



United States Election Assistance Commission

## Certificate of Conformance

**ES&S EVS 5.2.2.0**



The voting system identified on this certificate has been evaluated at an accredited voting system testing laboratory for conformance to the 2005 *Voluntary Voting System Guidelines (2005 VVSG)*. 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: ES&S Voting System (EVS)

Model or Version: 5.2.2.0

Name of VSTL: NTS Huntsville

EAC Certification Number: ESSEVS5220

Date Issued: February 27, 2017

*Executive Director*  
*U.S. Election Assistance Commission*

**Scope of Certification Attached**

**Manufacturer:** Election Systems & Software  
**System Name:** EVS 5.2.2.0  
**Certificate:** ESSEVS5220

**Laboratory:** NTS Huntsville  
**Standard:** VVSG 1.0 (2005)  
**Date:** February 27, 2017



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## Scope of Certification

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This document describes the scope of the validation and certification of the system defined above. Any use, configuration changes, revision changes, additions or subtractions from the described system are not included in this evaluation.

### Significance of EAC Certification

An EAC certification is an official recognition that a voting system (in a specific configuration or configurations) has been tested to and has met an identified set of Federal voting system standards. An EAC certification is **not**:

- An endorsement of a Manufacturer, voting system, or any of the system's components.
- A Federal warranty of the voting system or any of its components.
- A determination that a voting system, when fielded, will be operated in a manner that meets all HAVA requirements.
- A substitute for State or local certification and testing.
- A determination that the system is ready for use in an election.
- A determination that any particular component of a certified system is itself certified for use outside the certified configuration.

### Representation of EAC Certification

Manufacturers may not represent or imply that a voting system is certified unless it has received a Certificate of Conformance for that system. Statements regarding EAC certification in brochures, on Web sites, on displays, and in advertising/sales literature must be made solely in reference to specific systems. Any action by a Manufacturer to suggest EAC endorsement of its product or organization is strictly prohibited and may result in a Manufacturer's suspension or other action pursuant to Federal civil and criminal law.

### System Overview:

ES&S EVS 5.2.2.0 is comprised of the ExpressVote Universal Voting System (ExpressVote), DS200 Precinct Digital Scanner (DS200), DS450 mid-range Central Count Digital Scanner (DS450), DS850 high-speed Central Count Digital Scanner (DS850), AutoMARK Voter Assist Terminal (AutoMARK A100, A200 & A300), Electionware, Election Reporting Manager (ERM), ES&S Event Log Service, and Removable Media Service (RMS).

- The ExpressVote is a universal vote capture device designed for all voters, with independent voter-verifiable paper record that is digitally scanned for tabulation. This system combines paper-based voting with touch screen technology. The ExpressVote includes a mandatory vote summary screen that requires voters to confirm or revise selections prior to printing the summary of ballot selections using the internal thermal

printer. Once printed, ES&S ballot scanners process the vote summary card. The ExpressVote can serve all voters, including those with special needs, allowing voters to cast ballots autonomously. ES&S has fully integrated the ExpressVote with the existing suite of ES&S voting system products.

