

Minutes
State Election Commission Meeting
October 9, 2017

The State Election Commission meeting was called to order by Chairman Jimmy Wallace at 12:20 p.m., Central Standard Time, October 9, 2017. The following members and staff were present: Chairman Wallace; Commissioners Barrett, Blackburn, Duckett, McDonald and Wheeler. Coordinator of Elections Mark Goins and Beth Henry – Robertson, Assistant Coordinator of Elections.

Chairman Wallace turned the meeting over to Commissioner Barrett.

Commissioner Wheeler made a motion to adopt the minutes from July 10, 2017, 2017, Commissioner McDonald seconded the motion and the minutes were unanimously approved. (Aye votes: Barrett, Blackburn, Duckett, McDonald, Wallace and Wheeler; No votes: None; Abstention: None.)

Commissioner Blackburn made a motion pursuant to T.C.A. § § 2-12-101 and 2-12-106, seconded by Commissioner McDonald and unanimously approved to accept the nomination(s) for county election commission appointments as submitted, and to leave the nomination process open until 4:30 p.m. Central Standard Time Monday, October 9, 2017. (Aye votes: Barrett, Blackburn, Duckett, McDonald, Wallace and Wheeler; No votes: None; Abstention: None.) **(See attached list of appointments made.)**

Old Business

- **Julie Miller – A. F. Rifkin Co – Collapsible Ballot Box and Ballot Bag for all Ballots** – Julie Miller discussed the provisional ballot bag and a request for the provisional ballot bag to be used for all ballots. Ms. Miller also provided a prototype baffle which will be used on the collapsible ballot box, with shorter locks and ballot seals. Ms. Miller requested approval of both the ballot bag, and ballot boxes to be sold to the counties.

Coordinator Goins discussed TCA § 2-5-214 and 2-6-311 with commission members regarding the ballot bags and boxes. Coordinator Goins stated if the prototype does not work, or if problems become apparent with the ballot bags or boxes that commission would have the right to decertify.

Commissioner Wheeler made a motion to approve the use of the provisional ballot bag for all ballots, and to allow the use of the collapsible ballot box. Commissioner Wallace seconded the motion both the ballot box and bags were unanimously approved for use in the counties. (Aye votes: Barrett, Blackburn, Duckett, McDonald, Wallace and Wheeler; No votes: None; Abstention: None.)

- **Everyone Counts – Shelby County – Voter Registration Update.** Coordinator Goins advised the commission that Everyone Counts provided a letter of their update with Shelby County. The contract with Shelby County was not executed until September 20, 2017. The delay in signing the documents was due to county and vendor issues. Coordinator Goins suggests having a telephonic meeting in December to obtain an update from Everyone Counts. Everyone Counts software will need to be able to communicate with the online voter registration system, as well as with the state system. (Letter provided by Everyone Counts is attached to the minutes.)
- **Legislation – County Election Commissioners – Appointment and Restrictions.** – Assistant Coordinator of Elections, Beth Henry – Robertson gave the presentation. Various options to amend the current code were presented. Commission members took no action. Members are to review the recommendations and are to come back with ideas at the next meeting. (Proposed legislation is attached to the minutes.)
- **Voting Machine Policy** - Coordinator Goins spoke regarding the viewing of Hart Intercivic Voting machines in Texas, on November 7, 2018. Texas does not allow individuals to view their elections. There is a law which would allow machine technicians in a polling place, but the State Election Commissioners and Elections staff would not meet the definition of a machine technician, as defined by Texas law. There are no exceptions to the Texas law. The voting machine policy might need to be adjusted and Coordinator Goins provided several suggested changes to the State Election Commission policy.
 - If the voting system is an upgrade to a current certified system an outside of state viewing would be permissive.
 - If the voting system is a new voting system, then viewing in another jurisdiction outside of the state will still be required.

Most elections are on the same dates as our elections, and this would allow the State Election Commission, and the Coordinator of Elections to certify vendors who already have certified voting machines in Tennessee. The State Election Commission would still have the discretion to view, or not view a voting machine with this change in policy. Letters of recommendation will require the responding user counties to answer a series of survey type questions, regarding the voting system in order for approval to be given.

