



Are you Overpaying for Wireless Data Collection Devices?

For those that feel Windows CE-based systems are overkill, wireless Linux data collection devices can provide streamlined, real-time inventory control with savings up to \$1,000 per terminal

As the Wal-Marts of the world increasingly press suppliers for real-time inventory tracking, the pressure gets passed right down the supply chain.

Warehouse and distribution managers who responded by turning to wireless data collection systems for faster, more accurate inventory control, however, have another problem. As the original, DOS-based terminal emulation systems they've relied on wear out, or are phased out by manufacturers, they've been pressured to turn to more costly, complex Windows-CE based systems.

But industry professionals are discovering that a Linux-based drop-in replacement for these old DOS devices running terminal emulation clients, produced by companies such as Eules, Texas-based AML, provides real-time access to inventory applications, without the "unnecessary bells and whistles" of Windows-CE based systems. Savings can approach \$1,000 per terminal.

"We've saved about 30 percent of our total cost of operation with Linux-based terminal emulation devices instead of a Windows-based system, says Dennis Dominioni, IT Director of Power & Telephone Supply Co. (Power & Tel), an independent distributor of telecom and cable TV material.

"While Windows is fine for sales or customer relationship management-type applications, it was overkill for our in-house supply logistics needs," explains Dominioni. "We have to invest in the most cost-effective technology to be the most cost-effective supplier."

Making the Right Choice

For the millions of corporate users who access, manage and maintain connections to business applications and data via IBM mainframe computers, AS400 midrange servers and VT hosts, terminal emulation is often the simplest, most economical way to access these legacy systems. Terminal emulation, using software to make a computer perform like a hardware terminal, is the main method used to deploy mainframe-based applications to mobile data capture devices.

Though Windows CE is suitable for terminal emulation applications requiring high-resolution graphics, a growing number of industry professionals are recognizing that it's "overkill" for routine, warehouse logistics applications.

"Most warehouse data collection applications are pretty simple," says John Cook, Sales Manager for Premier Electronics, a data collection VAR/integrator servicing a variety of industries in Crystal Lake, Illinois. "They're typically just four input fields: part number, location, quantity, and operator i.d. Most are less than ten input fields. If all you need is basic warehouse data collection, using a Windows-based device is like hitting a thumbtack with a sledgehammer."

For routine warehouse logistics applications, Windows CE can add unnecessary cost and complexity. Besides a powerful microprocessor in the 500 MHz range that can handle PDA-type applications, Windows-based portable data capture devices also require the purchase of third-party terminal emulation software, which typically costs about \$150-250 per terminal.

"A typical handheld data collection device with Windows has up to 1 gigabyte of memory, which is more than you need for basic terminal emulation," adds Paul West, owner of West Technical Resources, a data collection VAR/integrator near Memphis, Tennessee. "It has programs not necessary for basic inventory control such as a contact manager, MS Word, and Internet Explorer."

To keep warehouse operators from fiddling with inappropriate programs, in fact, IT managers typically have to remove or inactivate such programs on mobile data capture devices.

When it comes to routine warehouse logistics, a rising number of industry professionals are refusing to overpay for Windows CE-based capabilities in mobile wireless data collection. Instead, they're opting for a drop-in replacement for the lower cost and simplicity of wireless Linux terminal emulation devices.

AML, for instance, has developed a dedicated terminal emulation mobile data collection device, the M7220, that's much more efficient than Windows CE devices. It avoids using precious battery power, memory or microprocessor time running a graphical operating system that's not needed for terminal emulation applications. As a drop in replacement for aging DOS terminals, it's preloaded with terminal emulation clients so there's no need to purchase or load additional software on the device.

There's minimal overhead in the device, compared to Windows. Without the power, memory or processing speed required to run the Windows operating system, there's initial cost savings. Instead of a touch screen or pen stylus, the device is operated by keyboard which makes it more robust.

"With a device like AML's, you'll get a full work shift of mobile data collection use without battery replacement or recharging," says West. "For basic terminal emulation, there's no need for third-party client software, and it functions well with as little as 32 megabytes of memory."

With the dedicated terminal emulation application running, users see the same host application screen they're used to seeing on their old DOS terminals, but benefit from newer, faster technology.

"If all you need is basic inventory capability, you can save about \$1,000 per terminal by choosing a dedicated terminal emulation application over a Windows-based one," says Cook. "The savings come from a lower initial price, with less need for training and maintenance."

To improve its logistics and customer service, Power & Tel now uses about 100 wireless Linux data collection devices by AML throughout its international organization.

"Customers can track their orders in real-time from the time they're placed to the time they're shipped via our web-based extranet," says Power & Tel's IT Director Dennis Dominioni.

While the wireless devices are ruggedized for use in warehouse environments, they connect to any Windows, UNIX, i5/OS, or Linux host so they're easily deployed across a range of applications. Administrators can quickly configure settings on multiple terminals from their PC.

"The wireless devices have all the features we need without unneeded bells and whistles," says Matt Moyer, Power & Tel's System Administrator. "Their reliability has made my job easier."

"The wireless devices help us fulfill our mission statement: 'to be our customers' most cost-effective way to have the right material, at the right place, at the right time, every time,'" concludes Dominioni.

AML is a leading U.S. designer and manufacturer of wireless data collection products. With in-house design and manufacturing capability, it can customize and expedite corporate data capture solutions.

For more info, call 800-648-4452 or visit us online at www.amltd.com.

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