- DS200 digital scanner is a paper ballot tabulator designed for use as a polling place scanner. After the voter makes their selections on their paper ballot, their ballot is inserted into the unit for immediate tabulation. Both sides of the ballot are scanned at the same time using a high-resolution image-scanning device that produces ballot images.
- The DS450 mid-range scanner and tabulator that simultaneously scans the front and back of a paper ballot and/or vote summary card. TruGrip™ technology insures that multiple sets of rollers are controlling the ballot in the transport at all times. This provides for reliable handling of ballots; even folded ballots. It can also read ballots in any of four orientations. The DS450 uses our patented Positive Target Recognition and Compensation™ (PTRAC) and Intelligent Mark Recognition™ (IMR) technology to determine what constitutes as a mark for a candidate. It sorts tabulated ballots into discrete output bins without interrupting scanning. Optionally, this device may be configured to transmit tabulation results to the results server through a closed network connection rather than using physically transported USB flash drives.
- The DS850 is a high-speed, digital scan central ballot counter that uses cameras and imaging algorithms to capture voter selections on the front and back of a ballot, evaluate results and then sort ballots into discrete bins without interrupting scanning. A dedicated audit printer generates a continuous event log. Machine level reports are produced from a second, laser printer. The scanner saves voter selections and ballot images to an internal hard disk and exports results to a USB Memory stick for processing with Election Reporting Manager.
- AutoMARK Voter Assist Terminal enables voters who are visually or physically impaired and voters more comfortable reading or hearing instructions and choices in an alternative language to privately mark optical scan ballots. The AutoMARK supports navigation through touchscreen, physical keypad or ADA support peripheral such as a sip and puff device or two position switch.
- Electionware integrates the election administration functionality into a unified application. Its intended use is to define an election and create the resultant media files used by the ExpressVote, DS200 tabulator, AutoMARK® Voter Assist Terminal (VAT), the DS450 Central Ballot Scanner, the DS850 Central Ballot Scanner, and Election Reporting Manager (ERM). An integrated ballot viewer allows election officials to view the scanned ballot and captured ballot data side-by-side and produce ballot reports.
- Election Reporting Manager (ERM) generates paper and electronic reports for election workers, candidates, and the media. Jurisdictions can use a separate ERM installation to display updated election totals on a monitor as ballot data is tabulated, and send the results' reports directly to the media outlets.  
ERM supports accumulation and combination of ballot results data from all ES&S tabulators. Precinct and accumulated total reports provide a means to accommodate candidate and media requests for totals and are available upon demand. High-speed

printers are configured as part of the system accumulation/reporting stations PC and related software.

- ES&S Event Log Service is a Windows Service that runs in the background of any active ES&S Election Management software application to monitor the proper functioning of the Windows Event Viewer. The ES&S Event Log Service closes any active ES&S software application if the system detects the improper deactivation of the Windows Event Viewer.
- Removable Media Service (RMS) is an application that runs in the background of the EMS client workstation and supports the installation and removal of election and results media.

This modification includes the following updates to the EVS 5.2.0.0 system:

#### **ExpressVote**

- The random number generator, used for security functions to meet VVSG 1.0, Sections 2.1.4 and 7.5.1, has been updated to meet new NIST standards.
- Display candidates in either 1 or 2 columns in a particular contest screen based on a configuration flag from Electionware.
- Support the ability for a poll worker to scan a 128c barcode on the external barcode scanner instead of manually selecting the ballot style on the touch screen.
- Update copyright date (code and splash screen).
- Add a Power Supply to meet Level Efficiency 6

#### **DS200**

- The random number generator, used for security functions to meet VVSG 1.0, Sections 2.1.4 and 7.5.1, has been updated to meet new NIST standards.

#### **DS450**

- The DS450 is a new central count component that was added to the system.

#### **DS850**

- The random number generator, used for security functions to meet VVSG 1.0, Sections 2.1.4 and 7.5.1, has been updated to meet new NIST standards.

#### **AutoMARK**

- The random number generator, used for security functions to meet VVSG 1.0, Sections 2.1.4 and 7.5.1, has been updated to meet new NIST standards.

#### **Electionware**

- The random number generator, used for security functions to meet VVSG 1.0, Sections 2.1.4 and 7.5.1, has been updated to meet new NIST standards.
- Renamed "DS850" labels to "Central Count".
- Corrected spelling of the word 'change' in the AutoMARK system prompt Excel file.
- Correction to enable the save button after making changes in the text box (...) in the Language Additional text area.
- Corrected message display from an internal processing error to the 'Import of ballot style alternate ID' error message when the continuous ballot style ID is longer than 8 characters.
- Correct the contest order display for the ExpressVote in an open primary election to sort by party.
- Added the election wide option to enable/disable multi column view on the ExpressVote.
- Added the ExpressVote Multi Column setting to the ExpressVote Settings Report.

- Corrected erroneous data fit error message that occurred when no nonpartisan contests existed in a closed primary.
- Update copyright to 2016.
- Update user guide help file.
- Corrected the situation where an error was displayed erroneously when triple clicking in the Bengali language text editor.
- Updated creation of passwords for the SFTP server so that they do not include leading zeros which the server cannot authenticate.
- Updated the users.xml to version 3.0 for compatibility with Cerberus version 8.0.0.9 and newer.
- Improved the refresh action in the navigator so that the data appears correctly.
- Corrected an Invalid party ID in Illinois Export party records.
- Can now export results from Produce when the last contest is a text only contest.