Commissioner Blackburn made a motion to approve the recommended changes to the State Election Commission certification policy and Commissioner Wheeler

seconded the motion. All members voted unanimously to update the Voting Machine Certification Policy as recommended by Coordinator Goins. (Aye votes: Barrett, Blackburn, Duckett, McDonald, Wallace and Wheeler; No votes: None; Abstention: None.)

New Business

- **Dominion Voting – D – Suite 5.0 (Touchscreen Ballot Marking Device) – Presented by Masha Boshan and Cathi Smothers. Presentation includes ICX BMD, ICP, ICC and EMS** – Both Masha Boshan and Cathi Smothers presented the Democracy Suite 5.0, Image Cast X (A copy of the presentation and handout are attached to the minutes.) Most of 5.0 is an upgrade in both software and firmware from what is currently used in Hamilton County. The central election management system and the tabulator involve upgrades. The new component to the system is the Image Cast X, which is a touchscreen ballot marking device.

The commission went into recess for the State Election Commission members to view the Dominion's voting machine.

Coordinator Goins stated the ICX BMD is a new firmware component to the current Dominion 4.14 voting machine, and that the State Election Commission may need to view this machine in an election outside the state.

Commissioner Wheeler made a motion to take the Coordinator's recommendation as to which policy the certification of Dominion's voting system falls, and Commissioner Duckett seconded the motion. The motion was unanimously approved. (Aye votes: Barrett, Blackburn, Duckett, McDonald, Wallace and Wheeler; No votes: None; Abstention: None.)

- **Unisyn – Freedom Vote 2.0 - Voting Machine Demonstration – Presented by Wes Wagner and Dustin Vanderburg of Henry M. Adkins and Son, Inc. and Barry Herron of Unisyn.** Wes Wagner requested State Election Commission members to view the voting machine prior to his presentation.

The commission went into recess for the State Election Commission members to view Unisyn's voting machine.

Coordinator Goins stated there is a statutory requirement that a ballot stub is required on paper ballots. The Unisyn – Freedom Vote 2.0 does not have a ballot stub. Unisyn and the Coordinator will be looking at fixing the issue of having a ballot stub added to the system.

- **Provisional Ballot Process** – Coordinator Goins discussed legislation which was introduced last year regarding provisional voters. The legislation would allow a voter whose provisional ballot was not counted, to appeal to the State Election Commission within a five (5) days period to have their ballot counted. The General Assembly would like for the commission to come up with a timeframe for counting a provisional ballot if a county election commission erred on not counting a ballot that should have been counted.

Coordinator Update

- **Hart InterCivic** – Coordinator Goins asked that Hart InterCivic's Verity 2.0 voting machine be placed on the January State Election Commission agenda.

Dick Williams of Common Cause, spoke before the State Election Commission. Mr. Williams would like to maintain the audit requirement if a county uses optical scan ballots.

Pam Cardenas and Bob Heisner of Hart InterCivic, and Chad Colgan of Harp, would like to have the Verity 2.0 certified as quickly as possible.

Commissioner Wheeler recommended to have the survey completed by counties using the Verity 2.0, and present the surveys at the next state election commission meeting.

Commissioner Duckett made a motion to adjourn, Commissioner Wheeler seconded the motion and was unanimously approved. (Aye votes: Blackburn, Duckett, McDonald, Wallace and Wheeler; No votes: None; Abstention: None.)

The next regularly scheduled meeting is set for January 8, 2018, and will be held in the William R. Snodgrass – Tennessee Tower, Nashville Room - 3rd floor at 12:00 Noon, Central Standard Time.

The meeting was adjourned.

Respectfully submitted,



Greg Duckett, Secretary
State Election Commission

Vacant Status

06-Oct-17

Crockett

D Greg Duckett
R Jimmy Wallace

D

Grundy

D Mike McDonald
R Donna Barrett

R

Hardin

D Greg Duckett
R Jimmy Wallace

D

Moore

D Mike McDonald
R Donna Barrett

D

R

Sumner

D Mike McDonald
R Donna Barrett

D

Trousdale

D Mike McDonald
R Kent Younce

D

Van Buren

D Mike McDonald
R Kent Younce

D

Total Vacancies: 8

State of Tennessee

State Election Commission
312 Rosa L. Parks Avenue, 7th Floor
Nashville, Tennessee 37243-1102

