

# IBM PC Information Update

SALES AND MARKETING NEWS FOR BUSINESS PARTNERS

MARCH 1998

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## IBM awarded for design excellence

The comprehensive redesign of products in the IBM Personal Systems Group has been recognized for its innovation. This redesign, known as the PC Next initiative, has received a prestigious Product Design Award from Industrie Forum Design Hannover. The Industrie Forum award recognizes the design excellence of the new IBM PCs, IntelliStations, Aptivas and Visual Products.

Industrie Forum (iF) is an independent organization that actively promotes good design through conferences, events, exhibitions, publications and annual awards competitions.

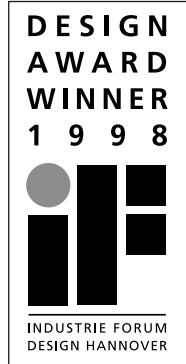
Judging is conducted by international panels of design experts.

In presenting the award to IBM, Ralph Wiegmann, Managing Director of iF Design Hannover, noted that this award "is not only a recognition of outstanding product quality but also an acknowledgment of IBM's entrepreneurial skills which, combined with IBM's consistent design style, gives IBM a clear competitive edge in the marketplace."

As award winners, the IBM desktop product line, IntelliSta-

tion, Aptivas and Visual Products will be featured in iF's annual yearbook and in a year-long exhibit that will open on March 19, and will coincide with CeBit, Europe's largest computer tradeshow. The exhibit is expected to draw more than 200,000 visitors from all parts of the world.

Additionally, the ThinkPad 770, the ThinkPad 380 and 20X-8X Portable CD-ROM Drive received individual awards for their design achievement.



## 5250 Express Adapters now deliver TCP/IP support

The 5250 Express Adapters are the first of their kind in the industry to support native TCP/IP when attached to the Twinax Workstation Controller.

Without requiring a separate LAN connection, PCs with the 5250 Express Adapter now have the ability to:

- Surf the Web
- Share printers and files
- Utilize workgroup applications, such as Lotus Notes



Ideal for migrating non-programmable displays to PCs, these adapters can save time and money—eliminating the need to rewire the network. AS/400 customers having large investments in twinax cabling and twinax to UTP Hubs will appreciate not having to rewire their networks to access the World Wide Web over the Internet or company intranet.

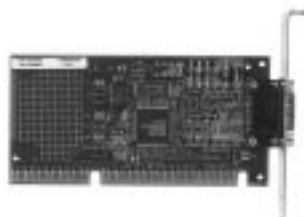
The 5250 Express Networking Kit is designed to

provide a low-cost, easy-to-use process for attaching five PCs to an AS/400 Twinaxial Workstation Controller using UTP cabling.

**The 5250 Express Networking Kit includes:**

- Five 5250 Express ISA Adapters with the 5250 TCP/IP Transport Driver
- One 7299 Express hub model 2EX
- Five DB15 - to - UTP RJ45 Baluns
- One Twinax - to - UTP Balun

► **The IBM 5250 TCP/IP Transport Driver for the 5250 Express Adapters is available from the Internet at: <http://www.networking.ibm.com/525/525home.html>**



# New ThinkPad 380 and 560 models

IBM has announced new performance enhancements to ThinkPad 380 and 560 models in its award-winning family of mobile computers.

- These include:
- Faster processors, up to 266MHz<sup>1</sup>
  - Larger TFT and HPA displays
  - Bigger hard drives, up to 5.1GB<sup>2</sup>
  - Faster CAV CD-ROM drives<sup>3</sup>, up to 24X-10X

## New ThinkPad 380 Models

The ThinkPad 380 family of all-in-one integrated business notebook computers incorporates a diskette, CD-ROM and hard disk drive in a convenient package that delivers all the functionality of a desktop with the personality of a ThinkPad.

The ThinkPad 380 family has added three new models with up to 266MHz Intel® Pentium® processors with MMX™ technology,

up to 5.1GB hard drives and 12.1-inch HPA or TFT displays.

Refer to the table below for the features available on the new ThinkPad 380XD models (2635-8AU, 2635-9AU and 2635-AAU).

## New ThinkPad 560 Model

The new ThinkPad 560 model (2640-70U) supplies additional heavyweight power to the award-winning ThinkPad 560 family of lightweight ultraportable notebook computers.

