

SB213 Proponent Presentation

Cast Vote Records (CVRs) & Ballot Images

Rick Weible

Rhode Island reaches settlement with voting machine vendor over primary election errors

Secretary Gorbea Announces Settlement with Election Systems and Software Over Errors in the 2022 Election

by **Ryan Belmore**
December 29, 2022

The Rhode Island Department of State has reached a settlement with voting machine vendor Election Systems and Software (ES&S) following programming errors that were discovered during the 2022 primary election.

As part of the settlement, ES&S will provide a credit of \$47,644 for all project management services provided during the election. In addition, the company has agreed to post a public statement (included below) on its website outlining best practices for collaborative Logic & Accuracy testing.

Pre-election testing includes logic and accuracy (L&A) testing. It's the process by which the machines and ballots are publicly tested by jurisdictions before Election Day to confirm that the ballot content is accurate and those ballots will tabulate a voter's selections correctly. L&A testing increases confidence in elections.

ES&S wants to reiterate its recommendation for best practices which are contained on our online customer portal. "L&A testing starts with proofing all of your ballot styles, both paper and touch screen, for accuracy in layout and contests." This will ensure that all touch screens match exactly paper ballots, in every language used for voting.

Furthermore, we have also expressed: "To test your tabulation equipment, use a test deck of ballots and or ExpressVote vote summary cards containing votes for each candidate and questions in all contests, and where the expected results are known." This means that on touch screens, testing should include votes for all candidates and questions in all races. As we have said: "You can create your own test deck independently by manually filling out ballots for all ballot styles in sufficient quantity to vote all candidates/questions in all contests."

Voting rights groups call for investigation of Election Day problems in Northampton County

BY: **PETER HALL** - NOVEMBER 14, 2023 5:02 PM

“The county’s conflicting messages to the public on Election Day led to confusion, concern, and doubt in the security and accuracy of votes. These mistakes grow into misinformation,” said Philip Hensley-Robin, executive director of Common Cause PA.

The [voting machine malfunction](#) forced voters in Northampton County to vote via emergency ballots. County election officials said the issue was a “clerical error.”

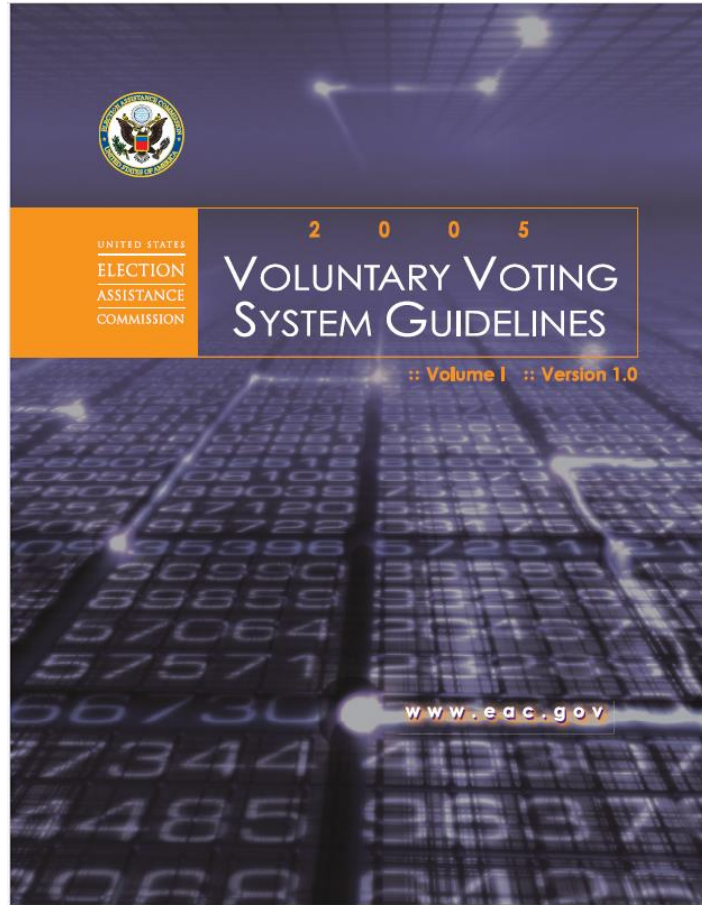
The malfunction occurred in the Superior Court retention race where the voter had to select ‘Yes’ or ‘No’ to vote for Judges Jack Panella and Victor Stabile to retain their seats.