New Appointment Status

Monday, October 09, 2017

		Appointment
Crockett	R Jimmy Wallace / D Greg Duckett D Randy Camp	10/9/2017
Grundy	R Donna Barrett / D Mike McDonald R Bradley (Brad) Fincher	10/9/2017
Hardin	R Jimmy Wallace / D Greg Duckett D Shawn Duren	10/9/2017
Moore	R Donna Barrett / D Mike McDonald R Lorraine Carter D Raby Glen Thomas	10/9/2017 10/9/2017
Sumner	R Donna Barrett / D Mike McDonald D John William Smith Jr.	10/9/2017
Trousdale	R Kent Younce / D Mike McDonald D Ronald Kent Moreland ,II	10/9/2017
Van Buren	R Kent Younce / D Mike McDonald D Jerry Randolph Johns	10/9/2017

Total New Commissioners: 8

A. F. Rifkin
Collapsible Ballot Box
And
Request for ballot bags to be
used for all ballots.
Demonstration
October 9, 2017

Julie Miller - Presenter

2-5-214. Ballot boxes.

(a) The county election commission shall furnish for each polling place and for absentee voting at the commission office, locks and standard ballot boxes made of metal or such other material deemed as safe, durable, and secure by the coordinator of elections and the state election commission.

(b) The coordinator of elections shall prescribe the dimensions for such boxes, making allowance for the differences in numbers of voters using paper ballots at the various polling places.

(c) The county election commission shall prescribe and provide the type of lock and seals to be used.

Acts 1972, ch. 740, § 1; T.C.A., § 2-520; Acts 1985, ch. 78, § 1; 1993, ch. 518, §§ 15, 21; 1994, ch. 859, § 9.

Cross-References. Sealed absentee ballots, § 2-6-311.

Section to Section References. This section is referred to in § 2-6-311.

2-6-311. Absentee ballot boxes — Requirements.

(a) Absentee ballot boxes shall meet the requirements for standard ballot boxes under § 2-5-214, have at least two (2) hasps for locks, and be equipped with baffles so that ballots cannot be removed without unlocking the box.

(b) The ballot boxes shall be locked at the beginning of absentee voting with one (1) lock from a county election commissioner of one (1) party and another lock provided by a commissioner of another party. The commissioners shall retain the keys personally. The boxes may not be unlocked except when the votes are to be counted.

(c) In addition to the locks required in subsection (b), the county election commission shall place two (2) numbered seals on each ballot box at the beginning of absentee voting with one (1) seal placed by a county election commissioner of each party. Such seal numbers shall be recorded by the administrator of elections and certified in duplicate by one (1) commissioner of each party, and the original shall be forwarded by mail immediately to the office of the coordinator of elections and the duplicate shall be filed in the election commission office. The seals may not be broken except when the votes are to be counted. If a seal or seals are broken, the administrator shall immediately attach new numbered seals and certify in writing to the coordinator of elections the numbers and a description of the circumstances necessitating this action.

Acts 1972, ch. 740, § 1; T.C.A., § 2-6-27; Acts 1984, ch. 636, § 2; 1993, ch. 518, §§ 12, 21; T.C.A., § 2-6-127; Acts 1994, ch. 859, § 2.

Compiler's Notes. References to the county "registrar-at-large" and "deputy registrar" have been changed to "administrator of elections" and "deputy", respectively, pursuant to Acts 1997, ch. 558, §§ 21 and 22.

Section to Section References. This section is referred to in §§ 2-7-112, 2-7-114, 2-7-131, 2-20-103.

Everyone Counts

Update

October 9, 2017

- Letter from Brandon Johnson of Everyone Counts Regarding Shelby County Update



September 29, 2017

United States – Headquarters

Everyone Counts
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La Jolla, CA 92037
Phone: + 1 858 427 4673
Toll Free: +1 866 843 4668

Mr. Mark Goins
Coordinator of Elections
Tennessee Secretary of State - Elections Division
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Nashville, TN 37243-1102

Canada

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United Kingdom

Phone: +44 (0) 20 3608 0507

Australia

Phone: +61 4 6683 1857

contact@everyonecounts.com

Dear Mr. Goins,

On June 12, 2017 we presented our *eElect Voter Registration* product for certification by the State Election Commission for the State of Tennessee. On August 17, 2017 we received written notice that our product was certified for use in Tennessee with the understanding that a representative of the company would provide an update to the State Election Commission at its October 9, 2017 meeting.