Stylishly designed, weighing barely 4 pounds<sup>5</sup> and a trim 1.2 inches thin, the ThinkPad 560's sleek exterior packs uncompromised top-shelf power and performance for the discerning traveller who does not want to be burdened with extra bulk and weight.

► *For more information on the newest ThinkPad models, visit <http://www.pc.ibm.com/us/thinkpad>*

New ThinkPad 380XD models include hard drives up to 5.1GB and 12.1-inch HPA or TFT displays.



The new ThinkPad 560X offers an HPA (High-Performance Addressing) display.



## Select Options for 380XD

### Memory

32MB EDO SO DIMM	92G7342
64MB EDO SO DIMM	76H0268

### Power

Li-Ion Battery	73H9793
56W AC Adapter	83H6739

### Port Replication

Enhanced Port Replicator	11J8997
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### Networking

Turbo 16/4 Token-Ring PC Card (9-Pin D-Shell)	85H3628
Turbo 16/4 Token-Ring PC Card (RJ-45)	85H3629
EtherJet PC Card Combo 10BaseT/10Base2	72H4534

### Communications

56K PC Card Modem Kit	04K0052
56K PC Card Modem Kit/Cellular Capable	02K4196
PCMCIA 33.6Kbps International Data/Fax Modem	42H4319

## Select Options for 560X

### Memory

32MB EDO SO DIMM	92G7342
64MB EDO SO DIMM	76H0268

### Storage

2.1GB Hard Disk Drive	45H8783
4.0GB Hard Disk Drive	02K0501
20X-8X Portable Stereo CD-ROM Drive	1969011

### Power

Li-Ion Battery Pack	46H4206
External Battery Charger	11J8985
56W AC Adapter	83H6739

### Port Replication

Enhanced Port Replicator	11J8997
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### Networking

Turbo 16/4 Token Ring PC Card (9-Pin D-Shell)	85H3628
Turbo 16/4 Token-Ring PC Card (RJ-45)	85H3629
EtherJet PC Card Combo 10 BaseT/10Base2	72H4534

### Communications

56K PC Card Modem Kit	Z02K0052
56K PC Card Modem/Cellular Capable	02K4196
PCMCIA 33.6Kbps International Data/FaxModem	42H4319

## New ThinkPad models

	380XD	380XD	380XD	560X
<b>Model</b>	2635-8AU	2635-9AU	2635-AAU	2640-60U
<b>Pentium Processor</b>	233MHz w/MMX	233MHz w/MMX	266MHz w/MMX	200MHz w/MMX
<b>Display</b>	12.1" HPA	12.1" TFT	12.1" TFT	12.1" HPA
<b>Hard Drive</b>	3.2GB	4.0GB	5.1GB	2.1GB
<b>CD-ROM</b>	24X-10X*	24X-10X*	24X-10X*	optional
<b>RAM std./max.</b>	32MB/96MB	32MB/96MB	32MB/96MB	32MB/96MB
<b>Weight</b>	7.1 lbs.	7.1 lbs.	7.1 lbs.	4.2 lbs.

# New IntelliStations gain 333MHz processor and bigger drives

In February, IBM announced the incorporation of Intel's top-of-the-line Pentium II 333MHz processor in its IntelliStation range of workstations for Microsoft's Windows NT operating system.

Marco Rengan, the Marketing Product Manager for IntelliStation M Pro, explains, "The incorporation of the new Intel Pentium II 333MHz processor in our range of workstations is combined with the addition of new disk drives which will give us technical leadership in the high performance NT workstation sector."

IBM and Intel have been working closely in their Advanced Manageability Alliance and this has increasingly led to sharing of technology.

"With regards to the Pentium II processor, this means we are always abreast of Intel technology. We allowed for it in our workstation designs from the outset so we were then able to incorporate all the phases of Pentium II technology into our systems with graceful ease," he says.

With the addition of the new 6.4GB 7200rpm IDE disk drive,

IBM has an industry first and there is a new 9.1GB 10,000 rpm drive further enhancing the IntelliStation range.

"In terms of disk capacity we have always tended to give customers more than our major competitors. Even on our standard workstation machines we consistently offered 4GB dri-



ves when other manufacturers typically had 2GB drives," remarks Rengan.

"Indeed, although our prices are very competitive, when you look at our subsystems we give more function in every respect."

The pricing on the IntelliStation range is already very competitive, following price cuts last year and early in 1998, and will remain so because of IBM's

good relationships with suppliers. This also means it is able to bring more advanced technologies, like the 7200rpm IDE drive, to the marketplace early.