“The programming error that occurred in Northampton County should be a lesson for every Pennsylvania county that uses hybrid touch screen voting machines,” Marian Schneider, senior policy counsel for voting rights at the ACLU of Pennsylvania, said.

In addition to the investigation and report, the groups called on the county to evaluate voting machine logic and accuracy testing procedures and make adjustments to catch errors; issue public notices to allow observers during the testing, as required by the Election Code; and supply polling places with adequate emergency paper ballots, equal to 50% of the poll’s registered voters.

Counties are required to perform logic and accuracy testing of all voting machines. According to the [Pennsylvania Department of State](#), the testing is designed to detect issues with screen calibration, mislabeling and other potential problems to ensure the machines work properly.

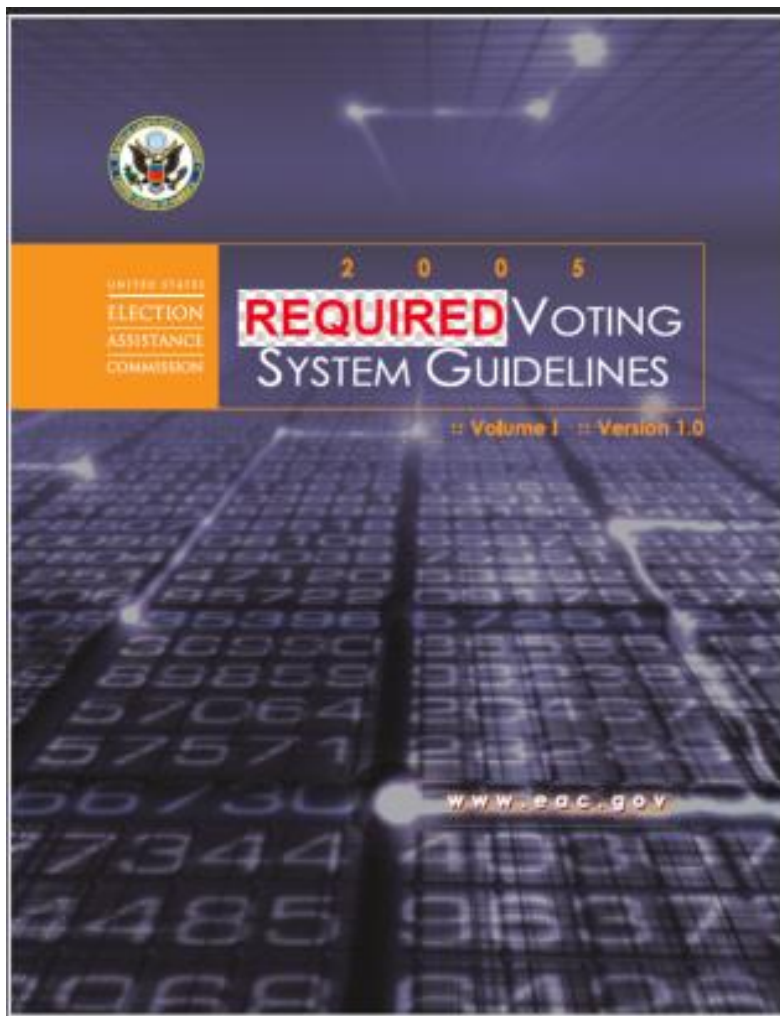
“While the county completed some of this testing, it was not completed to adequacy or full compliance; otherwise the issue would have been caught and corrected before Election Day,” the voting rights groups said in a statement.



12-17B-2. Requirements for automatic tabulating, electronic ballot marking, and election voting equipment systems--Approval of changes or modifications.

Any automatic tabulating or electronic ballot marking system used in an election shall enable the voter to cast a vote for all offices and on all measures on which the voter is entitled to vote. No automatic tabulating, electronic ballot marking, or election voting equipment system may be connected to the internet. No ballot marking device may save or tabulate votes marked on any system. Each system shall fulfill the requirements for election assistance commission standards certification and be approved by the State Board of Elections prior to distribution and use in this state. No system may be approved unless the system fulfills the requirements as established by the State Board of Elections. Any changes or modifications to an approved system shall be approved by the State Board of Elections prior to distribution and use.

Source: SL 1994, ch 110, § 6; SL 2005, ch 92, § 3; SL 2018, ch 81, § 2, eff. Feb. 5, 2018.