Due to matters outside of our control, the contract from Shelby County was not executed until September 20, 2017 – approximately three months later than our original timetable indicated. As a result, we have worked with Shelby County to re-plan the system rollout accordingly, with the intent that the system will be fully deployed in support of the 2018 General Election.

Development of the underlying software system has proceeded on schedule since we met with the commission, and at this time we are not aware of any significant risks that would negatively impact our ability to deliver Shelby County's voter registration system early next year. Although we are fully available to present this update to the commission in person, I would like to submit this written statement as an alternative, and perhaps in person at a later date when the project is fully underway.

Sincerely,

James M. Simmons
Vice President, Technology & Operations
Everyone Counts, Inc.



Kathy Summers

From: Brandon Johnson <brandon.johnson@everyonecounts.com>
Sent: Friday, September 29, 2017 1:45 PM
To: Kathy Summers; Mark Goins
Cc: Phillips, Linda
Subject: Everyone Counts' update to State Election Commission regarding Shelby County
Attachments: E1C Memo - TN Certification Update.pdf

*** This is an EXTERNAL email. Please exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email - STS-Security. ***

Good afternoon Kathy,

Attached please find a letter from Everyone Counts regarding the status of Shelby County. Again, due to matters outside of our control, the contract from Shelby County was not executed until September 20, 2017. We understand that the State Election Commission stated that they wanted a representative from Everyone Counts to be present at the October 9th commission meeting. However, due the delay in contract signing, it is agreed upon that this letter serves as the status update to the State Election Commission that the commission stated during the June 12th certification meeting.

Everyone Counts is more than happy to be present in-person at the next State Elections Commission meeting to update the commission on the status of Shelby County. Please let me know if you have any further questions. Thank you for your time and look forward updating the commission in the future.

Regards,

Brandon Johnson

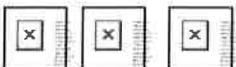
Sales Director

Everyone Counts, Inc.

Mobile: 605-222-6549

Email: Brandon.Johnson@everyonecounts.com

Website: www.everyonecounts.com



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Draft of Possible Legislative Changes for State Election Commission

Option 1 – Defining governmental agency

- a. For purposes of this section, governmental body or agency means any federal, county or municipal governmental entity, including, but not limited to, any federal, county, municipality, metropolitan government, utility district, public building authority, and development district created and existing pursuant to the laws of this state, or any instrumentality of government created by any one (1) or more of the named governmental entities or by an act of the United States Congress or Tennessee General Assembly. (Definition is derived from Tenn. Code Ann. § Tenn. Code Ann. § 8-25-111)
- b. This section does not disqualify any employee of a county or city school system, or an employee of a public utility board or an electric or telephone cooperative who does not work directly under the supervision of an elected official.

Option 2 – Limiting who from other boards may serve on the county election commission

- a. No member of the county election commission may serve on any board of any other governmental body or agency, unless the service on such other board is without compensation. Compensation shall include, but not be limited to, pay, insurance benefits or per diem reimbursement for meals, travel, or other similar expenses.

OR

- b. No member of the county election commission may serve on any board of any other governmental body or agency, unless the member receives less than **\$50.00 per month** as compensation for such service on the other board. (Compensation shall include, but not be limited to, pay, insurance benefits or per diem reimbursement for meals, travel, or other similar expenses.)

Option 3 – Disqualifying county election commission members with close relatives on the ballot (Note does not impact AOE)

- a. Any member of the county election commission who has a close relative qualify for any federal, state, county or municipal elected office shall automatically become disqualified to continue in office as a member of the commission, and a vacancy on the commission shall be considered to exist. A person qualifies for elected office upon filing the required nominating petition for the office with the appropriate election commission. A close relative shall consist of the spouses, parents, siblings or children, including in-laws of commission election commission members. (Definition is derived from Tenn. Code Ann. § 2-12-116)

OR

- b. A close relative shall consist of the parents, children, spouses, siblings, grandparents, grandchildren, including in-laws, or any family member who resides in the same household of county election commission members. (Definition is derived from Tenn. Code Ann. § 3-1-202)

PROCEDURES FOR CERTIFYING VOTING MACHINES BY THE TENNESSEE STATE ELECTION COMMISSION

All voting machines/vendors must receive certification from the state election commission and the coordinator of elections before any voting machines or systems may be sold in the State of Tennessee.