The IntelliStation range now covers the traditional workstation sectors such as mechanical CAD, software engineering, finance/trading and digital media content creation. But a key sector for Rengan is the high end of the general business marketplace.

"With Authorized Assembler Program (AAP) we can arrange for almost anyone who is interested in buying a workstation class system to have that system configured for their use," he adds.

"We have all the components and options so an IntelliStation can be configured from entry level right up to someone doing CAD simulations or visualization with perhaps a dual processor, multiple disk drives and large amounts of memory. With AFI (Advanced Fulfillment Initiative) we aim to take AAP a step further, so customers get a machine assembled precisely

for their needs, and we help our own cost reduction process.

"All the advantages we are recognized for in the commercial desktop market, in terms of network readiness and manageability, have been incorporated in the workstations. Our systems are easy to manage and enterprise ready. With an IntelliStation you get a business ready system that can accomplish tremendous workstation functions."

With the aggressive pricing and superb price/performance IBM expects strong demand for the IntelliStation range. "IBM is fully behind this product in every aspect of the business with good service/support and a positive relationship with the channel.

"There is now a much more competitive price performance from an NT/Intel workstation which is a compelling reason to consider the IntelliStation choice. Although, from the broader IBM point of view, we have a full range of workstations with UNIX-based machines from our RISC 6000 business and extremely good inter-operability between the UNIX and NT platforms," concludes Rengan.

► For more information on the newest IntelliStation M Pro models, visit <http://www.pc.ibm.com/us/intellistation/>

## IBM's Flat Panel Monitor choice gets wider

IBM Flat Panel Monitors take the active matrix TFT LCD technology found on our popular ThinkPad notebooks and apply it to stand-alone monitors for desktop and system use.

IBM Flat Panel Monitors are an ideal choice in work environments where space constraints are an issue, such as hospitals, military installations or financial trading room floors. Despite their slim flat-screen design, they boast large viewable image sizes that easily rival those found on conventional monitors with larger CRTs. They don't use a lot of energy and they give off virtually no electromagnetic emissions.

IBM is expanding its offering of Flat Panel Monitors. In addition to the already available 9516 Flat Panel Monitor (16.1-inch viewable image size), IBM now has the 9514 Flat Panel Monitor (14.1-inch viewable image size). All IBM Flat Panel Monitors offer consistent picture quality from edge to edge. And all are available in a choice of Pearl White or Stealth Gray.

While their up-front cost is higher than monitors with conventional CRTs, Flat Panel Monitors can actually pay for themselves over time through their lower energy costs and through space savings that can translate into major cost savings.

Flat Panel Monitors from IBM are available through regular Personal Systems Group channels.

► For more information on IBM's Flat Panel Monitors, visit <http://www.pc.ibm.com/us/options/monitors>



# Updated PCI Fast/Wide Ultra SCSI Adapter features more than before

The latest version of the PCI Fast/Wide Ultra SCSI Adapter (02K3454) delivers two new features for server and desktop systems.

The first is host-controlled power conservation. This convenient feature automatically powers down the system at the end of each work day, saving money and preserving natural resources.

The operating system only has to be programmed once to shut down all of the attached peripherals, and waking up the system every morning is as easy as hitting a button.

The second new feature of this adapter is that it supports the

next generation of the Windows operating system expected to be announced in 1998.

As before, the new PCI Fast/Wide Ultra SCSI Adapter performs with unprecedented sustained data transfer speeds as high as 40MB<sup>2</sup> per second and allows the attachment of high-speed Ultra SCSI devices.

Busmastering Direct Memory Access (DMA) further enhances these data transfer rates by allowing the adapter to control the transfer of data from the peripherals to the system memory.

Because the processor is relieved of this burden, the serv-

er or desktop system is free to operate at its greatest potential speed and maximize throughput.

The PCI Fast/Wide Ultra SCSI Adapter continues to be capable of supporting up to 15 devices at one time, as well as handling any combination of 8- and 16-bit drives.

Installation remains easy, too. The adapter's SCSISelect utility, which is built into its BIOS chip, allows simple, on-



screen configuration and eliminates the need to manipulate jumpers and terminals.

► For more information, visit <http://www.pc.ibm.com/us/options/>

## MSS Server Module - better performance for the same price

IBM's Multiprotocol Switched Services is the award winning, popular product that turns an Asynchronous Transfer Mode (ATM) network into a high performance, scalable and reliable data network.

