

## TWO PLACES AT ONCE: HOW THE VIRGINIA SUPREME COURT USES TECHNOLOGY TO IMPROVE EFFICIENCY AND SAFETY

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The Foxfield Races in Charlottesville, Virginia, draw a spirited crowd of 25,000 horse racing enthusiasts every April. At the 2007 event, Patrol Officer Dennis Hahn of the Albemarle County Police Department took part in the daunting job of keeping the peace. By the end of the day 60 spectators were arrested on various charges ranging from public drunkenness to disorderly conduct. Without leaving the site, Officer Hahn served warrants and received commitment orders for his arrestees, then turned the paperwork over to jail officials while the offenders were loaded onto a waiting Department of Corrections bus. Chief Magistrate Cheryl Thompson conducted the hearings via video and printed the signed warrants and commitment orders from her office in Culpeper, 40 miles away. Instant access to the magistrate and arresting documents via video was not available during the 2006 event, so arrestees were transported to the jail by the arresting officers themselves and

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waited up to six hours before seeing a magistrate to complete the incarceration process.

Magistrates provide the link between law enforcement agencies or citizens and the judicial system in Virginia. Over 450 magistrates throughout the commonwealth issue arrest warrants and summonses as well as commitment, bond and release orders and a myriad of other court documents. These judicial officers fall under the purview of the Office of the Executive Secretary (OES), Supreme Court of Virginia. The Magistrate Support Team, under the Department of Judicial Information Technology (DJIT) of the OES, maintains two systems that are essential to magistrates in the performance of their duty: the eMagistrate system that is used to create court documents and a video system network connecting approximately 140 magistrate offices to a number of police departments, jails and other locations that need signed, original court documents. The effective integration of these two systems was a vital step toward timely and cost-effective processing of criminal and civil defendants across a wide geographical area.

The ability to produce legal documents from the magistrate's location and print originals to a remote facility was a key requirement of the integration of the eMagistrate and video systems. The Magistrate Support Team collaborated with the manufacturer of the video units, Polycom Inc. ([www.polycom.com](http://www.polycom.com)), to design and incorporate the printing technique in their current and future video products. The remote print feature that resulted from this collaboration allows the generation of signed documents over the same network used to transmit video signals during a video conference.

This unique application of video conferencing received state-wide recognition when the Department of Judicial Information Technology was selected for the 2006 Governor's Technology Award in the category of Increased Accessibility to Government.<sup>3</sup> "The Awards program honors outstanding achievements and recognizes successful technology and economic development initiatives in the public and private sectors

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3. See Press Release, Commonwealth of Virginia, "Virginia's Secretary of Technology Announces Governor's Technology Award Winners," (Sept. 11, 2006), available at <http://www.technology.virginia.gov/TechnologyNews/GovTechAwardWinners2006.pdf>.

in the Commonwealth of Virginia.”<sup>4</sup> The award also “recognizes [the] use of innovative technologies to improve citizen access to and service from governmental entities of any type.”<sup>5</sup>

### **Remote Access to Magistrates through Videoconferencing**

Videoconferencing has served the public significantly since its inception in Virginia’s judicial system in 1998 by allowing patrol officers to return to the streets faster and increasing the effective geographic coverage of a single magistrate. The introduction of the remote print feature helps to ensure that all paperwork required to process an arrestee is produced at the remote location. Remote print provides the convenience of sending original documents as opposed to relying on a faxed copy of a document that in the best case needs to be reconciled with the original, or in the worst case lacks sufficient readability to be usable.

Over a recent 12-month period, magistrates issued a daily average of 437 warrants and other documents using the video remote print feature, nearly 15 percent of the total number issued. The video network is commonly used to connect magistrates to jails and police departments, but it can also be used to connect magistrates to hospitals (to process temporary detention orders and emergency custody orders) and sports stadiums or concert venues (to process intoxicated or disorderly offenders). Videoconferencing and remote print usage are expected to increase as deployment of video systems to additional courts and jails throughout the state continues for the foreseeable future.

The remote print functionality of the Virginia Supreme Court deployment is unique among court systems.<sup>6</sup> Polycom is currently the only provider of the remote print feature, and the Supreme Court of Virginia is its only customer using the tech-

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4. *Id.* at 1.

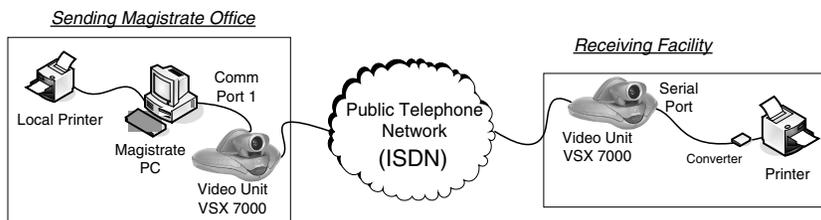
5. *Id.*

6. See, e.g., POLYCOM, POLYCOM VIDEO HELPS VIRGINIA SUPREME COURT ENSURE DUE PROCESS, BOLSTER PUBLIC SAFETY, AND SAVE MONEY (2006), [http://www.polycom.com/common/documents/company/customer\\_success\\_stories/government/virginia\\_supreme\\_court.pdf](http://www.polycom.com/common/documents/company/customer_success_stories/government/virginia_supreme_court.pdf).

nology to print legal documents through the video connection to a remote location.<sup>7</sup>

### Technical Overview

The Polycom VSX 7000 video unit located in magistrate offices not only provides two-way video and audio but also the means to send documents directly from the magistrate's PC to a printer at any Receiving Facility (See Figure 1). The Receiving Facility is also equipped with a Polycom VSX 7000 and a laser printer. The printer is connected directly to the Polycom video unit with a standard modem cable and a 25-pin converter box. With this configuration, no PC is required at the remote site.



