

A background image of a modern office. Several people are working at desks with computers. In the foreground, a man and a woman are looking at a document together. The office has large windows and a white railing in the foreground.

How IT Can Eliminate Monitor and PC Pain Points Using the Latest LG Technologies

INTRODUCTION

Managing an organization's IT infrastructure can be a thankless task. IT managers and administrators are faced with increasingly complex environments in the midst of reduced budgets and staff cuts. Add to that end-user demands coupled with their limited understanding of technology when things go wrong, and inevitably, when issues do arise, the IT professionals are the ones held accountable. Through it all, they work diligently to maintain order and productivity, day in and day out. The goal of this paper is to highlight how new technologies can ease the burden on IT departments while enhancing productivity and satisfaction for the end users they serve.

Spec IPS technology to enhance image quality while saving energy

There are good reasons the medical, broadcast and photographic industries specify displays with IPS technology.



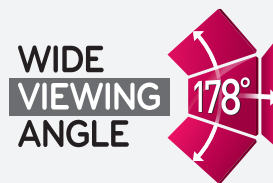
IPS (In-Plane Switching) is an LCD screen technology that dramatically increases image quality.

The latest IPS advancements are the result of engineering breakthroughs that allow more efficient transmission of the light source through the panel. With the best designs, backlights do not need to be as powerful and energy-consuming to drive the displays. IPS technology offers key benefits over conventional Twisted Nematic (TN) and Vertical Alignment (VA) desktop displays.

With so many technological advantages, it's no wonder that IPS technology is the clear winner in desktop displays. Look for it when purchasing monitors to ensure your company gets the best, most cost-effective solutions with the lowest TCO (total cost of ownership). A top brand is LG, the leading display company with IPS technology. Its IPS displays deliver excellent color impression and have been recognized for their advancements in picture quality by the world's leading testing authorities.

What makes IPS better?

- A true wide viewing angle up to 178 degrees, where color values and contrast remain consistent and data is clearly readable



- Superior color reproduction for critical image evaluation
- Runs considerably cooler than VA monitors
- Energy efficient for greater corporate responsibility and cost savings
- More stable and reliable—no image distortion when mounted on a wall or articulating arm, or when tapping/rubbing on the panel
- Color accuracy remains consistent over long-term use, for higher ROI
- IPS displays from top manufacturers can offer 3-year warranties



Maximize efficiencies by minimizing the number of monitors

Today it is common for designers, artists, security professionals and others to work with multiple monitors on their desks. Replacing multiple monitors with a single wide-format monitor will enable users to multitask with as many programs as they like, and numerous video feeds, on one screen at the same time. Reducing the overall number of monitors will cut your company's energy usage and equipment costs, provide clean workspace and reduce the number of hardware-related issues.

Look for monitors with a very wide screen ratio, preferably 21:9

like those offered by LG. These monitors provide a very efficient environment for Microsoft® Office programs, such as Word, Excel and OneNote. A single monitor, for example, can show 47 columns and 63 rows in Excel so users can see all the content in full view without scrolling or hiding functions of columns and rows. For business meetings, monitors with dual link-up capability allow two portable devices, such as a computer, camera, phone or Blu-ray player, to be connected to the monitor and used on a single screen simultaneously, controlled with only one keyboard and mouse.

For Mac OS X users, wide-screen monitors can provide selectable screen ratios, changeable by a single click, to increase ease of use and productivity. The 21:9 ratio enables the user to open and run an editing program and its source-clip folder without minimizing other programs. In addition, a four-screen split function divides the screen from two to four customizable subscreens of the user's preferred size, without any overlapping of windows. For super-fast connectivity with Mac devices, look for the Thunderbolt 2 interface and a hub display for various digital devices and daisy chaining.

With immersive viewing and crystal-clear HD, LG's state-of-the-art UltraWide® 21:9 monitors with IPS technology are designed for professionals, gamers and everyone in between.

Equip visual arts professionals for their best work

Professional-grade 4K UHD monitors with IPS technology offer superior color reproduction compared to common TN and VA panels, providing wider viewing angles and color consistency over the entire screen. They cover a wide color gamut from sRGB 99% to AdobeRGB 99% and are color calibrated at the factory to meet professional color accuracy by default.

Supporting high-speed unified interfaces and USB hubs, 4K UHD monitors function as a display dock for laptop and MacBook users. Their USB Type-C™ interface transfers 4K UHD screen, audio, data and even power through a single cable—eliminating the clutter of a laptop power adaptor cable, HDMI or DisplayPort cable, and USB data cables.

Give game designers the speed they need. Input lag often determines the winner, especially in graphic-intensive games. With IPS technology, UL-approved 9.7ms or lower input lag is classified in the top class. This means both 4K UHD resolution and fast speed are provided with IPS's outstanding picture quality. Additionally, look for FreeSync™ technology, 4K@60hz through DisplayPort and HDMI interface, which eliminates artifacts like image tearing and stuttering.

From sturdy narrow-bezel models to borderless slim models, 4K UHD monitors from LG are ideally suited to various work environments via their ergonomic tilt/pivot stands.



