OTTAWA PC NEWS

Product Review

Do you want/need SCSI? *By Dunc Petrie*

SCSI is an acronym for Small Computer System Interface; a bus designed to provide a reliable, fast connection for system peripherals (including hard drives, CD-Roms, tape backups and scanners). Using SCSI, several peripherals could be connected to one host adapter (usually a plug in card) by daisy chaining.

The original SCSI-1 was variously implemented by manufacturers; avoid it if possible. SCSI-2-today's standardoffers significantly improved compatibility; it supports more peripherals; finally, it improves throughput. Fast, Wide and Fast Wide sub-variants extend the basic offerings. The latest, SCSI-3, is likely of little interest at this time to mainstream users.

SCSI host adaptors exist for common system buses: ISA (8 and 16 bit) and PCI (also MicroChannel, EISA and VL Bus); choose one consistent with the available expansion slots on your system. Assume the faster the bus, the better the data transfer rates and the greater the adapter cost.

The advantages include expansion slots are freed, IRQs and DMAs are conserved, speed is increased and demand on the CPU to service peripheral devices is decreased.

The disadvantages are increased costs and complexity. You need a host adapter (non-SCSI approaches are usually "no-cost" add ins). SCSI peripherals usually cost more although this gap is narrowing. Finally, complexity is increased through termination, cables, software drivers.

Your options include: third party expansion slot cards, motherboard manufacturer expansion slot cards (for a specific series of motherboards), motherboard integrated cards and device-specific cards (typically a scanner). For greatest flexibility, purchase a third party add-in card since the remainder pose potential problems. Integrated or motherboard-specific cards leave you at the mercy of the manufacturer. While most use recognized chipsets (NCR is a favorite), the chipset manufacturers disavow direct support. Without drivers you will have a frisbee when the operating

system is changed (these seem to migrate to flea markets caveat emptor!). Worse, some integrate the SCSI BIOS into the system BIOS. Although a BIOS is not integral to all SCSI operations, if you need it or you wish to disable it and lack a functional upgrade... well, you get the idea! Some of these integrated approaches command (at present) stiff premium prices.

What's left? Adaptec products are widely available and reliable; the software (EZ-SCSI) is highly

Next meeting: **WEDNESDAY, March 4ᵗʰ,1998**

by Bert Schopf

February meeting review

We were honored to welcome back Adobe to the DTP SIG for a "DTP Power Trio" presentation that focused on new features in Adobe Illustrator, Photoshop and PageMaker. Eastern Canada Adobe representative Paul Theriault brought presenter Colin Smith up from the Toronto office for a superb presentation-which even drew in some curious folks from Corel! Colin's presentation began with a demonstration of *Illustrator's* (vector-based drawing) cool features including: - skewable grids (that look like graph paper) - ability to make any object a guideline -vertical type - auto drop shadows - Photoshop plug-in capability -layer support - much improved import/export filters including PDF and ANY PostScript for full editing capability - type on a curve - path patterns Some of the improvements to the industry-standard raster image editor *Photoshop 4.0* included: - a new Navigator for customizable zooms to any increment - adjustment layers - an editable gradient palette - the very usable "replace colour" feature - a downloadable patch (version 4.01) that lets you "fade" effects

PageMaker 6.5 also had too many new features to list here, but one highlight was the fact that PM 6.5 now allows you to embed Acrobat PDF files, making it an ideal page layout tool for both paper and web publications. Colin stressed that all the Adobe products were very well integrated and would automatically launch/close the appropriate application for effective cross-program publishing. The entire presentation was given a big "thumbs-up" by everyone!

As usual, Adobe gave away some nifty stuff (flashlight key chains) and the winners of the cool Adobe ball caps were Moe Duchene, Dunc Petrie, Bryan Bonell, Tim Mahoney and Paul Blakely.

March DTP SIG meeting

Join us March 10"h as we welcome back Michael Vlugt of Vorton Technologies to demonstrate their newly developed graphics utilities under the name "Tidal Wave".

DTP SIG needs YOU!

The DTP SIG will be making a presentation at the May OPCUG General Meeting that will be much like our very successful past "Show n' Tell" sessions. If you would like to make a short (10-15 minute) presentation on something interesting you've done, please contact Bert Schop£ This promises to be a very enlightening session that will show OPCUG members what we're all about!