United States Election Assistance Commission

Certificate of Conformance

ES&S EVS 6.1.1.0



The voting system identified on this certificate has been evaluated at an accredited voting system testing laboratory for **conformance to the Voluntary Voting System Guidelines Version 1.0 (VVSG 1.0)**. Components evaluated for this certification are detailed in the attached Scope of Certification document. This certificate applies only to the specific version and release of the product in its evaluated configuration. The evaluation has been verified by the EAC in accordance with the provisions of the *EAC Voting System Testing and Certification Program Manual* and the conclusions of the testing laboratory in the test report are consistent with the evidence adduced. This certificate is not an endorsement of the product by any agency of the U.S. Government and no warranty of the product is either expressed or implied.

Product Name: EVS

Model or Version: 6.1.1.0

Name of VSTL: Pro V&V

EAC Certification Number: ESSEVS6110

Date Issued: July 27, 2020

Mona Harrington

Executive Director

Scope of Certification Attached



United States Election Assistance Commission

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application that provides election definition creation, ballot formation, equipment configuration, result consolidation, adjudication, and report creation. Electionware is composed of five software groups: Define, Design, Deliver, Results, and Manage.

ExpressVote XL™ is a hybrid paper-based polling place voting device that provides a full-faced touch screen vote capture interface that incorporates the printing of the voter's selections as a cast vote record and tabulation scanning in a single unit.

ExpressTouch® is a DRE voting system which supports electronic vote capture for curbside voting at the polling place.

ExpressVote® Hardware 1.0 is a hybrid paper-based polling place voting device that provides touch screen vote capture that incorporates the printing of the voter's selections as a cast vote record to be scanned for tabulation in any one of the ES&S precinct or central scanners.

ExpressVote® Hardware 2.1 is a hybrid paper-based polling place voting device that provides touch screen vote capture that incorporates the printing of the voter's selections as a cast vote record to be scanned for tabulation in any one of the ES&S precinct or central scanners.

DS200® is a polling place paper-based voting system, specifically a digital scanner and tabulator that simultaneously scans the front and back of a paper ballot and/or vote summary card in any of four orientations **for conversion of voter selection marks to electronic cast vote records (CVR)**.

DS450® is a central scanner and tabulator that simultaneously scans the front and back of a paper ballot and/or vote summary card in any of four orientations for conversion of voter selection marks to electronic CVRs.

DS850® is a central scanner and tabulator that simultaneously scans the front and back of a paper ballot and/or vote summary card in any of four orientations for conversion of voter selection marks to electronic CVRs.

Event Log Service (ELS) monitors and logs users' interactions with the election management system. Events that happen when a connection to the database is not available are logged to the Windows operating system log through the ELS.

Removable Media Service (RMS) is a utility that runs in the background of the Windows operating system. RMS reads specific information from any attached USB devices so that an ES&S application such as Electionware can use that information for media validation purposes.

NIST Special Publication 1500-103

Cast Vote Records Common Data Format Specification

Version 1.0

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This publication is available free of charge from:
<https://doi.org/10.6028/NIST.SP.1500-103>

November 2019
INCLUDES UPDATES AS OF 03-31-2020; SEE APPENDIX E



U. S. Department of Commerce
Wilbur Ross, Secretary

National Institute of Standards and Technology
Walter G. Copan, Under Secretary of Commerce for Standards and Technology and Director

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Herb Deutsch's Post



Herb Deutsch

Retired - Previously Manager Software Products at Election Systems & Software
1y

This is an announcement of my retirement from ES&S. My last day will be July 1, 2022. I've been with ES&S or one of its predecessor companies for over 46 years, having been designing or being involved in the design of voting machines and the voting systems that they are part of. Elections is in my blood. However technology, security and design methods that are being used in new systems have changed as has technology in general. It's time for me to move on and let the upcoming generation carry the elections torch going forward.

74 · 47 Comments

DOMINION
VOTING
Our customers come first.



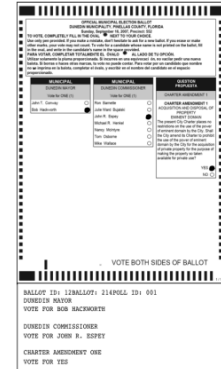
FEBRUARY 26, 2013

FUTURE OF VOTING SYSTEMS

IAN S. PIPER
DIRECTOR, CERTIFICATION

AUDITABILITY

- Full ballot image scans
- Machine interpretations appended to ballot images
- Risk-limited auditing
- Software verifications



FUTURE OF VOTING SYSTEMS

DOMINION
VOTING

https://csrc.nist.gov/csrc/media/events/future-of-voting-systems-symposium-2013/documents/presentations/piper_fov2013.pdf

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U. S. Department of Commerce
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SP 1500-103, Version 1.0
NIST Cast Vote Records CDF Specification

2 Background: Cast Vote Record Creation, Contents, and Handling

This section contains a general overview of how CVRs are created, their contents, and how they are subsequently handled in the election process.