First Step:

Any interested vendor should submit a written request to the coordinator of elections and the state election commission requesting certification of your company together with the EAC certification number, a financial report and a list of all states that have already bought your voting machines or systems. If you would like to demonstrate your product at a meeting of the state election commission, please make that request in your letter. You will be notified of the date, time, and place of the meeting where you may make your presentation.

Second Step:

A. Voting Machine Procedure

Following verification of EAC certification and an initial presentation of your product and/or services, you would need to arrange for at least two (2) State Election Commissioners (of opposite parties) and the coordinator of elections (or designee) to view your machines or system in use in an election of a substantial size in another state. An election of a substantial size involves at the minimum the following characteristics:

- The jurisdiction has a population of at least 10,000 persons;
- The jurisdiction has at least two (2) or more district races on the ballots; and
- There are at least two (2) contested races involving both at large and district races on the ballot.

B. Voting Machine Software Systems Upgrade

- EAC Certification;
- Presentation of software upgrade before State Election Commission at a monthly meeting; and
- Viewing of upgrade in another state (In lieu of viewing machine in another state, at the discretion of the State Election Commission, letters of recommendation from users in other jurisdiction may be used as support for approval.)

C. De Minimis Voting System Changes

- Any De Minimis change to an EAC certified voting system shall be submitted to the state election commission and coordinator of elections to be approved. For purposes of approval of the de minimis change to the voting system, all that will be required is a letter from the EAC stating the change is de minimis, unless further information is requested by the state election commission or coordinator of elections.

Third Step:

The State Election Commission must vote to certify the machine in order for the machines to be used in an election in Tennessee.

You may send any correspondence for both the state election commission and the coordinator of elections to the following address:

312 Rosa L.Parks Avenue, 7th Floor
William R. Snodgrass Tower
Nashville, Tennessee 37243
(615) 741-7956

If you have any further questions regarding certification of your company, please feel free to contact the office of the state election coordinator at the phone number listed above.

Dominion Voting

D-Suite 5.0

Touch Screen Ballot

Marking Device

Demonstration

October 9, 2017

Presenters:

Masha Bosha

Cathi Smothers

- EAC – Certification Number
DVS-DemSuite-5.0



United States Election Assistance Commission

Certificate of Conformance

Dominion Democracy Suite 5.0



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: Democracy Suite

Model or Version: 5.0

Name of VSTL: Pro V&V

EAC Certification Number: DVS-DemSuite-5.0

Date Issued: February 8, 2017

Executive Director
U.S. Election Assistance Commission

Scope of Certification Attached

Manufacturer: *Dominion*
System Name: *Democracy Suite 5.0*
Certificate: *DVS-DemSuite5.0*

Laboratory: *Pro V&V*
Standard: *2005 VVSG*
Date: *February 8, 2017*



Scope of Certification

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:

The D-Suite 5.0 Voting System is a paper-based optical scan voting system with a hybrid paper/DRE option consisting of the following major components: The Election Management System (EMS), the ImageCast Central (ICC), the ImageCast Precinct (ICP), and the ImageCast X (ICX).

Election Management System (EMS): The D-Suite 5.0 EMS consists of various components running as either a front-end/client application or as a back-end/server application. A listing of the applications and a brief description of each is presented below.

Front-end/Client applications:

- **EMS Adjudication:** Represents the server and client components responsible for adjudication, including reporting and generation of adjudicated result files from ImageCast Central tabulators and adjudication of write-in selections from ImageCast Precinct and ImageCast Central tabulators.
- **EMS Audio Studio:** A client application that represents an end-user helper application used to record audio files for a given election project. As such, it is utilized during the pre-voting phase of the election cycle.
- **EMS Election Data Translator:** End-user application used to export election data from election project and import election data into election project.
- **EMS Election Event Designer:** A client application that integrates election definition functionality together with ballot styling capabilities and represents a main pre-voting phase end-user application. **ImageCast Voter Activation:** An application, installed on a workstation or laptop at the polling place, which allows the poll workers to program smart cards for voters. The smart cards are used to activate voting sessions on ImageCast X.
- **EMS Results Tally and Reporting:** A client application that integrates election results acquisition, validation, tabulation, reporting, and publishing capabilities and represents the main post-voting phase end-user application.