This new MSS Server is a single wide module that is the same MSS module that fits into the 8260. With improved performance, the single slot MSS module has extra cycles that will handle peak load conditions.

This IBM product has many features and benefits:

- MSS module—features a single slot format which frees up an additional 8265 slot. It has the same price as the double wide module.
- Embedded Ethernet port—this feature speeds up out of band loading of the MSS.
- New 166MHz<sup>2</sup> 603EV processor—this processor replaces the 100MHz processor and gives the MSS server more power.
- New packaging—eliminates the need for an external PCM-CIA hard drive, cutting cost from the system.

## 10,000rpm Hard Drives now available for IBM's IntelliStation M Pro via AAP

IBM recently introduced a new 9.1GB<sup>2</sup>, 10,000rpm wide ultra SCSI hard disk drive that is available now via IBM's PC Authorized Assembler Program (AAP).

With 38% higher rotational speed than previously available drives, 10,000rpm drives dramatically improve data access and sustained data transfer rates providing the fastest available solution for disk-intensive professional workstation applications.

AAP makes it possible for our Authorized Business Partners to efficiently order competitively priced customized systems, freeing up their in-house technical resources for other customer support functions, reducing inventory costs, and speeding fulfillment.

Now they can build to demand and offer the latest in storage technology while driving down costs.

## AGP graphics glossary

- **Accelerated Graphics Port** - AGP This system delivers a point-to-point connection between system memory and system graphics that improves 2D graphic performance and improves the 3D data flow through the system.
- **Clock Doubling** - The method referred to when AGP data is transferred at twice the rate (133MHz) as normal AGP and PCI transactions on the AGP bus (66MHz).
- **Sideband Address Port** - A bus on the AGP interface that is used to send an AGP command separately from the data. Splitting up the AGP commands and data onto two busses speeds up the overall operation of the AGP bus.
- **Split Transactions** - When split transactions are used to transfer data on the AGP bus, several commands can be queued on the AGP bus before the first piece of data is returned.
- **Baseline AGP** - An AGP adapter which only implements the bare minimum requirement to work on the AGP interface. There is no support for clock doubling, sideband addressing, or split transactions.
- **Full AGP** - An AGP adapter which implements clock doubling, sideband addressing, and split transaction support.

# IBM Netfinity and IBM PC Server systems certified for Microsoft BackOffice family

**Microsoft BackOffice is a family of server software products designed to extend existing customer systems to the World Wide Web.**

IBM Netfinity and IBM PC Server systems are now certified to run Back Office which brings thoroughly-tested, compatible e-business solutions to customers engaged in, or getting ready to engage in the endless possibilities of business over the Internet.

Built for a Windows NT Server Enterprise Edition 4.0 communications platform, the BackOffice family includes

Exchange Server, for e-mail; Proxy Server, for fast Internet access from the desktop; Site Server, for deploying and managing intranet sites; Systems Management Server, which contains a rich assortment of centralized management tools; SNA Server, that integrates legacy systems and data with modern networks via the Internet and intranets; and SQL Server, a relational database system.

BackOffice Server Suites include BackOffice Server, for developing, deploying and managing intranet and line-of-busi-

ness applications; BackOffice Small Business Server, which provides tools essential to connecting to and sharing information with Business Partners and customers; and Commercial Intranet System, a set of standards-based, commercial-grade server components that enhance the Internet services and Web sites of commercial service providers such as telecommunications carriers. Compatibility testing of Microsoft BackOffice Family and Suites on IBM Netfinity and IBM PC Server systems was conducted at IBM's



Kirkland Programming Center, located adjacent to Microsoft's headquarters campus in Redmond, Washington.

## IBM and APC bring uninterruptible power to IBM Netfinity and IBM PC Server systems

### IBM server systems take fast lane on Intel roadmap

In close cooperation with Intel Corporation, IBM's announcement that its PC Server 325 and PC Server 330 systems will offer models that utilize Intel's new 333MHz Pentium II processor with 1GB of memory support is especially good news for your large customers.

This announcement signals a concurrent improvement in Pentium II processor speed and maximum memory support. The potential benefit to customers is both obvious and immediate: their large applications whose performance is related directly to system memory -- databases, data mining activities, number-intensive and human resource applications, for example -- can now run faster than ever before.

