

## Artisoft Goes Vertical

Last fall Artisoft, developer of the next-generation digital, analog, and VoIP phone system TeleVantage®, purchased Vertical Networks, a leader in VoIP systems for large distributed enterprises such as CVS/pharmacy and Household International. This January, Artisoft announced it had changed its name to Vertical Communications, to signify the improved capabilities of the post-merger company.

To some degree the name change to Vertical Communications reflects a desire to distance the firm from LANtastic, which used to be Artisoft's flagship networking product years ago. However, after Microsoft bundled networking software into Windows 95 and 98 for free, Artisoft saw the writing on the wall and sold the LANtastic family to focus solely on TeleVantage.

Vertical Communications (or simply Vertical) will continue to develop and support its two main phone systems, TeleVantage and InstantOffice®, a Voice-over-IP phone system designed for large enterprises with many locations, such as a retail chain. Since the two products do not overlap they will continue to coexist. Vertical will also change focus slightly for its TeleVantage phone system. While TeleVantage can be used in any business (ITS has had it in our own office for years now), Vertical will focus marketing for TeleVantage more directly on several selected professional services markets as well as call centers. Vertical will continue to target TeleVantage towards businesses with 4 to 720

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## LCD Monitor Buyer's Guide

LCD monitors have finally reached the point where they can make sense for a large number of users. However not all LCD monitors are created equal. The reality is there are several grades in quality and features that can impact a user's experience and should therefore impact the buying decision.

First, realize a flat LCD (liquid crystal display) monitor is not the same as a "flat screen" CRT (cathode ray tube). Many tube monitors are flat nowadays, in order to reduce glare and optical distortion. But they are still picture-tube based and measure around 15-18 inches deep. An LCD monitor is typically about one inch thick, uses less power, and often sports a brighter picture. The size and picture quality often allow a monitor to be placed further away from a user, resulting in improved ergonomics. LCD monitors also have no flicker so eye strain and fatigue is reduced. A CRT monitor's picture is typically about one inch less in size than the picture tube, because the edge of the tube is held in by the frame. This is why all monitors today list "viewable area" in addition to the tube size. An LCD monitor's picture is exactly the same size as the screen, so a 17-inch LCD would be about the same size as an 18- or 19-inch CRT monitor. LCD monitors also have no geometry problems (the wavy or uneven borders often seen on older monitors).

We have written before about the benefits of a higher screen resolution (see our online Tips article, "Increase Productivity By Increasing Screen Size"). One advantage of CRT monitors is that one can easily adjust the screen resolution to several different sizes and end up with a sharp picture. An LCD, by contrast, has a fixed number of crystals

on its screen, and if the user wants a lower resolution than the default, he or she often ends up with blocky text and graphics as the monitor attempts to show 800 dots of resolution using 1024 pixels. Windows XP has some display effects such as "ClearType" which can smooth out the blockiness by adjusting the color of surrounding pixels. However, users with challenged eyesight may want to visually inspect a new LCD monitor running at its native resolution before buying a spanking new 19-inch unit and discovering the ultra-sharp, "native" resolution is too small for them. The native resolution will always provide the sharpest picture, and fit the most information onto the screen.

Many LCD monitors can accept analog or digital signals. Analog signals are the same signals sent to a CRT monitor. A video card with a special digital output, however, can send its signals to a digital monitor directly without first converting them to analog, which the LCD monitor must convert back into a digital signal. Digital signals usually provide higher image quality, though newer LCD monitors are better

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## Thank You!

2005 marks not only our ninth year of publishing *The ITS Connection*, but also our **15th year in business!** ITS has helped hundreds of clients during this time, and your referrals to friends and business colleagues have made it possible. It has been a long trip from the days of DOS, through the birth of the Internet, on to today's leading technologies like wireless and VoIP. ITS promises to bring you the newest and best technologies for the next fifteen years as well!

at handling analog signals. If you have an analog video card look for an LCD monitor with an "auto-adjust" button.

Higher quality LCD monitors tend to provide a wider viewing angle...that is, the angle range from where the picture can be seen. The better units will provide 160 degrees or better, both horizontally and vertically. That way someone standing next to your desk can still see the spreadsheet to which you are pointing onscreen. Better units provide higher contrast ratios and brightness. A few add the capability to pivot 90 degrees to make the monitor taller than it is wide, for example to show a full page (height and width) on a smaller screen. Others add wall-mount capability, though many include that through an add-on mounting kit.

