Other users prefer the PKZip compression program to make back up files. Here's the command that will get the job done.

```
pkzip -a -ex -o -p -P -r a:\backup c:.*
```

Use Some Structure to Simplify a Backup Procedure

Alexander Gutfeldt, suggests the following structure for a C: drive.

Separate data and programs on

the assumption that the former changes more often and needs more backups than the latter.

Reserve the c:_dat\ directory and its subdirectories to hold data and configuration files.

Create a c:\s directory to hold system utilities. Create a c:\a directory to hold applications.

Use an appointment, such as “||3” above, to run a batch file that will ZIP the c:_dat directory and its subdirectories and store the archive in A:\BACKUP. Once a week, perform the ZIP backup for the C:\S and C:\A directories. Then backup the flashcard to the hard drive on a desktop or laptop computer.

Every 3 or 4 months, weed out the files on the desktop/laptop backup that are no longer useful. Transfer the remaining files or archive to an external medium such as a ZIP disk or a tape.

The most thorough back up procedure ever.

The following backup procedure may sound like overkill but, if your data is your business, there is no such thing as overkill.

Take a look at this routine, by Alan Striegel. You will probably have to modify it to suit your own hardware and software setup. It's well worth the effort. Note that this routine is not limited to the Palmtop but includes other computers on which you store critical data or irreplaceable software.

A Daily backup:

Compress the entire contents of the C: drive into a ZIP file on the A: drive of the Palmtop. Then copy the entire contents of the A: drive (a flash card) to the hard drive of a desktop or laptop. This latter step can be quite fast if your desktop or laptop machine has a flash card reader, otherwise use a serial cable and the Transfile 200 program, or ZIP.COM to effect the transfer.

A Weekly backup:

Copy the entire contents of your desktop's or laptop's hard drive to an external removable hard drive or tape drive. An Occasional backup: (more

often than monthly but not weekly) Copy the entire contents of your desktop's or laptop's hard drive to a larger hard drive and perform an incremental back up of that drive to a magneto-optical cartridge or a read/write CD ROM.

A Monthly backup:

Copy your laptop or desktop hard drive to a tape cartridge. The backup procedure may sound like the invention of someone with an obsessive-compulsive disorder. Not so! You may only see the benefits of such a system when your Palmtop loses all its information and your desktop computer loses its hard drive. In that case you could either be out of business or staring at a bill for thousands of dollars from a data recovery service.

Alan Striegel

Striegel@PIONEER-STANDARD.COM

Practice Safe Backup and Restore

No matter what method you use to perform a backup of your Palmtop, here are a couple of cautionary notes.

1. Every time you open one of the built in database applications, the file is changed and the archive bit for the file is set. If you are using PKZip or XCOPY to perform an incremental backup based on the setting of the archive bit, the database files will be backed up even if you did not change anything in the files.

2. If for some reason, a database file is corrupted it will be backed up. Oftentimes this will overwrite a previous, “good” backup of these files.

3. To get around this, back up the database files (i.e., those that have an extension of .?DB) to a different location on the A: drive or on the hard disk of your desktop computer. Do not send the files to the same directory where the previous database files are located.

4. No matter how elaborate or sophisticated a backup procedure becomes it's worthless if you can't restore the whole Palmtop, or parts of the Palmtop's data and applications, from the backup files. Before you pat

yourself on the back for backing up, run a test to see how easy it will be to restore your Palmtop. If it's impossible or difficult to restore, it may be time to return to the drawing boards to look at other backup procedures.

Turning NUMLOCK Off

On most PC's you can choose to have the computer start with the NumLock function active or inactive. Usually this is done through the BIOS settings. For example, on some PC's you can press the F2 key after you turn the machine on and you will gain access to the BIOS (Basic Input Output System). There is no such option on the Palmtop. However, to activate or inactivate the NumLock key on the Palmtop you can run a small program that will do the same thing.

Here is the hex-coded version of the program created by Eric Meyer, the author of VDE and many PC utility programs.

To build the program, exit System Manager by using the More Menu AT command. At the DOS prompt type

```
DEBUG
e100 b8 40 00 0e c0 bf 17 00 26 80
25 df b8 00 4c cd
21
rcx
11
nnolock.com
w
q
```

When you finish typing in the program, press Enter and you should see that a new file NNOLOC.COM has been created on your disk drive.

For those who want a prewritten program that does the same NumLock setting, goto <http://home.t-online.de/home/stefan.peichl>

This Web site and the small NumLock program are the work of Stefan Peichl. ■

Shareware/Freeware mentioned in this article

DATETEST.EXE and **NUMLOCK** are all freeware and will be available on this issue's *The HP Palmtop Paper ON DISK* and online at www.palmtop.net.

LIST program.

Now, with QUICKV, you can stay in System Manager and view files either as text files or display the hexadecimal version of the file.

QUICKV.EXM is a small, System-Manager Compliant file viewer for the HP 100/200LX. Some of the features of QuickView are:

- Text and Hex viewing modes
- Supports the zoom modes of the HP-LX
- Integrates well with X-FINDER
- Runs in 7k of memory, 10k when using the file open dialog
- System manager compliant: uses the HP-LX user interface, can be task-switched, leaves your DOS process free for other applications.
- File to be viewed can be chosen via file open dialog or passed by the clipboard.