2.1 Overview of Cast Vote Records and their Generation

Simply put, a cast vote record (CVR) is an electronic record of a voter's ballot selections, and its primary purpose is to provide a record of voter selections that can be counted in an efficient manner to produce election results. A CVR is created by equipment such as a voter facing scanner in a polling place into which a voter inserts a paper ballot. CVRs also get created by batch fed scanners used to scan absentee or other types of ballots that are collected before the election or that cannot be scanned by polling place scanners for various reasons. After the polls are closed, the CVRs are collected by election officials on memory devices and subsequently copied to an election management system that aggregates and tabulates the votes.

Three primary types of voting devices that create CVRs are:

- All-electronic voting devices that a voter uses to make ballot selections and that create and store a CVR for each ballot.
- Ballot marking devices (BMDs) that function like all-electronic devices but that produce a paper record of the voter's choices that must be subsequently scanned.
- Voter-facing optical scanners used in polling places and batch-fed optical scanners used in central offices to scan paper ballots.

The scanning devices above are sometimes referred to collectively as "tabulators" because they generally have a tabulation capability, but this is not always the case.

CVRs may include other information besides voter choices, including:

- Information on all contests and contest options on the ballot in addition to those marked
- The ballot style associated with the CVR
- The precinct or location associated with the CVR
- The equipment that produced the CVR
- The political party associated with the ballot for partisan primaries
- Images of the entire ballot and images of write-in areas on the ballot
- An identifier that is also printed on the ballot as it is scanned
- Indications of how the scanner has interpreted various marks.

This specification includes support for the above items.

2.2 Counting Cast Vote Records

To produce a CVR that is countable, the scanner must interpret the voter's selections according to the rules of each contest to determine which selections can be counted. This is true primarily of hand-marked paper ballot scanners in which voters may write in candidates whose names were not on the ballot or they may make mistakes that invalidate their choices such as overvoting in a contest. All-electronic devices and BMDs guide the voter how to make selections according to the contest rules, thus the CVRs they create require much less interpretation, except for write-ins.

When creating a cast vote record, ballot scanners must first interpret the ballot and detect where voters have made marks and whether those marks meet manufacturer-specific criteria for validity, that is, whether a mark is placed in the right location and is sufficiently formed so it constitutes an intentional ballot selection made by the voter. Each device in the jurisdiction must also be programmed with election specific information for the polling place that it will be used in, so the scanners can apply that polling place's election rules to the detected marks. Scanners may perform interpretation based on a number of different factors, including:

- A scanner may flag marks as being marginal, that is not meeting the criteria for validity, and therefore not counting those marks.
- Voters may vote for more than the allowable number of options (overvote) and the scanner must know not to count *any* of the selections made by the voter for that particular contest.
- Likewise, voters may undervote a contest, and the scanner must record that the contest was undervoted. The marked selections are still counted.
- The scanner must be programmed to tabulate the voter marks according to the voting method in place for a particular contest.
- A scanner may create indirect selections in the case of straight party voting where a voter can decide to vote for all candidates of a particular party by making a single straight-party selection at the top of the ballot.
- A scanner may invalidate voter marks in the case of straight party voting where a voter selects the straight party choice but votes for the other party in various contests. Depending on local election rules, the votes in those contests or the entire ballot could be invalidated.

Typically, CVR-generating equipment will export a collection of CVRs that may also include a tabulated report. This CVR collection may be copied to a memory device or otherwise transferred to a central location, where it can be combined with other CVR exports to produce election results.

2.3 Adjudication of Cast Vote Records

After a CVR collection has been exported, a number of the CVRs may require additional inspection and adjustment as part of a process known as adjudication, which may be done on an EMS by election officials. Write-ins are the most common reason:

1. On ballots produced by BMDs the write-in names could still be spelled differently or incorrectly, and
2. For scanned paper ballots, either the ballots themselves or the images of the write-in areas of the ballot that were made by the scanner must be inspected.

There are a number of other reasons why ballots may require adjudication, such as:

- The ballot was unreadable by the scanner.
- The voter may have marked the ballot in ways that are difficult to interpret, for example, the voter may have circled the ovals instead of filling them in.
- The scanner detected one or more overvotes.
- The scanner detected that the entire ballot was blank.