Calendar		
Meetings	**Date**	**Time and venue**
OPCUG General Meeting	March 4: - Corel Office Suite	7:30 p.m. - National Museum of Science and Technology, 1867 St. Laurent Blvd.
	April 1: - Presentatin of PUB II	
Desktop Publishing SIG	March 10: - Vorton Technologies	7:30 pm - Griffin Computer Training Centre, 275 Slater St. (at Kent)
Ottawa Paradox Users Group	To be announced	6:15 pm - Inly Systems, 1221a Cyrville Rd.

Pub Crawl - URLs Out!
Save your favourite web site addresses to an HTML file

by Alan German

You probably surf the net, storing all sorts of site addresses which just might be useful-some day. If you are really organized, you probably have a neat set of folders containing many such addresses. The question is: can you store these away as a text file on a floppy disk so that you have a backup copy of all those hard-won favourite sites?

What you could do is check the file area of The PUB for:

```
     VRL30VT1.ZIP    l0k 1-22-98
```

URLs Out! v1.4 converts MS Internet Explorer shortcuts into a single HTML document. Minor bug fix.

I came across this tiny utility program recently and found that it was just what I wanted-a quick and not-so-dirty way to turn my browser favourites into a textual listing of site names and URLs. Just point at the subdirectory which contains the shortcuts and enter a file name for the output listing. There is even some minor customization which you can add in terms of selecting which HTML tags are to be wrapped around the headers and hyperlinks in the final document.

The program automatically scans the favourites directory and any subdirectories. The output file is in HTML format, so this gives a different way to display all those favourite sites. What you end up with is a list of useful links such as:

Internet Shortcuts

```
c:\windorrs\favorites\xeb design\

canadian flag clip art gallery javascript

for the total non-programmer

c:\Windows\favorites\
```

```
altavista

carsp-acpser

opcug
```

List generated by Bill Reid's URLs Out!, version 1.4 Updates posted to Bill's Personal Freeware Dumpsite as the need arises... At the same time the source code stores the actual links. See, for example, the following code extract:

```
<H3>c:\windors\favorites\</H3>

<A HREF="http://~.altavista.digital.com/">
altavista</A><BR>

<A BREF="http://rvv.cyberus.ca/-carsp/
acpser.htm"> carsp-acpser</A><BR>

<A HREF--"http://opcug.ottawa.com/">
opcug</A><BR>
```

The program installs easily and the compact Visual Basic code runs very quickly. Best of all - the package is freeware. All that the author requests is an e-mail message with your feedback on his program. Give this one a try - it's well worth sending a congratulatory e-mail.

Bottom Line: breeware from Bill Reid

                    Release reviewed: Version 1.4

Web Site: `http://billreid.home.ml.org/`

recommended. A good, plain vanilla card is Adaptec's 1542. Much of its' configuration is software mediated (no jumpers); setup is a breeze. You might also check out the Iomega card (for the Jaz drive). I have not used it but reports state it is effective and relatively inexpensive. Unless you are configuring a server or high-end workstation you should not require a top-end card. Don't leave the store without at least the support software (called ASPI drivers) for your operating system. Individual device drivers are supplied by the respective manufacturers. A few years ago Corel's SCSI card was a problem solver; unfortunately, it was sold off and to my knowledge there are no drivers more recent than Windows 3.1x.

Alternates: SCSI is "unto itself"; a SCSI device will work only with a SCSI card. The arrival of parallel port, Universal Serial bus (USB) and Firewire supported hardware portend alternate approaches; however, parallel port and USB have limited suitability for hard drives and Firewire remains a few years distant.

Finally, a few suggestions: Be careful if you want to attach a "vintage" scanner. A few brands had tweaked, pseudo-SCSI cards. "It looked like a SCSI, acted like a SCSI, but was not a SCSI." Attempting to replace one of these with a name-brand will prove frustrating, even impossible. Cables are a source of many frustrations (nomenclature is confusing): keep them as short as possible and try different brands. Install devices individually; try repositioning recalcitrant devices on the chain; make sure device numbers are not duplicated; verify proper termination. First-timers: consider having the dealer perform the installation unless you are a hardware buff.

Additional assistance: both Minasi and Mueller offer extensive practical assistance in their upgrade/repair texts; **www.cis.ohio-state.edu/hypertext/ faq/usenet/scsi-faq/top.htmlor** www.adap **tec.** com offer more information.

Dune Petrie is coordinator of the Beginners and Windows SIGs.