**Figure 1. Remote Print Video Network**

The technology to transmit video images generally falls into two categories: Integrated Signal Digital Network (“ISDN”) and Internet Protocol (“IP”). Use of IP networking to transmit video images has become a common practice in the videoconferencing industry. IP networking easily permits multiple access points within internal, secure networks, but cannot be used in the public domain without stringent security measures to prevent unauthorized access. IP networking also requires fully twice the amount of information (bandwidth) as ISDN to convey the same quality video.

ISDN uses a dedicated phone line, similar to railroad tracks that connect Point A to Point B with no other access points in between. Each endpoint of a video connection, between a magistrate office and a jail, for example, often exists

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7. *Id.*

within its own isolated network. The potential for unauthorized access between locations where there is limited control over endpoint security is greatly reduced using ISDN technology. Therefore ISDN is the method of choice for Virginia's magistrates who need to print official digital signatures and court documents at a variety of remote sites.

### **Return on Investment**

There are three major aspects of the use of videoconferencing with remote print that provide significant return on capital investment. The first is quicker access to the magistrate, where videoconferencing with remote print allows one magistrate to cover multiple jurisdictions from a single office. Without this technology, the magistrate would have to drive to multiple sites to cover the same territory.

The second is enhanced public and judicial officer safety, where videoconferencing with remote print is used in place of transporting dangerous criminals from jail to a courthouse for a hearing. With this technology, the criminal can attend his or her hearing from jail without putting the public or the judicial officers in danger.

The third way that the use of videoconferencing provides a return on investment is through savings on additional equipment and human resource costs. In a recent example from Richmond, Virginia, a facilities issue caused magistrates to be temporarily relocated and required them to process arrestees and jail inmates face-to-face in an open, office-like environment. Sheriff's deputies often worked overtime to provide protective services (transporting and escorting the offenders) while magistrates issued court documents. To eliminate the estimated \$1 million cost of protective services to manage this potentially dangerous situation, the city deployed 13 video units at a cost of \$140,000.

The initial capital investment required to install each video site is dependent upon several factors including configuration (whether documents need to be originated at either end), ISDN and long distance charges, and video quality desired (determined by the number of ISDN lines). The costs shown in Table 1 are for a basic video system only. Additional costs would be

incurred if the receiving facility were also required to double as an originating office (as would be the case for two magistrate offices alternatively covering each other).

VIDEO EQUIPMENT		
Originating Office	Polycom VSX 7000	\$7500 <sup>8</sup>
Receiving Facility	Polycom VSX 7000	\$8500

NETWORK		
ISDN Lines (3 recommended)	Verizon	\$120/month (\$40 per month per line) + usage fees <sup>9</sup>

**Table 1. Basic Video System Costs**

With the remote print feature a PC is not required at the remote site thus reducing equipment costs. A process is issued at the local site and simply sent to the remote printer through the existing video connection. Remote printing allows savings on the cost of fax machines and extra phone lines. The efficiency of remote printing saves law enforcement the time it takes to transport offenders to staffed magistrate offices. Since the original document is printed and executed, it also saves office personnel the time it would have taken to match up the faxed copy with the original.

Quicker access to magistrates has been noted in the areas in which video is utilized. When an arrest is made, a police officer must either take the accused to the nearest on-duty magistrate or wait for an on-call magistrate to come in. In either scenario the magistrate may not be seen for at least 30 to 60 minutes depending on distance or traffic. With a video system in place, a third option is to take that person to the nearest remote video site. Using the video system, the magistrate conducts a probable cause hearing in the same way as it would be conducted in person. If the magistrate finds probable cause to issue the process, a warrant is issued from the magistrate's PC and printed at the remote site. Being able to print the original document with the appropriate signature allows the police of-

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8. Can reach \$12,000 for a customized configuration.

9. See comment above.

ficer to execute the original warrant immediately. In this way the remote video and print process provides the same judicial function as if the police officer had driven the person under arrest to the magistrate, but in a fraction of the time.

Quicker access to the magistrate in turn enhances public safety in a number of ways. A magistrate can perform a video hearing at any location within the judicial district. If the magistrate determines the person under arrest will be committed to jail, then all the necessary commitment paperwork can be produced via video prior to incarceration. The arresting officer does not have to be seen again by the magistrate and is able to return to duty or patrol sooner, which benefits the public by providing more active law enforcement coverage.

On several occasions video conferencing has been used to try civil cases in which a maximum-security defendant is violent, making transport to and from a courtroom costly and dangerous. The extent to which the video magistrate system has positively impacted public safety and law enforcement is incalculable.

## **Conclusion**

The remote print technique requires no special software or hardware other than the video units and parts for the remote printer. As such, this solution could be used with any PC-based application. The only drawback noted since statewide deployment began was an instance where local police officers had to become accustomed to the idea that they must sometimes wait for a magistrate serving multiple jurisdictions to complete a video process with another officer before being served.

The practical use of video conferencing within Virginia's judicial system has been proven. Significant actual and intangible cost savings have already resulted from the use of video and will continue to grow as more systems are deployed throughout the state. With relatively minor adjustments, the techniques used to implement Virginia's Video Magistrate System can be successfully applied to any state's judicial system.