Some Known Limitations are:

It does not show database type files nor will it let you perform a search in such a file.

QuickView has some problems viewing files that are larger than 64 Kbytes or more than 128 pages long.

QUICKV.EXM is copyright freeware by Alan Krempler of Graz, Austria: alan@oeh.tu-graz.ac.at

Smallest Infrared Device

The HP 200LX has an infrared (IR) port that can send and receive signals to other computers and printers. The IR protocol that is built into the HP Palmtop doesn't meet the latest specifications. However, that is easily corrected by getting a copy of the most recent IR driver from the SUPER site. If you have the latest drivers, there may still a problem since there may be no way to connect to your desktop or laptop computer if it doesn't have an IR device.

Here's a device that will remedy that situation.

The IR-HP5 is a serial infrared adapter that will connect your HP 100/200LX to a desktop or laptop via the Palmtop's built-in IR port. It works at 57600 Kbps so it's the perfect hard-

ware companion to the popular Transfile Win200 software distributed for free by Hewlett-Packard. It will also work with the HP Connectivity Pack and other file transfer software. You can plug the IR-HP5 directly into the DB-9M serial port on your desktop or connect through a cable. (A 6-foot DB-9M to DB-9F cable is included with the adapter.) As an added bonus, the IR-HP5 also works very nicely with Linux and either lxttools or LXFileman. Setup is simple. Just use the setserial program to make sure your serial port is set for spd_hi. With the 200LX pointing at the IR-HP5, the Filer will answer commands from your Linux box via infrared! The IR-HP5 is constructed inside a DB25-DB9 adapter shell so is very small and only weighs a few ounces. ■

Shareware/Freeware mentioned in this article

PalEdit 2.2b and **PIM 1.0a** are freeware by D&A Software, written by Andreas Garzotto. They are available directly from www.dasoft.com and will be on *The HP Palmtop Paper ON DISK*.

Stereo Shell 4.01 is a shareware program that is no longer supported by the author. It is available on the 1999 CD InfoBase from Thaddeus Computing, Inc. and on the Web at www.palmtop.net.

OLC2LXinst.EXE is freeware available on this issue of *The HP Palmtop Paper ON DISK* and on the S.U.P.E.R. site at www.palmtop.net.

DBCHECK is copyrighted freeware by Curtis Cameron. It is available directly from <http://cameron.hplx.net> and will be on *The HP Palmtop Paper ON DISK* and on the SUPER site.

CXCTL.EXE, **QUICKV** and **DIA.COM** are all freeware available on *The HP Palmtop Paper ON DISK* and on the SUPER Web site.

Commercial Products mentioned in this article

IR-HP5 — \$39.95; a serial infrared adapter available from Thaddeus Computing, www.palmtoppaper.com, 800-373-6114.

How To Contact Us

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Software on The HP Palmtop Paper ON DISK

September/October 1999

You can find all the software described in this issue at www.palmtop.net/super.html which is now sponsored by our Web site www.PalmtopPaper.com.

PRODUCT	FUNCTION	FREWARE/SHAREWARE
CUTEMOUS.ZIP	Mouse driver program	Freeware
CXCTL10.ZIP	Take control of HP 95LX	Freeware
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DIA.ZIP	Keep appointments/todos in Diary	Freeware
FM31.ZIP	German clone of Xtree Gold 3.01	Freeware
IFF40.ZIP	Enhance DOS batch IF command	Freeware
NUMLOCK.ZIP	Control numlock on HP Palmtop	Freeware
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- 3) Complete set of kits for marketing your Palmtop product
- 4) CompuServe starter kit (CompuServe is where Palmtop programmers hang out)
- 5) PAL: a C source code library for developing software with the look and feel of the HP Palmtop built-in applications

'79 #GDEV

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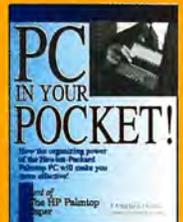
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Palmtop Golden Age Over? We Think Not!

Dear Palmtop User,

It's amazing. Yes, HP discontinues the HP 200LX Nov. 1. But you could have fooled Palmtop users and developers. **New Palmtop possibilities appear weekly.**

There's tons of new software. Examples: www.dasoft.com's PIM/LX, Outlook file transfer tools, and a database file corruption tester. Also, commercial DOS software such as Borland's Turbo Pascal and Symantec's ThinkTank have now been released in the public domain. Use keyword search at www.palmtoppaper.com/download.htm. Also, check out new Palmtop listings at www.palmtop.net. You'll be amazed!

Last issue we introduced the 96 Meg upgrade. In the future, we hope to announce **HP 200LX backlighting!**

Furthermore, **your HP Palmtop investment is safe.** HP continues its support until November, 2002. We plan to supply knowledge, repairs, upgrades, and used Palmtops for at least that long.

Finally, an active and knowledgeable group of users continue to provide **free technical support** and the latest Palmtop news via an email list — sign up at www.sp.uconn.edu/~mchem1/HPLX.shtml. For knowledge visit www.hplx.net. By the end of this year, 8 years of *The HP Palmtop Paper* can be found at www.palmtoppaper.com.

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