UVS pilot equipment setup observations
Adams County (Clear Ballot ClearVote 1.0)
Adams County Economic Development Building
10/23/2015

Members of the Voting Systems team were onsite at the Adams County Economic Development Building located at 12200 Pecos St. in Westminster to observe the delivery and equipment setup process. Present at the time of setup were Voting Systems Specialist Danny Casias, Voting Systems Manager Jessi Romero, two Adams County Election Judges, eight members of the county IT department, Susie Guardado (Equipment Tech) and Mary Lietzan (Support Tech), both of the Adams County (Adco) Elections Department.

Setup observations

Voting equipment setup began at 9:40 a.m. Equipment was transported in black canvas bags which were previously used to transport Diebold AVPM's. Approximate size of the bags is 9.5" x 15" x 20". Adco Elections staff removed one "All-in-one" Dell OptiPlex 3030, one Dell Inspiron 7000, and two Brother 2340 printers from three bags. We were informed that each VSPC would have the same number of units.

Adco staff and judges began to set up the "All-in-one" ballot marking device (BMD) first. A plastic foot was screwed into the BMD, which was then set on the table. The printer was then placed next to the BMD and connected. Two APC uninterruptible power supplies (UPS) were then removed from their original boxes and placed on the floor. The first voting unit was then plugged into one UPS. Next, Adco staff removed the Dell Inspiron 7000 laptop and placed it opposite of the first BMD setup. The laptop was connected to its DC power converter and to its printer via a USB cable. While Susie was connecting the printer, Mary connected a cable attached to the laptop case on one end and around the table leg on the other. The cable is a security device intended to prevent removal of the BMD from the room. Privacy screens consisting of two cardboard voting booths taped together were then placed around each unit. This completed the setup, with a total time of 22 minutes.

Susie then started up each unit, logged in and printed a test ballot. This process was timed on the Dell OptiPlex 3030, and took approximately 6 minutes. Included in this time was the logging of removed/replaced seals over the power button, and those covering the printer tray. Actual test ballot printing time was two minutes.

Overnight storage

Dave Penny, VSPC Supervisor Judge, informed us that equipment would be left in its current location overnight. All locks for the room were changed while we were on site, with possession of the keys going to the Supervisor Judge and Adams Staff. The Clear Ballot solution for covering the power button was observed, as were seals over all exposed ports.

Summary

Overall, system setup appeared very simple and straightforward. Other than the two UPS devices, each component of the system seemed relatively easy to maneuver into position. The setup time presented within this report is not truly representative of the process because A) Adco staff halted setup numerous times to log seals on the components, or replace seals damaged in shipping, B) Adco staff and judges

paused numerous times to discuss the equipment, and C) Adco staff was diverted to other, non-voting equipment, setup issues within the VSPC.

UVS Pilot Equipment Setup Observations
City and County of Denver – Dominion Voting Systems Democracy Suite 4.19
Harvey Park Voter Service and Polling Center

10/26/2015

At 8:30AM on Monday, October 26, 2015, County Support Manager Dwight Shellman observed staff members of the City and County of Denver Elections Division setup the in-person voting equipment for Dominion Voting Systems' Democracy Suite 4.19 at the Harvey Park Voter Service and Polling Center (VSPC), located at 2120 S Tennyson Way, Denver, Colorado. Jimmy Flanagan (Senior Voting Systems Analyst for Denver Elections) personally setup the voting equipment, consisting of five ImageCast X (ICX) ballot marking devices, five paired printers, and the ICX server. Paul Casper (Operations Manager for Denver Elections) and VSPC election judges were also present.

Setup observations

Dominion's ICX in-person voting system generally consists of ballot marking devices (BMDs) housed in secure kiosks. The BMDs themselves are commercial-off-the-shelf (COTS) Samsung Galaxy Tablet Pro 12.2 tablets. The system operates on a closed, hard-wired network utilizing a Dell Latitude E7440 laptop computer as a server. Each BMD is paired with a Dell B2360dn printer. When a voter's eligibility is confirmed, the voter registration judge passes the voter to an election judge at the ICX server. The election judge utilizes the ICX server to program an access card that, when swiped on the BMD, displays the specific ballot style the voter is eligible to vote. When a voter marks and verifies his or her voting choices on the BMD, the voter selects an on-screen option to print the ballot on the paired printer. When the voter instructs the device to print his or her marked ballot, the BMD communicates with the server, which generates a human-readable, PDF document containing the voter's choices. The server then sends the PDF document to the printer paired with the BMD. No record of the voter's choices is preserved or retained in the server or the software. The voter then deposits the printed ballot in a secured ballot drop box. The in-person ballot boxes are periodically retrieved by election judges and returned to Denver Elections' main office for central tabulation on the ImageCast Central tabulation system.