#### ERM

- The random number generator, used for security functions to meet VVSG 1.0, Sections 2.1.4 and 7.5.1, has been updated to meet new NIST standards.
- Renamed “DS850” labels to “Central Count”.

### Mark definition:

ES&S’ documentation declares that the DS200, DS450 and DS850 will reject anything seen inside the oval area that is smaller than .005 square inches (i.e. a circle of diameter .025”, a rectangle of .02” by .025”) as a marked response on a pixel count basis and will be listed as an unmarked oval and not be evaluated further.

### Tested Marking Devices:

Bic Grip Roller Pen

### Language capability:

EVS 5.2.2.0 supports English, Spanish, Chinese (Cantonese), Korean, Japanese and Bengali.

### Components Included:

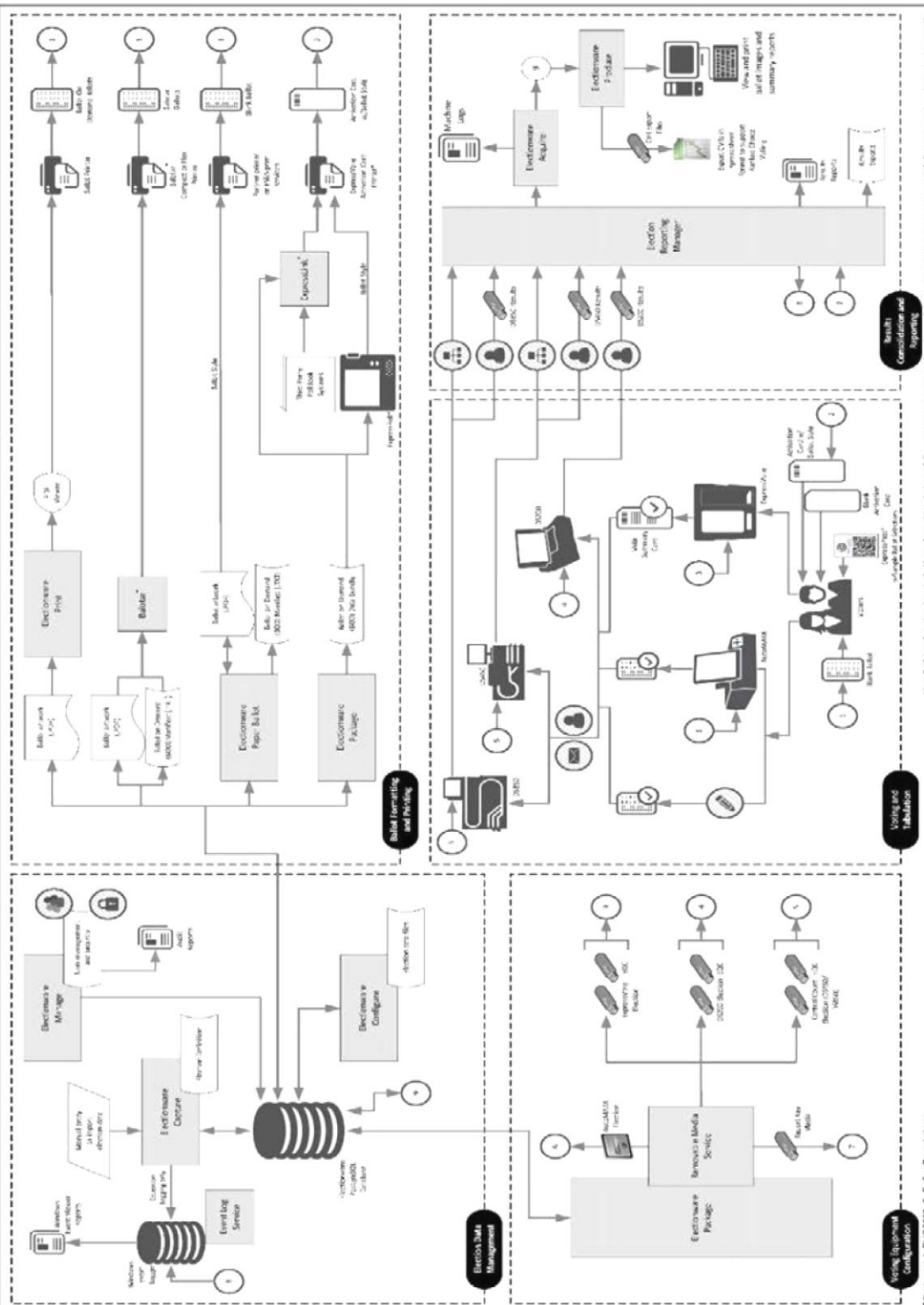
This section provides information describing the components and revision level of the primary components included in this Certification.