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Apropos last month's Zip article:

Zip drives-"an alternate lonwga Zip site"
Information on the whole Iomega line of removable media (Zip, Jaz, Ditto) and even the old Bernouillis and lots of discussions on SCSI can be found at:

`wrw.geocities.com/SiliconValley/Heights/2798/`

Go International (II)

by Jean Vaumoron

In a previous article, we saw some of the benefits brought by the US International keyboard driver. Two and a half dead keys allow you to type accented letters straight from a standard US keyboard, without playing musical chairs with the keys, or fiddling with the Ctrl or Alt keys. This keyboard driver also has more resources, unleashed with the AltChar key

The AltChar key (no, this has nothing to do with your second set of car keys) is the second Alt key, on the right of the space bar on a 101-key extended keyboard or a Microsoft "Natural" keyboard. It works exactly as the combination of the Ctrl key and the regular Alt key and if you still have a "legacy" 84 keyboard, you can indeed use this combination with the same results.

The goodies brought by this "second" keyboard however are frankly disappointing and nowhere near what could be achieved with a better planning of the combinations. Some of the characters obtained with the AltChar key just duplicate those already reached by the straight keyboard. A good number of "new" features are just accented letters, or Ç and Ç, ñ and Ñ which can all be obtained using the existing dead keys. Others are more useful although there

Key(s)	Character	Note
1	¡	
Shift 1	^{1}	Superscript 1- note lack of uniformity with 2 and 3
2	^{2}	Superscript 2
3	^{3}	Superscript 3
4	¤	Generic currency
Shift 4	£	British Pound
6	¼	
7	½	
8	¾	
9	'	Opening single quote
0	'	Closing single quote

are many combinations which produce no action at all or conflict with Ctrl-Alt macros in word processing programs. Here is the list of keys or shifted keys that produce an action in combination with the AltChar key:

Key(s)	Character	Note
-	¥	Japanese Yen
=	×	Multiplication sign
Shift =	÷	Division sign
Q	ä	Obtainable using dead key
Shift Q	Ä	Obtainable using dead key
E	é	Obtainable using dead key
Shift E	É	Obtainable using dead key
R	®	Registered
T	þ	Icelandic or old English lower case thorn- Some programs overide it to give '
Shift T	Þ	Icelandic or old English upper case thorn

Key(s)	Character	Note
Y	ü	Does not work in some programs - obtainable using dead key
Shift Y	Ü	Obtainable using dead key
U	ú	Obtainable using dead key
Shift U	Ú	Obtainable using dead key
I	í	Obtainable using dead key
Shift I	Í	Obtainable using dead key
0	ó	Cancelled by some programs - obtainable using dead key
Shift 0	Ó	Obtainable using dead key
P	ö	Obtainable using dead key
Shift P	Ö	Obtainable using dead key
[	«	Opening French quotes
]	»	Closing French quotes
\	¬	
Shift \	¦	Gives an unbroken vertical bar in some programs
A	á	Cancelled by some programs - obtainable using dead key
Shift A	Á	
S	ß	Does not work in all programs - This is the German ß (double s), not the Greek ß (beta)
Shift S	§	French paragraph sign
D	ð	Icelandic or old English lower case edh
Shift D	Ð	Icelandic or old English upper case edh
L	ø	
Shift L	Ø	
;	¶	English paragraph sign

Key(s)	Character	Note
Shift;	°	Degree sign (distinct from exponent lower case o)
'	´	Prime sign
Shift '	¨	Supposed to be the Second sign but gives an umlaut!
Z	æ	
Shift Z	Æ	
C	©	
Shift C	¢	
N	ñ	Conflict in some programs - obtainable using dead key
Shift N	Ñ	Obtainable using dead key
M	µ	
,	ç	Obtainable using dead key
Shift ,	Ç	Obtainable using dead key
/	¿	

This A1tChar twist on the US International keyboard is probably aimed at authors who frequently have to quote from Spanish, Italian and Scandinavian languages. The Icelandic d and p can also be used when quoting certain words in old English.

The front end of the keyboard is more useful for French or Portugese. It can indeed be used as a standard keyboard for typing text in French with the notable exception of the missing œ and Œ. This character could easily have been introduced by using the same trick as with the ^ (shift 6), this time with the & (shift 7). This other half a dead key could have produced æ and Æ when followed by a or A, and œ and Œ when followed by o or 0.