The way it works is simple: the larger the system memory, the more data can be placed there, and the less the processor must wait for the hard disk and other subsystems for more data or instructions. Put another way, a fast processor plus greater memory support equals a better performing server.

IBM PC Server 325 and 330 systems offer both 300MHz and 333MHz models that make a strong statement that IBM continues to follow the Intel roadmap in providing leading-edge, industry-standard server solutions. Additionally, 333MHz models of these servers come standard with the IBM Advanced Systems Management Adapter that complements IBM Netfinity Manager software, which is also standard, for the best in remote systems control.

IBM intends to continue leveraging its strategic relationships with Intel and other industry leaders to meet the ever-increasing demand for better server solutions. Whenever Intel increases the power and performance of its processors, IBM will be there to incorporate that technology in its servers. When the best in the business work together, our customers have every right to expect the best.

**The problem could be disastrous: power to your customer's network is cut off for any number of reasons, end users have no access to business-critical applications and profitability takes a beating.**

To avoid this scenario, IBM and American Power Conversion (APC) have joined forces so that IBM Netfinity and IBM PC Server systems have uninterruptible power source (UPS) capability.

At the heart of APC's Smart-UPS is PowerChute plus software, included in the ServerGuide CD, which comes with IBM Netfinity and IBM PC Server. PowerChute plus works with IBM Netfinity Manager software, as well as the IBM Advanced Systems Management Adapter (standard on some systems), to provide both local and remote power management. With the integration of PowerChute plus and Netfinity Manager, system administrators have access to critical UPS information through Netfinity Manager's system monitor facility.

The IBM-APC UPS solution:

- Boosts and trims voltage to correct brownout conditions
- Conducts tests for site-wiring faults
- Implements hot-swappable, user-replaceable batteries while the server is still running
- Provides a quick battery recharge with redundant overcharge protection so batteries last longer
- Supports intelligent serial and Simple Network Management Protocol (SNMP) communications, which permits full UPS diagnostics and control from a single screen
- Provides multiple server support
- Is tested for compatibility with IBM Netfinity and IBM PC Server systems, as well as major operating systems such as Windows NT, SCO, OS/2, NetWare, Lotus, Oracle and SAP
- Offers an optional environmental monitoring capability for humidity, ambient temperature, UPS load, run time remaining, utility line voltage, UPS temperature, battery voltage and UPS battery capacity.

The goal: to give your customers the confidence that once they get up and running, the resources are available to keep them there.

# GartnerGroup touts benefits of Wake on LAN and LCCM

A recent **Personal Computing Research Note (December 16 1997)** article advising businesses on strategies to lower their total cost of ownership, the GartnerGroup singled out IBM innovations such as Wake on LAN and LANClient Control Manager (LCCM) as examples of technologies that can significantly reduce hardware management costs.

Using these and other technologies that follow Intel's Wired for Management (WfM) initiative GartnerGroup estimates that it can help organiza-

tions achieve total cost of ownership savings of 10 percent or more. Although the WfM standards and technologies are evolving rapidly, GartnerGroup recommends that customers should "understand, evaluate, and incorporate" them into all PC acquisitions.

Specifically, GartnerGroup recommends that customers specify compliance with Desktop Management Interface (DMI) 2.0, including a DMI 2.0 service layer, as a requirement for all new PC acquisitions. IntelliStation products

announced since October 1997 and IBM PC products announced since February 1998 meet this recommendation.

GartnerGroup also highlights the importance of a service boot environment that enables a remote network administrator to gain control of a client system remotely before it boots its local operating system. This is standard in all IBM PCs.

The article commends LCCM for its "tight integration with IBM hardware."

Finally, GartnerGroup cited IBM Wake on LAN as a technol-

ogy that allows a system to be initially powered up and booted from a network, while competing technologies require systems to be powered up for the first time manually.

IBM was an early adopter of GartnerGroup's focus on the total cost of ownership and Intel's WfM standards. IBM customers can rest assured that their technology investments are at the cutting edge of industry standards. IBM products are designed to help them save money today and prevent obsolescence tomorrow.

## Plug and Display

The current video interface—usually called "the VGA interface" and used by almost 100% of the computer industry—is nearing the end of its useful life and is in need of replacement.

Ian Miller, a Technical Staff Member in IBM UK Ltd and Chair of the VESAP&D Com-

mittee, explains why and offers a solution based on open industry standards.

monitors to develop the capability of exploiting the color depth at an affordable cost, but today high addressability with 24-bit color depth is almost standard.