Eliminate most security, hardware and maintenance issues with Zero Clients

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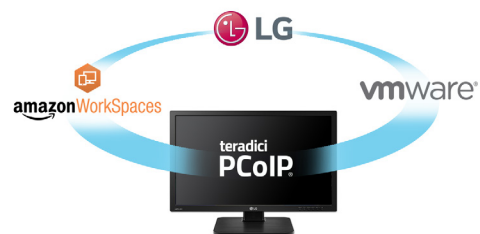
With
PCoIP Zero Clients,
we are never
scrambling to repair
someone's computer.

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Brian Dial
Network Administrator
Rummel, Klepper & Kahl, LLP

Today's working environments typically deploy a fleet of PCs, each containing a hard drive, memory, sometimes video cards and, more importantly, either a Windows or Mac OS X operating system. The very nature of this setup introduces vulnerabilities in security, with a risk of hacking or device theft, plus ongoing management and maintenance requirements for both software and hardware, and generally high power consumption. Chasing problems from PC to PC is both inefficient and frustrating. Isolated issues can quickly pile up while company personnel sit and wait to get back to work.

Now, deploying Zero Client devices throughout the company can virtually eliminate security problems, most hardware problems and maintenance issues. A Zero Client contains no hard drive, no moving parts and no operating system. It connects to a server in the cloud (self-hosted or a subscription service), such as Amazon Web Services (AWS) or VMware®, to deploy desktop functions from the cloud. Zero Clients are simple, secure, stateless endpoints—perfect for accessing VMware Horizon View, VMware Horizon DaaS, Amazon WorkSpaces and Remote Workstation environments.



Zero Clients come in a variety of form factors and run on PCoIP® (PC-over-IP)—a patented remote display protocol developed by Teradici that renders encrypted pixels (not data) to the end point. Simply plug in a CAT 5 cable, the power, keyboard and mouse. Easy to deploy, manage and operate, Zero Clients decode PCoIP transmissions and output pixels on the screen without transmitting the data so users enjoy a secure, rich virtual-computing experience.

Zero Clients (CONT'D)

To the end user, the Zero Client experience looks and functions nearly identically to that of a PC because a Zero Client will typically bring up a Windows session. But Zero Clients have many advantages over traditional PCs, laptops and tablets, especially with security. Security pervades all vertical market sectors, each of which has compliance and regulatory issues to contend with. This is the reason federal government, healthcare institutions, financial services, education, manufacturing and media/entertainment favor Zero Client devices. There is nothing installed on the local drive—customer data and other sensitive information are all stored in the cloud. Should the device be stolen, the only loss is the cost of the hardware.

Routine service and maintenance costs are greatly reduced, as with no moving parts, there is little that can break. Zero Clients also run cooler than PCs and use less energy. In most cases, electricity consumption typically plummets from a PC's 150 watts down to 30 watts or less with a Zero Client. Operating systems, software and apps are installed and updated by the IT administrator from a central location, and IT always knows exactly what is on its network.



LG, a leading manufacturer of Zero Clients, offers the Tera2 V Series Cloud Box and All-in-One Zero Client displays in three sizes: 19", 23" and 24". They feature six USB ports, support a second monitor and contain built-in speakers. All LG models have IPS panels for optimum image quality and are TAA compliant.

PCoIP Benefits

Simplifies the provisioning and management of computing services

Powers next-generation local, remote and mobile work styles

Allows IT departments to deliver a secure, right-sized computing experience to everyone

Simplify workstations and slash hardware/software costs with an all-in-one PC solution

Professionals in education, healthcare, hospitality and virtually any organization can benefit from a technology solution that makes their jobs simpler, such as an all-in-one PC solution powered by Google's Chrome OS. These complete computing solutions consist of a desktop/wall-mountable monitor with keyboard, mouse, built-in speakers and webcam, all compacted into a high-tech device that sets up in approximately five minutes. The devices are usually connected wirelessly but can be used with a landline as well. What's more, some models can serve as a Full HD 1080p monitor by connecting them to a laptop via the HDMI port.

All-in-one PCs with Chrome OS work within the Google ecosystem, providing access to all of the Google resources. For business use, the Chrome Web Store offers various applications that are compatible with and can replace MS Excel and PowerPoint, plus hundreds of thousands of free and paid apps. Built-in virus protection, multiple layers of security and verified boot keep the devices safe from viruses, malware and other computer threats. Additionally, Chrome OS updates itself at no cost, ensuring all devices always have the latest version.

LG's offerings in this category include the Chromebase™ with IPS panels. LG partnered with Google to create this complete computing solution that earned the 2014 Red Dot Award in Product Design.



Chromebase features a convenient Management Console that enables a single IT manager to access and control hundreds and thousands of Chromebase devices from a central location. Updates or troubleshooting can also be managed for a single unit or area—greatly reducing the time, expense and overall burden on organizational IT departments.

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CONCLUSION

When supporting a fleet of common TN or VA monitors and full desktop PCs, there is little an IT department can do to keep everyone up and running—other than react quickly to day-to-day issues. Fortunately there is a light at the end of the tunnel, and it is shining on professional-grade IT products such as those offered by LG. LG's full suite of IT products brings you a variety of IPS monitor and cloud-based computing choices to improve staff performance and satisfaction while providing long-term reliability and increased ROI.

To learn more about LG's IT products, [click here](#) or [contact us](#) today.