This leads me to my next question. Is there a way to introduce new dead keys in a Windows keyboard definition? Any contribution on this subject welcome; please send to Jean Vaumoron c/o the PUB or e-mail direct to:

vaumojav@magi.com

confused by graphics formats? Here are some basic answers.

by Ken Fermoyle

Judging by questions fm asked regularly, many computer users don't really understand the differences between vector (or object-oriented) images produced by graphics draw programs and bit-mapped (raster) images produced by paint programs. The differences are significant, and knowledge of what they are will help you choose the best tool for a given graphics task. First, a few basic definitions are in order. Draw programs use mathematical expressions to create objects (lines, curves, circles, squares, etc.) that make up the drawing. Paint programs create an image dot by dot, by turning the pixels that represent each dot on or off. When you draw a line in a program such as Corel Draw, for example, you create a mathematical formula that describes that line and its location. When you draw a line in any paint program, you create a series of dots that make up the line.

Each method has advantages and disadvantages. Draw

images are resolution-independent. Because of the way they are described, objects are

printed at the resolution of the output device, be it a 600-dpi (dots per inch) laser printer or a 2400-dpi image setter Moreover, they can be made smaller or larger without affecting their quality and sharpness.

Paint images are created at a given resolution that can't be changed. So an image created at 72 or 600-dpi will print only at that resolution even if the output device is capable of 2400-dpi or more. Nor can they be made much larger or smaller than originally painted. Blow them up much and paint images become coarse, with obvious " jaggies." Reduce them significantly and the dots merge, making images muddy and indistinct.

Paint image file sizes tend to be much larger than draw image files, though introduction of compressed image formats such as JPEG

and GIF in recent years has reduced this imbalance to some degree. To illustrate the size differences, I saved an identical piece of art in several formats; here are their respective sizes: CGM, 20KB; JPEG, 45KB; TIFF, 46KB; BMP 8,974KB! CGM (Computer Graphic Metafile) is a 'raw or vector format; the others are bit-mapped formats.
All this made it a no-brainer for desktop publishers to select draw art whenever possible, especially back in the 1980s when

much of the paint clip art available was in PCX, native format of Zsoft's PC Paintbrush. It

usually was quite low in resolution: 150 and even 72 dpi (the latter to match screen resolution). Many of us preferred the CGM format or, if using a PostScript device, EPS (Encapsulated PostScript) graphics native or proprietary format of Adobe Illustrator, first of the high-end illustration graphics program.
When scanners began gaining popularity, the TIFF (Tagged Image File Format) bit-mapped format developed by Aldus, Microsoft and others specifically for capturing scanned images, was used widely. Digital cameras will further popularize bit-mapped formats, and
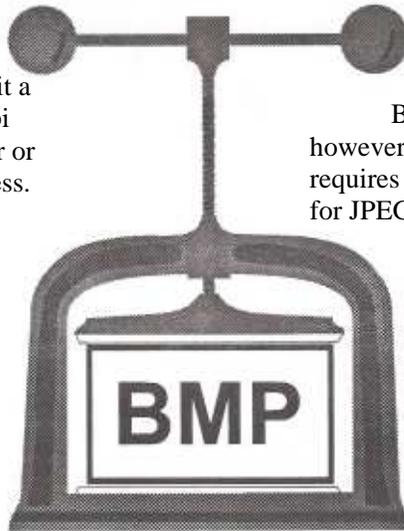
we can only hope that a standard will emerge from the many proprietary formats now used.

Biggest boost to bit-mapped graphics, however, has been the World Wide Web, which requires bit-mapped images, usually.JPG (short for JPEG, Joint Photographic Experts Group)

or.GIF (Graphics Interchange Format). Both formats greatly compress the size of bit-mapped files; .JPG files may be 20 times smaller than the original image, but images may lose something in the translation.

Graphics professionals may argue that this information is too simplistic, but space is limited and I believe it does cover the basics. Perhaps your group has several members with wide graphics experience and they could provide more detailed insight into different facets of computer graphics in future meetings.

Ken Fermoyle has been writing for computer publications since 1984 and has had some 2,500 articles published in a career of nearly 50 years. He can be reached at **kfernwyle@earthlink.aet.**

Prize winners from the February meeting

by Mark Cayer

Darryl Baker won a "Jigsaw Puzzle Power" CD and John Wickens a "Casino Master" CD courtesy of *Monitor Magazine*.

Reuse, recycle

Bring your old computer magazines, books, or any other computer paraphernalia you want to GIVE AWAY to the general meetings, and leave them in the area specified. If you don't bring something, you may want to TAKE AWAY something of interest, so look in on this area. Any item left over at the end of the meeting will be sent, you guessed it,... to the recycle bin.