

# Virtual KVM is a disruptive innovation, ready for mainstream adoption

By David Geer

IT managers across a broad range of industries are increasingly evaluating [Multiplicity®](#), the enterprise-grade software KVM switch for hardware KVM replacement

Leading IT organizations are adopting software KVM, the technology alternative that dramatically lowers costs and enhances multi-PC station capabilities. Expect more companies to follow.

*With Multiplicity, traders remain focused on their work while switching between PCs, saving up to an estimated 5-seconds per transaction, according to Matthew Misciagna, VP, Bank of America.*

## Virtual KVM Switch Software Trends

“Hardware virtualization increases utilization and efficiency. Virtual KVM is a good example,” says Dr. Mike Jude, PhD., Analyst, Frost & Sullivan; “trialing KVM software should be trivial.” There are really no obstacles to evaluating virtual KVM switches.

Software KVM switches are more versatile than their hardware counterparts, are compatible with all combinations of PC connectivity technologies, and are not subject to the physical wear and tear that deteriorates hardware KVMs. Major players such as Bank of America and the Federal Aviation Administration rely on large deployments of software KVM switches in support of mission critical operations, says Chris Kowal, VP, EdgeRunner, software KVM switch vendor.

IT managers are increasing enterprise productivity by turning to efficient software solutions, according to Virtualization: A 2013 HorizonWatching Trend Report (IBM). With the growing demand for virtualization, vendor competition is heating up, pressing software makers to provide the business critical innovations that enterprises need. The software KVM switch innovation has reached a level of capability that makes it a viable alternative to KVM hardware. A true enterprise-grade solution, virtual KVM is stable and ready for mainstream adoption.

## **Hardware KVM Conundrums**

Hardware KVMs present a number of challenges for IT managers and end-users. It can be complex to connect monitors, keyboards, and mice in a mixed configuration of differing port technologies, often requiring multiple hardware KVM switches and other conversion devices to do it.

There is also the requirement for reliability and hardware solutions eventually wear out. Replacing hardware switches can cost ten times as much as replacing them with a software KVM solution that does not wear out. Hardware switch replacement requires downtime as support teams remove one switch, cable in the new one, and then run tests to ensure it is working correctly. Once in operation, there is always the potential for future problems that require complex diagnoses to identify failures in the KVM switch box, cabling, extenders or other conversion devices. These issues are eliminated using a virtual software KVM solution.

## **Software KVM Switch Solution**

Few hardware KVMs have the unique capabilities of a software KVM switch. Software KVM switches such as Multiplicity are hardware agnostic, successfully weaving hardware using PS/2 and USB ports, and DVI, VGA, and Display ports together into a fluid multi-PC environment. Since the software KVM switch simply works using the existing networks, IT managers and support technicians don't have to worry about procuring specific converters, adapters, or software drivers to splice together varying peripheral connections.

With a software KVM switch, a user can simultaneously control multiple PCs using each PC's individual dedicated monitor with just the keyboard and mouse (a seamless connection) and with keyboard, mouse and just one monitor (the KVM connection); hardware solutions would require two separate switch technologies to accomplish this.

Multiplicity allows operators to instantly drag and drop files of any size between systems, which is something hardware KVMs cannot do. "My virtual KVM switch made it easy to drag and drop files from one PC to another, which is a real time

saver,” says Jackson Presley, Celebrity Web Designer; “virtual KVM buys back a full work day every month.”

Multiplicity enables users to copy and paste text between PCs while retaining the original text formatting; this is another feature absent in hardware KVMs. When transferring any data, even keystrokes between PCs, Multiplicity automatically applies state-of-the-art compression and encryption to data passing between systems so transfers are immediate and data remains secure.

IT managers and end-users can update or upgrade Multiplicity virtual KVM software quickly and easily via download; it does not wear out like hardware KVMs will. A virtual KVM switch for up to nine PCs costs significantly less than hardware KVMs do.

When process automation leader Control Southern gave a customer a price quote for a complete enterprise-class operator station bundled with a Multiplicity software KVM switch, the total was less than \$10K, says George Goodyear, an Engineer at Control Southern. Previously, a comparable station cost twice as much or more, explains Goodyear. The savings comes from using Multiplicity software KVMs instead of hardware KVM switches.

IT departments can standardize the configuration of a software KVM switch so enterprises can deploy it with minimal testing, unlike hardware KVMs, which require manual setup of each physical device and may even require a separate network for testing to avoid downtime in the production environment.

### **KVM Switch Software Supports Financial Services**

Financial institutions can require stock traders who move between PCs to type transaction authorization numbers from one computer into another; traders use Multiplicity to cut and paste the data between PCs instead, saving time, increasing accuracy and speeding transactions. These efficiencies proliferate across a broad install base.

The financial services sector has one of the largest populations of multiple PC users. The adoption rate for KVM switch software in that market is climbing. “Bank of America / Merrill Lynch went from a handful of traders using KVM switch

software to more than 500 users globally and growing,” says Matthew Misciagna, VP, Bank of America.

“Multiplicity saves time. Time is money,” says Misciagna. Without Multiplicity, operators must move from one keyboard and mouse to another each time they switch PCs, which takes too long. With Multiplicity, traders remain focused on their work while switching between PCs, saving up to an estimated 5-seconds per transaction, according to Misciagna.

With thousands of sites globally and many major brands using the technology, Multiplicity adoption is trending upward. Expect a significant uptick in IT managers evaluating KVM switch software this year.

### **Savings and Support**

Software KVM switch technology is a proven enterprise class solution for virtualizing hardware KVMs. There is growing adoption of virtual KVMs in the financial services, emergency response, support call center, education, media and engineering industries. Multiplicity provides significant benefits in these industries by reducing technology costs and desk clutter while increasing end-user productivity.

Customer support plays an important role in the enterprise decision to switch from hardware KVM to virtual KVM. “Great customer support is a cornerstone of our business” says Kowal.

“EdgeRunner provides enterprise-class support,” says Goodyear; “using their enterprise support and licensing system simplifies deployment and activation as you are able to manage your licenses from a central point.”

The low cost software KVM solution is available for download from the EdgeRunner/Multiplicity website. Install and setup times are typical of well-designed PC applications. Minimum requirements are two PCs and a network connection.

\* Multiplicity is a PC World 100 Best Product.

\*\*30-day free trial.