

HART InterCivic

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Hart InterCivic

The reason for the examination was to determine if the Hart Card Reader - HVS CR 3100 Rev B impacts the certification of the 6.2.1 system.

The Hart InterCivic 6.2.1 component version numbers are:

BOSS - version 4.3.13 – ballot design and generation sub-system
BallotNow - version 3.3.11 – scanner used for deposition of mail-in ballots
eSlate/DAU – version 4.2.13 – DRE voting device – disabled access unit
JBC – version 4.3.1 -Judges Booth Controller used with eSlate to select voters' ballot
Tally – version 4.3.10 – central-count accumulator and reporting sub-system
Rally – version 2.3.7 – regional or central MBB uploading (throughput enhancement)
SERVO – version 4.2.10 – used to extract audit data from eSlates and JBC's
eScan – version 1.3.14 – scanner to read paper ballots
eCM – version 1.1.7 – used to generate security keys

Collectively, the component pieces make up Hart's System 6.2.1 voting system.

The system reviewed was the same system (6.2.1) examined in January of 2008 with the exception of a new PCMCIA media card reader/writer. Hart personnel stated that there were no changes to the software or firmware for the components listed above. The new card reader/writer usage was demonstrated with each system component where it is used.

Findings

- Hart developed the new card reader because of a lack of availability of COTS PCMCIA card readers. Open source technology was used in its development and Hart is willing to provide the technology to any manufacturer. Currently, the card reader is being manufactured by McDonald Technologies International, Inc. of Farmers Branch, Texas.
- The file system used on the MBB (PCMCIA flash memory card) is proprietary and cannot be accessed from a PC that is not running the Hart election software.
- The issue of the disconnects from a Windows 2000 PC was mitigated by the addition of a resistor in the card reader. This eliminated the spurious *Unsafe Removal of Device* warning messages.
- There were no changes to the USB software driver used to communicate to/from the card reader.
- The new card reader/writer was able to accurately read and write data to the media.
- The change did not alter the effectiveness of the system and there were no new components introduced.
- The system recorded and tallied ballots correctly.

Conclusion

There were no functional changes to the system from the substitution of a new card reader/writer. Accuracy and security has not been compromised by the change. I believe the system meets the requirements of the Texas Election Code and therefore recommend allowing the change.

Tom Watson
Examiner