System Component	Software or Firmware Version	Hardware Version	Operating System or COTS	Comments
ExpressVote	1.4.1.2	1.0		Universal Voting System
ExpressVote Rolling Kiosk		1.0		
DS200	2.12.2.0	1.2.1, 1.2.3, 1.3		Precinct Count Tabulator
DS200 Ballot Box		1.2, 1.3		Plastic ballot box
DS200 Ballot Box		1.0, 1.1, 1.2		Metal ballot box
DS450	3.0.0.0	1.0		Central Count Scanner, mid-range
DS850	2.10.2.0	1.0		Central Count Scanner, high-speed
AutoMARK A100	1.8.6.1	1.0		ADA Ballot Marking

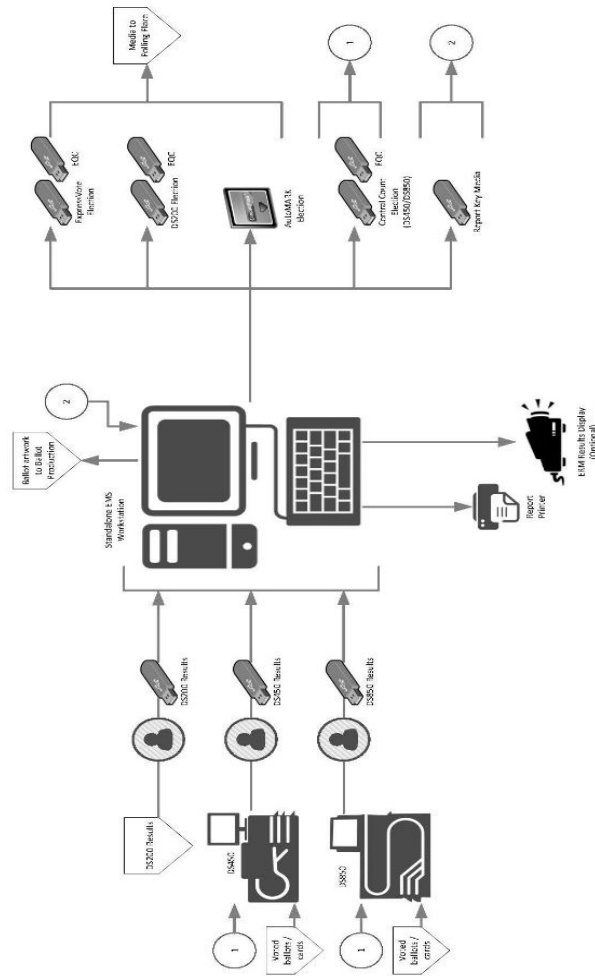
System Component	Software or Firmware Version	Hardware Version	Operating System or COTS	Comments
				Device
AutoMARK A200 (SBC 2.0 & 2.5)	1.8.6.1	1.1		ADA Ballot Marking Device
AutoMARK A300 (SBC 2.0 & 2.5)	1.8.6.1	1.3		ADA Ballot Marking Device
Electionware	4.7.1.1			
Election Reporting Manager (ERM)	8.12.1.1			
ES&S Event Log Service	1.5.5.0			
AutoMARK VAT Previewer	1.8.6.1			
ExpressVote Previewer	1.4.1.2			
Removable Media Service	1.4.5.0			
CreateNewUsers	3.0.3.0			Proprietary Hardening Script
NoNetwork	3.0.3.0			Proprietary Hardening Script
PreInstall	3.0.5.5			Proprietary Hardening Script
PostInstall	3.0.3.0			Proprietary Hardening Script
ServerShare	3.0.3.0			Proprietary Hardening Script
EMS Server		Dell PowerEdge T710		
EMS Client Workstation		Dell Optiplex 980 or 5040		
EMS Client Workstation		Dell Latitude E6410		
EMS Standalone Workstation		Dell Latitude E6410		
Delkin: USB Flash Drive				512MB, 1 GB, 2 GB, 4 GB, 8 GB
Delkin: Validation USB Flash Drive				16 GB
Delkin: Compact Flash				512 MB, 1 GB, 2 GB
SanDisk: Compact Flash				512 MB, 1 GB, 2 GB
Delkin: CF Card Reader		6381		
SanDisk: CF Card Reader		018-6305		
Headphones		Avid 86002		
Zebra QR code scanner		DS457-SR20009	COTS	Integrated with Rolling Kiosk