As the industry has pushed addressability, color depth, and refresh rates to levels that were not envisaged in 1986, the bandwidth requirements on the interface have also grown rapidly.

The analog interface is well suited to CRT monitor designs, but to meet the requirements for electromagnetic compatibility the industry has been forced to add filters to the interface, which limit the actual bandwidth transmitted. So we now have a situation in which increasingly sophisticated software and graphics subsystems are generating images with detail that even the best monitor cannot display because not all the information is being transmitted across the interface.

The bandwidth situation alone is enough to warrant consideration of a new video interface, but another major factor—the advent of new display technologies in monitors, most noticeably the TFT-LCD—has

added a sense of urgency.

Flat-panel monitors have been available in various forms for several years, but all market forecasts now indicate that these monitors will take over a significant percentage of the overall market within a few years.

Most of these flat-panel technologies use digital signals internally, but the general practice today is to add the electronics needed to convert the analog waveforms of the VGA interface to digital signals within the monitor. Such a monitor is relatively easy to market because it plugs into the existing video connector, but implementing the analog-to-digital technology effectively is very difficult and expensive.

### The Next Steps

How do we reconcile the apparently contradictory requirements of a high-bandwidth analog video interface for CRT-based displays and a digital interface for LCDs? The industry has responded by developing a standard for video interfaces through the Video Electronics Standards Association (VESA). This is the Plug and Display (P&D) standard.

### The VESA P&D Standard

The P&D standard first published in June 1997, provides a high-bandwidth analog video interface. It also adds a digital interface and this is the only industry-standard digital moni-

tor interface.

P&D uses the VESA DDC2 protocol to transmit configuration data from the monitor. For example, it can specify which display technology the monitor is using and which interface (analog or digital) the monitor requires to transmit its video data.

The data is used to configure the P&D interface automatically. Used appropriately, this interface will produce a single host-end video connector that provides high-performance video support in either analog or digital format and that can be accessed by a very wide range of display technologies. This should help minimize confusion and potential errors of the "Where do I plug in this monitor cable?" sort.

### Summary

There are good technical reasons why it is necessary to begin the difficult transition from the current, widely-used VGA interface to a new interface based on the P&D standards. The end result will be high-performance display support with the flexibility to choose the most appropriate interface. These benefits will come with only a small cost increment over the VGA interface for analog implementations and with a major cost saving for digital implementations.

*This article was sourced from Information Display magazine.*



mittee, explains why and offers a solution based on open industry standards.

Prior to the introduction of the VGA interface in 1986, the then-standard CGA and EGA PC monitors used digital interfaces and supported very limited addressabilities and color range. The VGA interface, at 640 x 480 pixels and 60Hz refresh, and with an analog interface capable of supporting a vastly greater color depth, was a major step forward.

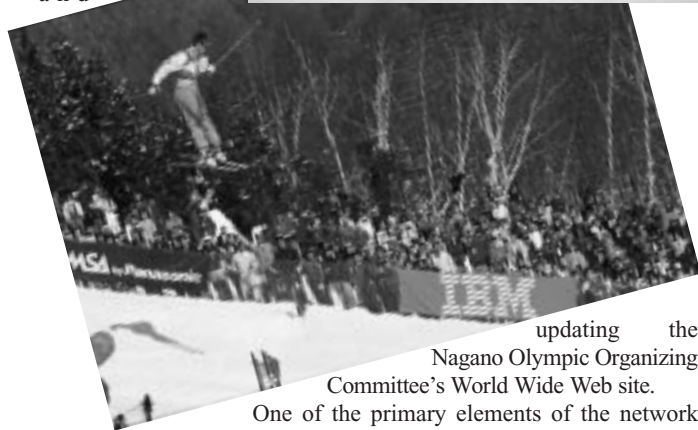
It was such a leap forward that it took a few years for the graphics subsystems driving the

# Networking hardware plays an integral role in the 1998 Winter Olympics

At the heart of the 1998 Nagano Olympic Winter Games was an elaborate and sophisticated multiprotocol network designed and produced by IBM to support the technological infrastructure of the Games.

With its robust design, which included multiple backup systems and sophisticated network management capabilities, this network offered maximum availability to a wide array of information users for a variety of needs.

They ranged from back office support to the Games, to calculating and delivering results, tracking thousands of athletes and their coaches, and



updating the Nagano Olympic Organizing Committee's World Wide Web site.