This specification provides the capability to update the CVR with multiple annotations made by adjudicators, recording the following items:

- The adjudicator name(s).
- Time stamp of when the adjudication(s) was made.
- The adjudication, i.e., the action taken by the adjudicator(s).

This is discussed in more detail in Section 4.1, Class Annotation.

2.4 Auditing Cast Vote Records

CVRs need to be audited against their paper counterparts so that election results can be verified to be accurate. This specification supports auditing by providing the following as options:

- Support for ballot-level comparison auditing, that is, there is an identifier in the CVR that can be linked to an ID printed on the corresponding paper ballot.
- Support to include adjustments to contest selections made by adjudicators.
- Different snapshots of the CVR can be created, one for the original scan, one for after election rules have been applied, and others as needed for adjudications.
- Indications of marginal marks, mark quality/density can be associated with contest selections.
- A CVR can include signed/hashed references to an associated image of the ballot or images of write-ins made by the voter.
- Capability to include batch information such as batch IDs and sequence within the batch.

Official Ballot Partisan Office November 8, 2022		
Notice to voters: If you are voting on Election Day, your ballot must be initiated by two (2) election inspectors. If you are voting absentee, your ballot must be initiated by the municipal clerk or deputy clerk. Your ballot may not be counted without initials (see end of ballot for initials).		
General Instructions	Statewide	Congressional
If you make a mistake on your ballot or have a question, ask an election inspector for help (absentee voters: contact your municipal clerk). To vote for a name on the ballot, fill in the oval next to the name like this: ● To vote for a name that is not on the ballot, write the name on the line marked "write-in" and fill in the oval next to the name like this: ●	<input type="radio"/> Josh Kaul (Democratic)	<input type="radio"/> Mike Van Someren (Democratic)
	<input checked="" type="radio"/> Eric Toney (Republican)	<input checked="" type="radio"/> Scott Fitzgerald (Republican)
	<input type="radio"/> write-in:	<input type="radio"/> write-in:
	Legislative	
Statewide	<input type="radio"/> Doug La Follette (Democratic)	<input checked="" type="radio"/> John Jagler (Republican)
When voting for Governor and Lieutenant Governor, you have one of two choices: • Vote for candidates on one ticket, or • Write in names of persons on both write-in lines. A write-in vote for only a Lieutenant Governor candidate will not be counted.	<input checked="" type="radio"/> Amy Lynn Loudenbeck (Republican)	<input type="radio"/> write-in:
	<input type="radio"/> Neil Harmon (Libertarian)	<input type="radio"/> write-in:
	<input type="radio"/> Sharyl R. McFarland (Wisconsin Green Party)	<input type="radio"/> Maureen McCarville (Democratic)
	<input type="radio"/> write-in:	<input checked="" type="radio"/> William Penterman (Republican)
Governor / Lieutenant Governor Vote for 1	<input type="radio"/> Aaron Richardson (Democratic)	County
<input type="radio"/> Tony Evers / Sara Rodriguez (Democratic)	<input checked="" type="radio"/> John S. Leiber (Republican)	Sheriff Vote for 1
<input checked="" type="radio"/> Tim Michels / Roger Roth (Republican)	<input type="radio"/> Andrew Zuelke (Constitution)	<input checked="" type="radio"/> Dale J. Schmidt (Republican)
<input type="radio"/> Joan Ellis Beglinger / No Candidate (Independent)	<input type="radio"/> write-in:	<input type="radio"/> write-in:
	Congressional	Clerk of Circuit Court Vote for 1
	<input type="radio"/> Mandela Barnes (Democratic)	<input checked="" type="radio"/> Kelly Enright (Republican)
<input type="radio"/> write-in: (Governor)	<input type="radio"/> write-in:	<input type="radio"/> write-in:
<input type="radio"/> write-in: (Lieutenant Governor)	<input checked="" type="radio"/> Ron Johnson (Republican)	
	<input type="radio"/> write-in:	
Typ:01 Seq:0071 Spl:01		
Continue voting at top of next column.	Continue voting at top of next column.	