System Component	Software or Firmware Version	Hardware Version	Operating System or COTS	Comments
Symbol QR Code scanner		DS9208	COTS	External
DS450 Report Printer		Dell S2810dn		Laser report printer
DS850 Report Printer		OKI B431dn & Oki B431d		Laser report printer
DS450 Audit Printer		Oki Microline 420		Dot Matrix Printer
DS850 Audit Printer		Oki Microline 420		Dot Matrix Printer
DS450 UPS		APC Back-UPS Pro 1500		
DS 450 Surge Protector		Tripp Lite Spike Cube		
DS850 UPS		APC Back-UPS RS 1500 or APC Back-UPS Pro 1500		
Adobe Acrobat Standard	11		COTS	
Cerberus FTP	8.0.6 (64-bit)		COTS	
Microsoft Server 2008	R2 w/ SP1		COTS	
Microsoft Windows 7 Professional	SP1 (64-bit)		COTS	
WSUS Microsoft Windows Offline Update Utility	10.7.4			
Micro Focus RM/COBOL Runtime	12.06		COTS	
Symantec Endpoint Protection	12.1.6		COTS	
Symantec Endpoint Protection Intelligent Updater	20160829-002-v5i64.exe			









## System Limitations

This table depicts the limits the system has been tested and certified to meet.

System Characteristic	Boundary or Limitation	Limiting Component
Max. precincts allowed in an election	9900	ERM
Max. count for any precinct element	500,000 (99,900 from any tabulator media)	ERM report (ERM results import)
Max. candidates allowed per election	Depends on election content (limited by 21,000 maximum counters) <sup>1</sup>	ERM
Max. contests allowed in an election	Depends on election content (limited by 21,000 maximum counters) <sup>2</sup>	ERM
Max. counters allowed per precinct	Limits candidates and contests assigned to a precinct to 1,000 <sup>3</sup>	ERM
Max. contests allowed per ballot style	200 or number of positions on ballot	N/A
Max. candidates (ballot choices) allowed per contest	175	ERM (database create)
Max. number of parties allowed	General election: 75 Primary election: 20 (including nonpartisan party)	ERM (database create)
Max. 'vote for' per contest	98	ERM (database create)
Ballot formats	All paper ballots used in an election must be the same size and contain the number of response rows.	Ballot scanning equipment
Max. Ballot Styles	9900	ERM
Max. District Types/Groups	20	ERM
Max. districts of a given type <sup>4</sup>	40	ERM

<sup>1</sup> Calculation of the number of counters must include a minimum of 4 counters for each contest, 3 overhead (overvote, undervote, precincts counted) and at least 1 candidate. Additional contest candidates each add a counter. If some precincts are defined as Absentee, a fourth overhead counter (absentee precincts counted) must be added to each contest. The number of statistical counters (Ballots Cast, Registered voters) must be added to the contest counters to determine the total counters.

<sup>2</sup> Example of maximum contest calculation if all contests had 2 candidates (5 counters each, 3 overhead counters + 2 candidates) and there were 10 statistical counters (i.e. Ballots Cast-Total, Republican, Democratic, Libertarian, Nonpartisan and Registered Voters-Total, Republican, Democratic, Libertarian, Nonpartisan.  $(21000-20)/5 = 4196$  or  $(\text{counter limit} - \text{statistics} \times 2)/\text{number of counters/contest} = \text{number of contests}$ .