Some LCD monitors include a microphone jack and speakers. Others advertise their speakerless, "narrow" bezel as a way to place two monitors side by side for a larger effective desktop, using Windows' support for multiple monitors. Fancier units include a USB hub for quick connection of pluggable devices.

## Gotchas

Caveat emptor, as they say. We find the largest "gotcha" is the issue with high screen resolutions, discussed previously.

Most LCD manufacturers have a policy on the number of acceptable dead pixels on an LCD screen. Higher quality manufacturers will allow less nonworking pixels on their units. Otherwise, don't be surprised to find a pixel or two that stays dark. After all, one or two pixels out of one million or so is a *really* small number, and they *are* little teeny dots, after all. Without this "dead pixel" policy, prices would be much higher overall. If a dead pixel or two will annoy you to no end, see if you can look at the actual monitor you will take with you before buying it.

Some manufacturers offer a shorter warranty on the backlight than the rest of the unit. However, if you cannot see the screen, the rest of the warranty period does not matter much.

# Trends

## "Pre-N" Wireless – Boom or Bust?

Rarely is new technology dead before it even exists, but "pre-N" wireless may be headed in that direction. Can something this neat be simply a marketing gimmick? If so why have so many companies released "pre-N" wireless gear?

On the surface, "pre-N" sounds great. Engineers discovered they could use a technology called MIMO (multiple input/multiple output) to greatly enhance the range and speed of wireless networking. MIMO divides a signal into several data streams, and the receivers can use multiple antennae to receive several copies of the data, which is checked for errors and recombined. The new technology promises three to four times faster networking speeds; more than that for long distances.

The problem? The 802.11n wireless specification does not exist yet! Scheduled to be ratified in 2006, the likelihood for change is high. This is why

this gear is labeled "pre-N" - it probably will not work with 802.11n-compatible equipment.

The other issue early adopters must consider is a lack of compatibility between vendors. One must buy all wireless networking equipment from the same company. In practice this is not a bad idea anyway, as even with 802.11g many vendors claim a dramatic speed boost if their hardware is used on both ends of the connection. However down the road next year's new laptop may not work with a "pre-N" access point.

With all the confusing standards for current wireless technology, it is unfortunate some vendors feel the need to push forward with nonstandard hardware. This will undoubtedly create more confusion in the marketplace. However, with the voracious consumer appetite for wireless speed, there is obviously a market, meaning someone will tap it.

# Humor

## Are You Truly A "Professional?"

by unknown

The following short quiz tells whether you truly have the skills to be considered a "professional."

**1. How do you put a giraffe into a refrigerator?** Correct answer: Open the refrigerator, put in the giraffe and close the door. This question tests whether you tend to do simple things in an overly complicated way.

**2. How do you put an elephant into a refrigerator?** Wrong answer: Open the refrigerator, put elephant in and close the refrigerator.

Correct answer: Open the refrigerator, take out the giraffe, put in the elephant and close the door. This question tests your ability to think through the repercussions of your actions.

**3. The Lion King is hosting an**

**animal conference, all the animals attend except one. Which animal does not attend?** Correct answer: The elephant. The elephant is in the refrigerator. This question tests your memory.

**4. There is a river you must cross, but it is inhabited by crocodiles. How do you manage it?** Correct answer: You swim across. All the crocodiles are attending the animal conference hosted by the Lion King. This question tests whether you learn quickly from your mistakes.

According to researchers, 90% of the professionals tested got all questions wrong. But many preschoolers got several correct answers. This disproves the theory that most professionals have the brains of a four year old.

# Tips

## Microsoft Excel: Tabs and Borders

**Tabs.** You don't like all the extra tabs on a blank workbook? Or maybe you prefer more? Set the default number of tabs for a new workbook by opening Tools/Options, clicking the General tab, and changing the entry for "Sheets in new workbook."

Add more tabs to a workbook by right clicking an existing tab and selecting *Insert*. Use *Move or Copy* to reorder tabs or create a copy of an existing tab. Mouse-lovers may notice one can also drag and drop the tabs, holding down CTRL to copy the source tab rather than move it.