Cast Vote Record: 34,195

Poll Place: Watertown W1&2
 Precinct: C Watertown W1&2
 Ballot Style: C Watertown W1&2 [Sheet Number 1]
 Party: Nonpartisan
 Tabulator CVR: 45e21200b3ab0caa
 Machine Serial: DS200 - 0317350792
 Blank Ballot: NO
 Reporting Group: Election Day

Contests:

Gov/Lt. Gov (245)

Vote For: 1

Michels / Roth (369)

Overvoted

Write-in (247)

Overvoted

(Marked)

Attorney Gen (250)

Vote For: 1

Eric Toney (375)

Counted

Sec State (255)

Vote For: 1

Amy Lynn Loudenbeck (379)

Counted

State Treas. (260)

Vote For: 1

John S. Leiber (387)

Counted

US State Sen (265)

Vote For: 1

Ron Johnson (393)

Counted

Rep Congress Dist 5 (270)

Vote For: 1

Scott Fitzgerald (397)

Counted

Ballot image 34195i.pdf is a case of the worst possible outcome, to where a voter who voted absentee by mail, or strictly by mail, voted on a poorly designed ballot, that invalidated a voter's intent on a race in an election. Better design of the ballot could have prevented this from happening.

Electionware® Election Management System

EVS 6.1.1.0
Version 6.0.1.0

User Guide



v. 1.1

Reporting Election Results

Reporting Module Overview

The Reporting module is used to load election results, machine logs, cast vote records, and ballot images. This module is then used to create the results reports, review and adjudicate ballots, and review and manage write-ins.

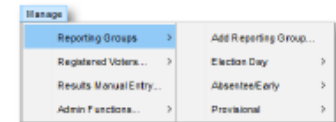
Reporting Users

There are three types of Users that can be setup specifically for the Results module. When loading results, it is recommended that you log in as a Reporting User rather than Administrator.

Access Level	Description
ReportingAdministrator	Full administrator access to the Results module.
ReportingUser	Access only to the Results Reporting module.
BallotReviewer	Access only to Ballot Review portion of the Results Reporting module.

Reporting Groups

Reporting groups are used to categorize different groups of ballot styles for statistical reporting purposes. They are ordinarily created in the Capture module while the election is being defined.

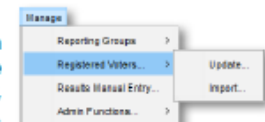


From the Results software group, click **Reporting**. Hover over **Reporting Groups** in the Manage menu and then click **Add Reporting Group**.

Complete the necessary information in the work pane for the new reporting group. Click **Save**. Click **Close**. Repeat as needed to create additional reporting groups.

Registered Voters

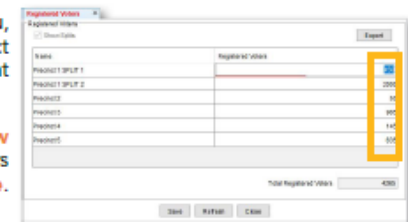
Although registered voter ("RV") numbers may have been entered in the Capture module while the election was being created for candidate rotation support, these totals may no longer be accurate on Election Day, and are not automatically transferred between Capture and Reporting. Final RV totals can be updated by precinct or split to calculate turnout.



Updating Registered Voters

Hover over **Registered Voters** in the Manage menu, then click **Update**. A two-column list of every precinct and split will appear with the number of RVs in the right column.

To view only precincts without splits, uncheck the **Show Splits** box. Double-click on the desired Registered Voters cell(s) to type the accurate number of voters. Click **Save**. Click **Close**.



More information: Electionware Vol. V: Results User Guide, p. 11

Electionware® Election Management System

EVS 6.1.1.0
Version 6.0.1.0

User Guide



v. 1.1

Appendix A: Election Backups

Creating a Backup

For a backup without ballot images, do not select **Include Ballot Images**. Ballot images are only available once there are election results processed in the Results module. The Election may only be restored with the correct Restore Code.

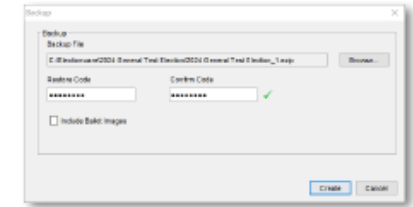
IMPORTANT: This code is not available on a report, so type with caution and archive codes for each election.

With the election open, click **Backup Election** from the File menu. Click **Browse** to select the backup location. Enter the Restore Code then confirm it in the Confirm Code field.

If there are ballot images you want to include from the Results module, check the box to **Include Ballot Images**. Click **Create**.

IMPORTANT: When creating or restoring an Electionware backup or Template, do not use special characters in the Election Name field. This can cause issues in Electionware. You may also not be able to restore the Electionware backup or Template if you use special characters (i.e. "&", "*", "@", and "/").