<sup>3</sup> Contest counters are calculated as indicated in footnote 1, but two counters must be added for each statistical counter defined for the precinct. There are a minimum of 3 statistic counters assigned to each precinct (six added counters), "Ballots Cast," "Registered Voters" and "Ballots Cast Blank."

<sup>4</sup> Excludes the Precinct Group which contains all precincts.

System Characteristic	Boundary or Limitation		Limiting Component
Supported Languages	<ul style="list-style-type: none"> <li>English</li> <li>Spanish</li> <li>Chinese (Cantonese)</li> </ul>	<ul style="list-style-type: none"> <li>Korean</li> <li>Japanese</li> <li>Bengali</li> </ul>	System Configuration

## Component Limitations:

### Paper Ballot Limitations

1. The paper ballot code channel, which is the series of black boxes that appear between the timing track and ballot contents, limits the number of available ballot variations depending on how a jurisdiction uses this code to differentiate ballots. The code can be used to differentiate ballots using three different fields defined as: Sequence (available codes 1-26,839), Type (available codes 1-30) or Split (available codes 1-40).
2. If Sequence is used as a ballot style ID, it must be unique election-wide and the Split code will always be 1. In this case the practical style limit would be 26,000.

### ExpressVote

1. ExpressVote capacities exceed all documented limitations for the ES&S election management, vote tabulation and reporting system. For this reason, Election Management System and ballot tabulator limitations define the boundaries and capabilities of the ExpressVote system as the maximum capacities of the ES&S ExpressVote are never approached during testing.

### DS200

1. The ES&S DS200 configured for an early vote station does not support precinct level results reporting. An election summary report of tabulated vote totals is supported.
2. The DS200 storage limitation for write-in ballot images is 3,600 images. Each ballot image includes a single ballot face, or one side of one page.
3. Write-in image review requires a minimum 1GB of onboard RAM.
4. To successfully use the Write-In Report, ballots must span at least three vertical columns. Using two columns or fewer results in the write-in area being too large to print on the report tape.

### AUTOMARK Voter Assist Terminal

1. ES&S AutoMARK capacities exceed all documented limitations for the ES&S election management, vote tabulation and reporting system. For this reason, Election Management System and ballot tabulator limitations define the boundaries and capabilities of the AutoMARK system as the maximum capacities of the ES&S AutoMARK are never approached during testing.

### Electionware

1. Electionware capacities exceed the boundaries and limitations documented for ES&S voting equipment and election reporting software. For this reason, ERM and ballot tabulator limitations define the boundaries and capabilities of Electionware system.
2. Limits were calculated using default text sizes for ballot and report elements. Some uses and conditions, such as magnified ballot views or combining elements on printed media or ballot displays, may result in limits lower than those listed. Check printed media and displays before finalizing the election.

3. The Electionware Export Ballot Images function is limited to 250 districts per export.
4. Special characters are not supported and may not appear properly when viewed on equipment displays or reports.
5. Electionware cannot display more than 30,000 images when filtering ballot images for display. Employ one or more filters to ensure that the number of ballots viewed is less than 30,000.

### **Election Reporting Manager (ERM)**

1. Election Reporting Manager requires a minimum monitor screen resolution of 800x600.
2. ERM Database Create allows 1,600 Precincts per Ballot Style.
3. There is a limit of 3,510 precincts in the precincts counted/not counted display.
4. There is a limit of 3,000 precincts in the precincts counted/not counted scrolling display.
5. Contest/Precinct selection pop up display limited to 3,000 contests/precincts.
6. Non-English characters are not supported in ERM. This has to do with the creation of the XML results file out of ERM.
7. ERM's maximum page size for reports is 5,000 pages.