On my arrival, the ICX server was already removed from its case and placed on the row of tables where election judges processed voters. The other components of the ICX system were contained in a locked and sealed cart. As the election judges busied themselves with setting up other equipment utilized in the VSPC (such as the laptop computer that election judges used to process voters in webSCORE, and the Runbeck ballot-on-demand equipment), Jimmy Flanagan set up the ballot marking devices and paired printers, and connected them to the ICX server via an Ethernet network switch.

The Harvey Park VSPC was equipped with five voting booths intended to house the ICX equipment. Other voting booths were available for voters to mark pre-printed paper ballots, if they so desired.

I observed Jimmy Flanagan remove five ICX tablets and printers from the sealed cart and place them in the voting booths. One of the five ICX terminals was equipped with accessible features.

Jimmy required 30 minutes to set up and test the five ICX stations. Jimmy connected each ICX and each ICX printer via Cat 5 cable to the network switch. Jimmy then connected the network switch via Cat 5 cable to the ICX server. The room was arranged in such a way so that the cable from the voting booths

to the server ran along the base of two walls, and then across a portion of the floor accessible only by election judges to the ICX server. After turning on all components, Jimmy utilized the test printer function from the Windows devices and printer menu to print a test page on each of the paired printers. This test procedure is an essential step, because if the printers are not paired correctly, a voter may unwittingly print his or marked ballot on a printer stationed in a different voting booth, which may or may not be occupied by a different voter.

As noted, Jimmy Flanagan completed the setup and testing of five ICX terminals, printers and the ICX server in 30 minutes. The setup did not seem overly complicated or difficult for someone of Jimmy's advanced technical aptitude. Less tech-savvy election judges and staff may find the VSPC setup process to be difficult or challenging. Counties utilizing this system should devote sufficient time to training and practicing VSPC setup. Much of the complexity can be avoided if Dominion further develops the system so that all ballot styles are saved or stored on the ICX terminals themselves, rather than communicating with a server to obtain the ballot. In addition, having to string Cat 5 cable across the floor where election judges are working is not ideal.

UVS pilot equipment setup observations
Jefferson County (EVS 5.2.0.3)
Standley Lake Library
10/26/2015

Jessi Romero (Voting Systems Manager) was onsite at the Standley Lake Library located at 8485 Kipling St. in Arvada to observe the equipment setup process. Five Jefferson County Election Judges and Erin Amos (Jefferson Co. Elections Operations Manager) were also present at the time of setup.

Setup observations

Upon my arrival, the voting equipment was located against a wall while the judges were setting up other VSPC functions. When I questioned Erin about how the equipment was shipped, she explained that the Expressvote ballot marking device's (BMD) body is equipped with wheels and a handle in the rear, which allows the unit to be moved easily and stacked up against others during shipping. The DS200 base also has wheels which allow it to be rolled and shipped easily.

When setup began, I observed the judges maneuvering the equipment around the room with relative ease. Two judges were then tasked with opening up each BMD unit. The first step of this process was to adjust the BMD from shipping orientation to the voting position. This was accomplished with one judge loosening the locks in the back, while the other raised the BMD into the voting position. The whole process appeared effortless and took approximately 15 seconds to accomplish.

The judges then verified and pulled a tape seal that was affixed at the front of the unit. After the seal was removed, the Supervisor Judge unlocked the cover and folded it back over the top of the unit. The privacy screens were then unfolded and placed into position. A seal over the power button compartment door was then verified and removed. After the seal was removed, the Supervisor Judge unlocked the door, and the unit was turned on. The door was then closed, locked and resealed. Once the unit booted up, an activation code was entered on the touchscreen and the unit was ready for use. This entire process took approximately five minutes, however there were several pauses in the setup to wait for the Supervisor Judge to unlock the BMD and power button covers.

The judges then moved on to the DS200. They first verified seals and unlocked the cover on the unit. The cover was then folded back and the unit was activated. The judges then verified and removed wire seals from the front of the ballot box portion of the unit. The transfer case inside was then removed and two judges verified that there were no ballots present. It was then signed off on, and the case was placed in position to receive ballots. The doors were then locked and resealed. Next, the activation code was entered into the scanner, which initiated the printing of a zero tape that the judges verified and signed off on. This process took about ten minutes to complete.

Overnight storage

Equipment will be stored in the VSPC overnight with the following security precautions. Expressvote covers will be folded down over the BMD component. They will then be locked and sealed with a tape seal. Similarly, the DS200 will be secured by folding the cover down over the scanning component which is then also locked and sealed. The room housing the VSPC is locked at night as well.

Summary

Overall, system setup appeared very simple and straightforward. The architecture of each component made it relatively easy to maneuver into position and prepare for voting. Setup of the Expressvote units also gained efficiency as the judges developed a process.