One of the primary elements of the network and system architecture at the Olympic Winter Games was a Wide Area Network, which included Nways controllers, switches and routers.

IBM's leading-edge networking technology connected approximately 4,000 IBM PCs, servers and ThinkPads, in every corner of the Olympic Village and athletic venues.

## Other networking products at work in the Olympic games:

- IBM PC Servers at the International Broadcasting Center and Main Press Center were connected through ATM technology for faster transmission times.
- Four interactive information systems (the Results System, Info'98, the Nagano Olympic Games Web site and Games Management) were run on the network.
- Intranet and Internet applications at the Winter Games, featured the latest in Web technology and were run over TCP/IP (Transmission Control Protocol/Internet Protocol).

## Spring Products to Debut on Satellite TV

The PC Institute will show a two-part program on April 15, unveiling IBM's new products for the Spring.

The first segment of the program will cover IBM's Spring Product Announcements. Viewers will be able to get the latest information about IBM's newest Desktops, Options, Servers and Mobile Computers; all of these products will be available in the second quarter of 1998.

The second segment will cover information on New Marketing Support Programs.

Viewers will have an oppor-

tunity to win an IBM ThinkPad and other valuable prizes, including attendance gifts, food and the latest product literature.

Space is limited so early enrollment is suggested. Attendees at last year's broadcasts consistently commented that the information was "relevant and helpful with sales and service efforts and a good investment of my time."

► *For more information and site locations, please call 1-888-IBM-PCTV (1-888-426-7288) or visit <http://www.ibm.com/pc/training>*

## Price actions for IBM PC products

For the latest information on product withdrawals, price actions, programs and promotions please visit the US PC Reseller Web site at <http://www.partner.us.pc.ibm.com/>

To automatically receive a weekly Personal Systems Group Marketing Summary via fax or e-mail, please call the Sales Solution Center at 1-800-722-PCPC and select option 3. If you would like to download the summary, please visit <http://www.partner.us.pc.ibm.com/globj/mktsum.html>

### Announcement Letter database

Includes all product announcements, product withdrawals, price actions, programs and promotions.

<http://www.partner.us.pc.ibm.com/globj/announc.html>

### Personal Systems Group Marketing Summary

A weekly summary of selected announcements, promotions, programs and price actions.

<http://www.partner.us.pc.ibm.com/globj/mktsum.html>

### Price Lists

Updated daily, in both Lotus 1-2-3 and Adobe Acrobat formats for easy export to other applications.

<http://www.partner.us.pc.ibm.com/globj/prices.html>

### Transship List

A weekly listing of products with excess inventory in the channel.

<http://www.partner.us.pc.ibm.com/globj/chansum.html>

# ThinkPad Solutions Corner

**This month's featured Options by IBM (OBI) products: Docking Solutions**

Today's innovative and modular docking alternatives available from OBI allow ThinkPad users to configure systems that meet their varied needs and budgets.

Docking solutions range



from port replicators to full docking and desktop equivalency at the high-end.

Port replicator options provide economical cable management and system expansion. When at home or back at the office, users can quickly connect peripherals, such as larger external displays, printers and keyboards without having to crawl under desks or tables to connect and disconnect cables.

Full docking solutions (SelectaDocks) allow users to follow a natural progression of upgrades and improvements so that their ThinkPad systems provide them the best of both worlds: full portability combined with full desktop functionality and connectivity. In addition

to port replication capabilities, full docking offers extra bays for another high-capacity hard disk or CD-ROM drive, SCSI ports, as well as additional PC Card slots.

**This month's featured ThinkPad Proven<sup>4</sup> product: Security Products from Compu-lock, Inc.**

Protect your ThinkPad notebooks, docking stations and port replicators from theft with security products available through ThinkPad Proven. ThinkPad Proven vendor, Compu-Lock, Inc., offers several lock and cable security products that anchor your ThinkPad to a stationary object either in your office or while you are on the road. IBM docking station



\*Tested, warranted and supported by manufacturer to ThinkPad Compatibility Standards.

replacement keys are also available from Compu-Lock, Inc.

► **For more information on Options by IBM, visit <http://www.pc.ibm.com/us/options/>**

**For more information on ThinkPad Proven products, visit <http://www.pc.ibm.com/us/thinkpad/proven>**

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Date	City	Class	Code	Days
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5/7/98	Waltham, MA	Client SMART	V5118	1
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