## **Functionality**

### **2005 VVSG Supported Functionality Declaration**

<b>Feature/Characteristic</b>	<b>Yes/No</b>	<b>Comment</b>
Voter Verified Paper Audit Trails		
VVPAT	No	
Accessibility		
Forward Approach	Yes	
Parallel (Side) Approach	Yes	
Closed Primary		
Primary: Closed	Yes	
Open Primary		
Primary: Open Standard (provide definition of how supported)	Yes	
Primary: Open Blanket (provide definition of how supported)	No	
Partisan & Non-Partisan:		
Partisan & Non-Partisan: Vote for 1 of N race	Yes	
Partisan & Non-Partisan: Multi-member ("vote for N of M") board races	Yes	
Partisan & Non-Partisan: "vote for 1" race with a single candidate and write-in voting	Yes	
Partisan & Non-Partisan "vote for 1" race with no declared candidates and write-in voting	Yes	
Write-In Voting:		
Write-in Voting: System default is a voting position identified for write-ins.	Yes	
Write-in Voting: Without selecting a write in position.	Yes	
Write-in: With No Declared Candidates	Yes	
Write-in: Identification of write-ins for resolution at central count	Yes	
Primary Presidential Delegation Nominations & Slates:		
Primary Presidential Delegation Nominations: Displayed delegate slates for each presidential party	No	
Slate & Group Voting: one selection votes the slate.	No	

Feature/Characteristic	Yes/No	Comment
Ballot Rotation:		
Rotation of Names within an Office; define all supported rotation methods for location on the ballot and vote tabulation/reporting	Yes	
Straight Party Voting:		
Straight Party: A single selection for partisan races in a general election	Yes	
Straight Party: Vote for each candidate individually	Yes	
Straight Party: Modify straight party selections with crossover votes	Yes	
Straight Party: A race without a candidate for one party	Yes	
Straight Party: N of M race (where "N">1)	Yes	
Straight Party: Excludes a partisan contest from the straight party selection	Yes	
Cross-Party Endorsement:		
Cross party endorsements, multiple parties endorse one candidate.	Yes	
Split Precincts:		
Split Precincts: Multiple ballot styles	Yes	
Split Precincts: P & M system support splits with correct contests and ballot identification of each split	Yes	
Split Precincts: DRE matches voter to all applicable races.	No	
Split Precincts: Reporting of voter counts (# of voters) to the precinct split level; Reporting of vote totals is to the precinct level	Yes	It is possible to list the number of voters.
Vote N of M:	Yes	
Vote for N of M: Counts each selected candidate, if the maximum is not exceeded.	No	
Vote for N of M: Invalidates all candidates in an overvote (paper)	No	
Recall Issues, with options:		
Recall Issues with Options: Simple Yes/No with separate race/election. (Vote Yes or No Question)	Yes	
Recall Issues with Options: Retain is the first option, Replacement candidate for the second or more options (Vote 1 of M)	Yes	
Recall Issues with Options: Two contests with access to a second contest conditional upon a specific vote in contest one. (Must vote Yes to vote in 2 <sup>nd</sup> contest.)	No	
Recall Issues with Options: Two contests with access to a second contest conditional upon any vote in contest one. (Must vote Yes to vote in 2 <sup>nd</sup> contest.)	No	Overturned - US District Court 7/29/03: CA Election Code sect. 11383
Cumulative Voting		
Cumulative Voting: Voters are permitted to cast, as many votes as there are seats to be filled for one or more candidates. Voters are not limited to giving only one vote to a candidate. Instead, they can put multiple votes on one or more candidate.	No	
Ranked Order Voting		
Ranked Order Voting: Voters can write in a ranked vote.	No	
Ranked Order Voting: A ballot stops being counting when all ranked choices have been eliminated	No	