Best practice when creating a backup is to always save it directly to your hard drive. If you must save it directly to a USB, ensure that it is NTFS-formatted media. If, for example, the USB is FAT32-formatted, the saving process could take 40 minutes as opposed to 20 seconds if it is NTFS-formatted.



Restoring a Backup

The restore option is only available when no elections are currently open.

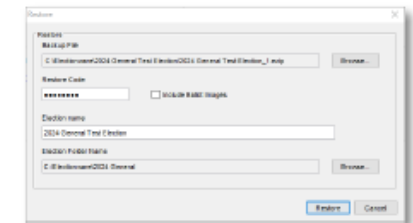
IMPORTANT: Do not use Restore Election to begin a new election.

Highlight the jurisdiction (County) for the election in the Navigator Pane. Click **Restore Election** from the File menu.

Click the top **Browse** button to locate the .zip election file.

Enter the **Restore Code** and check whether you want to **Include Ballot Images** with the restore. Type in the Election name; the election name must be unique.

Click the bottom **Browse** button and create a new folder under your Electionware folder to save the election. Select **Restore**.



CHAPTER 207—FEDERAL ELECTION RECORDS

Sec.	
20701.	Retention and preservation of records and papers by officers of elections; deposit with custodian; penalty for violation.
20702.	Theft, destruction, concealment, mutilation, or alteration of records or papers; penalties.
20703.	Demand for records or papers by Attorney General or representative; statement of basis and purpose.
20704.	Disclosure of records or papers.
20705.	Jurisdiction to compel production of records or papers.
20706.	"Officer of election" defined.

§20701. Retention and preservation of records and papers by officers of elections; deposit with custodian; penalty for violation

Every officer of election shall retain and preserve, for a period of twenty-two months from the date of any general, special, or primary election of which candidates for the office of President, Vice President, presidential elector, Member of the Senate, Member of the House of Representatives, or Resident Commissioner from the Commonwealth of Puerto Rico are voted for, all records and papers which come into his possession relating to any application, registration, payment of poll tax, or other act requisite to voting in such election, except that, when required by law, such records and papers may be delivered to another officer of election and except that, if a State or the Commonwealth of Puerto Rico designates a custodian to retain and preserve these records and papers at a specified place, then such records and papers may be deposited with such custodian, and the duty to retain and preserve any record or paper so deposited shall devolve upon such custodian. Any officer of election or custodian who willfully fails to comply with this section shall be fined not more than \$1,000 or imprisoned not more than one year, or both.

(Pub. L. 86-449, title III, §301, May 6, 1960, 74 Stat. 88.)

EDITORIAL NOTES

CODIFICATION

Section was formerly classified to section 1974 of Title 42, The Public Health and Welfare, prior to editorial reclassification and renumbering as this section.

§20702. Theft, destruction, concealment, mutilation, or alteration of records or papers; penalties

Any person, whether or not an officer of election or custodian, who willfully steals, destroys, conceals, mutilates, or alters any record or paper required by section 20701 of this title to be retained and preserved shall be fined not more than \$1,000 or imprisoned not more than one year, or both.

(Pub. L. 86-449, title III, §302, May 6, 1960, 74 Stat. 88.)

← → ↺ 🔍 <https://www.essvote.com/faqs/> ☆ 📁 📄 Ⓡ ⋮



Does ES&S support post-election audits?

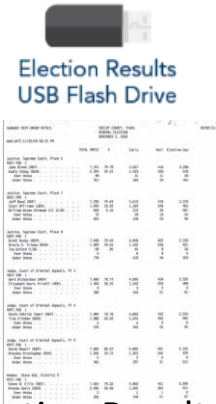
ES&S is a strong supporter of state and local administrations in their work to provide secure, accurate elections. Post-election audits are a legal process by which election officials verify that votes were counted accurately and is conducted by election officials according to state law. ES&S voting systems support these audits by providing election details (logs, **cast vote records**, reports, etc.) which election officials utilize for this purpose. ES&S supports the highest standards for security, including strict chain-of-custody protocols for equipment and all applicable laws, regulations and certification requirements.