Print out all the tabs in a workbook by using File/Print and choosing Print What: Entire Workbook. Or to print out just some of the sheets, use the CTRL and Shift keys to select specific sheets or a range of sheets to print. As with many types of lists in Windows, use CTRL to select individual sheets, and use Shift to select the first and last in a range.

**Borders.** Prior to Excel 2002 the way to add borders to a spreadsheet was to use the Format Cells dialog's Borders tab to modify the selected cells. In Excel 2002 and later, you can also right click any toolbar and select the Borders toolbar from the list. You can leave this new toolbar floating above your spreadsheet, or drag it onto an existing toolbar to dock it.

Click on Draw Border to show a pencil you can use to draw borders along whatever cells you wish, or a border around a group of cells, in the indicated style and color. Use Draw Border Grid to draw a grid over the cells you select. Use the Erase Border tool to remove borders from specific cells.

Prefer a fancier spreadsheet? Select a group of cells that make up a table, and pick Format/AutoFormat to view a list of predefined, colorful formats including borders, fonts, number formatting, alignment, and so on.

## Q & A

### What is a name server?

A name server, or DNS (domain name server) server, is how the world translates text names humans use for servers to the IP addresses used by computers worldwide. This can be for servers on or off the Internet. When you type "www.teamITS.com" into your browser, your computer asks a DNS server for the IP address to where the name "www.teamITS.com" points, and then connects directly to that address. If the first level DNS server does not know, it typically asks another, higher-level DNS server. Overall, names on the Internet are controlled by a select few "root" DNS servers, that control the top level domain names such as ".com" and ".net". The reason for all this is that humans tend to find a text name such as "www.teamITS.com" much easier to remember than its IP address, "168.143.155.222."

### Why are name servers important to my domain name and e-mail?

When an Internet domain name is registered, part of that registration information is to tell the world which name servers are in charge of managing the DNS information for that domain. The entity that manages the DNS information for a domain name basically controls the addresses to where all names in that domain point. All the other DNS servers in the world know this one particular server is the one to ask where "www.teamITS.com" points. The name servers for a domain also control where the e-mail for that domain is sent.

When a company changes web hosting providers, the name servers for the domain usually must change to those of the new web host, so the new hosting provider can control the domain and manage web, e-mail, and other services.

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users and one or more locations, and target InstantOffice towards large enterprises with 50 or more locations.

While the two flagship products TeleVantage and InstantOffice do not overlap in terms of target market, Vertical plans to integrate the best features of each system into the other. For instance, Vertical makes their own telephony hardware for handling VoIP as well as their own line of analog telephones which we expect to be supported in future versions of TeleVantage, possibly as soon as TeleVantage 7 which is expected within the next 6 months. Also, Vertical will support their own VoIP and digital phones, and intends to integrate InstantOffice technology into TeleVantage such as an XML-based IVR (Interactive Voice Recognition) engine, a fax server engine, and robust remote reporting capabilities.

Altogether Vertical expects that the IP-PBX, or software-based phone system, market will continue to be a high growth area. The ability to combine a company's phone system with applications that are built upon or interact with that phone system is a powerful combination. For example TeleVantage can forward voice mails to an e-mail address, and users can connect to the system visually via the ViewPoint software client or from any web browser anywhere in the world. This allows staff to quickly manage voice mail and set up call forwarding, greetings, and other phone settings from any location. Programming connections allow interaction with other software as well as calls arrive.

Overall, Vertical Communications' management has outlined a positive message and strategy to their Solution Providers. Artisoft's management is largely in place, with Vertical Networks' founder serving as Chief Technology Officer. We expect good things to come from the merger of Artisoft and Vertical Networks, and expect Vertical to continue innovating and improving its next-generation TeleVantage phone system in the years to come.

# Services

- *Network design, installation, and support*
- *Internet web site hosting, design, & high speed connections*
- *Software-PBX/VoIP phone systems*
- *Network and phone wiring installation and testing*
- *Troubleshooting, diagnosis, and repair*
- *Evaluation of business needs*
- *Evaluation and recommendation of technical alternatives*
- *System design and implementation*
- *Emergency service*

**Please give us a call to arrange a free initial consultation!**



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