Feature/Characteristic	Yes/No	Comment
Ranked Order Voting: A ballot with a skipped rank counts the vote for the next rank.	No	
Ranked Order Voting: Voters rank candidates in a contest in order of choice. A candidate receiving a majority of the first choice votes wins. If no candidate receives a majority of first choice votes, the last place candidate is deleted, each ballot cast for the deleted candidate counts for the second choice candidate listed on the ballot. The process of eliminating the last place candidate and recounting the ballots continues until one candidate receives a majority of the vote	No	
Ranked Order Voting: A ballot with two choices ranked the same, stops being counted at the point of two similarly ranked choices.	No	
Ranked Order Voting: The total number of votes for two or more candidates with the least votes is less than the votes of the candidate with the next highest number of votes, the candidates with the least votes are eliminated simultaneously and their votes transferred to the next-ranked continuing candidate.	No	
Provisional or Challenged Ballots		
Provisional/Challenged Ballots: A voted provisional ballots is identified but not included in the tabulation, but can be added in the central count.	Yes	
Provisional/Challenged Ballots: A voted provisional ballots is included in the tabulation, but is identified and can be subtracted in the central count	Yes	
Provisional/Challenged Ballots: Provisional ballots maintain the secrecy of the ballot.	Yes	
Overvotes (must support for specific type of voting system)		
Overvotes: P & M: Overvote invalidates the vote. Define how overvotes are counted.	Yes	
Overvotes: DRE: Prevented from or requires correction of overvoting.	No	
Overvotes: If a system does not prevent overvotes, it must count them. Define how overvotes are counted.	Yes	
Overvotes: DRE systems that provide a method to data enter absentee votes must account for overvotes.	No	
Undervotes		
Undervotes: System counts undervotes cast for accounting purposes	Yes	
Blank Ballots		
Totally Blank Ballots: Any blank ballot alert is tested.	Yes	
Totally Blank Ballots: If blank ballots are not immediately processed, there must be a provision to recognize and accept them	Yes	
Totally Blank Ballots: If operators can access a blank ballot, there must be a provision for resolution.	Yes	
Networking		
Wide Area Network – Use of Modems	No	
Wide Area Network – Use of Wireless	No	
Local Area Network – Use of TCP/IP	No	
Local Area Network – Use of Infrared	No	
Local Area Network – Use of Wireless	No	

Feature/Characteristic	Yes/No	Comment
FIPS 140-2 validated cryptographic module	No	
Used as (if applicable):		
Precinct counting device	Yes	DS200
Central counting device	Yes	DS450 and/or DS850

## Baseline Certification Engineering Change Order's (ECO)

This table depicts the ECO's certified with the voting system:

Change ID	Date	Component	Description	Inclusion
ECO 911	7/29/15	DS850	Second source for LED on camera circuit board	Non-DeMinimis Optional
ECO 917	7/29/15	DS850	Second source LG display	Non –DeMinimis Optional
ECO 919	7/29/15	ExpressVote	Second source LG display	Non – DeMinimis Optional
ECO 921	10/27/15	DS200 Plastic Ballot Box	Adding Block of security foam underneath the slot of the emergency bin	DeMinimis Optional
ECO 1741	7/29/15	ExpressVote	Add additional labels, Velcro patch for keypad	DeMinimis Optional
ECO 1880	8/5/15	DS200	Additional second source and end of life replacement	Non-DeMinimis Optional
ECO 2018	10/9/15	ExpressVote	Remove English from text on ExpressVote instruction label	DeMinimis Optional
ECO 933	2/10/16	PreInstall Patch 1.0.0.5	Disabling the ability to disconnect and create a mapped drive	De Minimis Optional
ECO 927	2/12/16	AutoMARK	Add Backup Battery (End of Life)	De Minimis Optional
ECO 924	3/1/16	Kiosk Stand	Update Kiosk Stand to include shipping stops, dock, feet, and thumbscrews	De Minimis Optional
ECO 930	4/7/16	DS200 Carry Case	Kit for gas trust in DS200 Carry Case	De Minimis Optional
ECO 1816	4/7/16	Steel Ballot Box	Universal rails for the steel ballot box	De Minimis Optional



<b>Change ID</b>	<b>Date</b>	<b>Component</b>	<b>Description</b>	<b>Inclusion</b>
ECO 2106	4/12/16	DS200 Ballot Box	New Ballot Box Wheels	De Minimis Optional
ECO 2113	4/20/16	DS200	CIS Cable Connector	De Minimis Optional
ECO 946	8/23/16	Intel Gigabit CT Desktop Adapter	Prevent onboard NIC card for not acknowledging incoming packets	De Minimis Optional
ECO 947	8/23/16	Linksys USB Ethernet Adapter	Prevent onboard NIC card for not acknowledging incoming packets	De Minimis Optional
ECO 950	1/4/17	DS850	Add second screw set to reverse belt pulley	De Minimis Optional