Voters Vote on Paper



Ballots Inserted into Tabulators



Election Results, Reports, Cast Vote Records, Ballot Images



Expanded Election Results & Reporting Export & Review Cast Vote Records, Ballot Images



Cast Vote Record: 22241	
Ballot Type: 801	Ballot Style: W1,2,4,16
Product: C	Beaver Dam W1,2,4,16
Ballot Type: C	Beaver Dam W1,2,4,16 (Sheet Number: 1)
Party: Republican	
Tabulator: C	Ballot Style: W1,2,4,16
Machine Serial: 05001	051500010
Ballot Style: W1	
Reporting Group: Election Day	
Contents:	
Ballot: 801 (801)	
Vote For: 1	Michels / Roth (200)
	Counted
Attorney Gen (200)	
Vote For: 1	Eric Toney (270)
	Counted
Sec State (200)	
Vote For: 1	Amy Lynn Loudenbeil (270)
	Counted
State Treas (200)	
Vote For: 1	John S. Lathier (307)
	Counted
US State Sen (200)	
Vote For: 1	Ron Johnson (300)
	Counted
Rep Congress Dist 6 (270)	
Vote For: 1	Glenn Guterman (300)
	Counted

Expanded Election Reporting Exports & Cast Vote Records, Ballot Images

Cast Vote Record	Precinct	Ballot Style	Gov./U. Gov (245)	Attorney Gen (200)	Sec State (200)
22241	C Beaver Dam W1,2,4,16	C Beaver Dam W1,2,4,16	REP Michels / Roth (CND) REP Eric Toney (CND0005 REP Amy Lynn Loudenbeil		
22242	C Beaver Dam W1,2,4,16	C Beaver Dam W1,2,4,16	REP Michels / Roth (CND) REP Eric Toney (CND0005 REP Amy Lynn Loudenbeil		
22243	C Beaver Dam W1,2,4,16	C Beaver Dam W1,2,4,16	DEM Evers / Rodriguez (CDEM Josh Kaul (CND0004 DEM Doug La Follette (CH		
22244	C Beaver Dam W1,2,4,16	C Beaver Dam W1,2,4,16	REP Michels / Roth (CND) REP Eric Toney (CND0005 REP Amy Lynn Loudenbeil		
22245	C Beaver Dam W1,2,4,16	C Beaver Dam W1,2,4,16	DEM Evers / Rodriguez (CDEM Josh Kaul (CND0004 DEM Doug La Follette (CH		
22246	C Beaver Dam W1,2,4,16	C Beaver Dam W1,2,4,16	DEM Evers / Rodriguez (CDEM Josh Kaul (CND0004 DEM Doug La Follette (CH		
22247	C Beaver Dam W1,2,4,16	C Beaver Dam W1,2,4,16	REP Michels / Roth (CND) REP Eric Toney (CND0005 REP Amy Lynn Loudenbeil		
22248	C Beaver Dam W1,2,4,16	C Beaver Dam W1,2,4,16	DEM Evers / Rodriguez (CDEM Josh Kaul (CND0004 DEM Doug La Follette (CH		
22249	C Beaver Dam W1,2,4,16	C Beaver Dam W1,2,4,16	DEM Evers / Rodriguez (CDEM Josh Kaul (CND0004 REP Amy Lynn Loudenbeil		

From the moment a voter marks their ballot to the moment they cast their vote, **patented mark-recognition technology built into every ES&S scanner and tabulator helps ensure voter intent is accurately captured.**

DS200® is a polling place paper-based voting system, specifically a digital scanner and tabulator that simultaneously scans the front and back of a paper ballot and/or vote summary card in any of four orientations for conversion of voter selection marks to electronic cast vote records (CVR).

DS450® is a central scanner and tabulator that simultaneously scans the front and back of a paper ballot and/or vote summary card in any of four orientations for conversion of voter selection marks to electronic CVRs.

DS850® is a central scanner and tabulator that simultaneously scans the front and back of a paper ballot and/or vote summary card in any of four orientations for conversion of voter selection marks to electronic CVRs.

United States Election Assistance Commission

Certificate of Conformance

ES&S EVS 6.1.1.0

The voting system identified on this certificate has been evaluated at an accredited voting system testing laboratory for conformance to the *Voluntary Voting System Guidelines Version 1.0 (VVS 1.0)*. Components evaluated for this certification are detailed in the attached Scope of Certification document. This certificate applies only to the specific version and release of the product in its evaluated configuration. The evaluation has been verified by the EAC in accordance with the provisions of the *EAC Voting System Testing and Certification Program Manual* and the conclusions of the testing laboratory in the test report are consistent with the evidence adduced. This certificate is not an endorsement of the product by any agency of the U.S. Government and no warranty of the product is either expressed or implied.

Product Name: EVS

Model or Version: 6.1.1.0

Name of VSTL: Pro V&V

EAC Certification Number: ESSEVS6110

Date Issued: July 27, 2020

Mona Harrington
Executive Director

Scope of Certification Attached