Back-end/Server applications:

- **EMS Adjudication Services:** Represents a server side application which provides ballot information such as contests, candidates and their coordinates from EMS to the Adjudication application.
- **EMS Application Server:** Represents a server side application responsible for executing long running processes, such as rendering ballots, generating audio files and election files, etc.
- **EMS Database Server:** Represents a server side RDBMS repository of the election project database which holds all the election project data, including pre-voting and postvoting data.
- **EMS Data Center Manager:** A server application that represents a system level configuration application used in EMS back-end data center configuration.
- **EMS Election Device Management:** Application used for production and programming of election files, and other accompanying files, for ImageCast X terminals.
- **EMS File System Service:** A client application that acts as a stand-alone service that runs on client machines, enabling access to low level operating system API for partitioning CF cards, reading raw partition on ICP CF card, etc.
- **EMS NAS Server:** Represents a server side file repository of the election project file based artifacts, such as ballots, audio files, reports, log files, election files, etc.
- **Smart Card Helper Service:** A service that is installed on a workstation or laptop at the polling place, and provides required data format for programming smart cards for ImageCast devices, or, for jurisdiction's voting registration system in case of integration.

ImageCast Precinct (ICP): The ICP device is a hybrid precinct optical scan paper/DRE ballot counter designed to provide three major functionalities: ballot scanning and tabulation,

accessible voting, and ballot review and second chance voting. Accessible voting allows voters with disabilities to listen to an audio representation of a ballot and use a hand held controller called an Audio Tactile Interface (ATI) to make vote selections, which are then saved directly to the ICP when the voter casts their Accessible Voting ballot. The Ballot Review feature allows a voter to review their vote selections using an audio or visual representation, which displays or presents the voter with a complete listing of all contests contained on the ballot and an indication of the results which will be recorded for each contest once the voter's ballot is cast. Second Chance voting refers to scenarios in which an error has been detected on the voter's ballot (blank ballot, undervoted ballot, overvoted ballot, misread ballot, cross-over voted ballot), and the ICP notifies the voter by displaying a message or providing an audio visual cue, that one of these situations has been detected, and offers the voter an opportunity to reject and fix their ballot, or to cast the ballot as-is. The ICP scans marked paper ballots, interprets voter marks on the paper ballot and stores and tabulates each vote from each paper ballot. The ICP contains a small touch-screen LCD to allow the poll worker to initiate polling place activities, diagnostics and reports.

ImageCast Central (ICC) Count Scanner: The ICC is a high-speed, central ballot scan tabulator based on Commercial off the Shelf (COTS) hardware, coupled with the custom-made ballot processing application software. It is used for high speed scanning and counting of paper ballots.

ImageCast X (ICX) Ballot Marking Device (BMD): The Democracy Suite ImageCast X ballot marking platform is a solution that is used for creation of paper Electronic Mobile Ballots. These ballots can be scanned, reviewed, cast and tabulated at the polling location on an ImageCast Precinct device or later scanned and tabulated by the ImageCast Central optical ballot scanner. The ImageCast X also supports enhanced accessibility voting through optional accessories connected to the ImageCast X unit.

Certified System before Modification:
NA

Anomalies and/or Additions addressed in Democracy Suite 5.0:

Testing determined that the system and components used are not fully compliant to VVSG 1.0, Section 7 and RFI 2012-05. The deficiency is a result of the system using COT's software products in which the FIPS Certificates are no longer valid. The DVS 5.0 system shall be modified to bring it into compliance with the requirements of VVSG 1.0, Section 7 and RFI 2012-05. DVS has 30 days from the date of Certification of the DVS 5.0 system to submit a modification to make these changes.

Mark definition:

50% or more of the target area marked consistently provides mark recognition. The manufacturer recommends black ink for marking ballot selections.

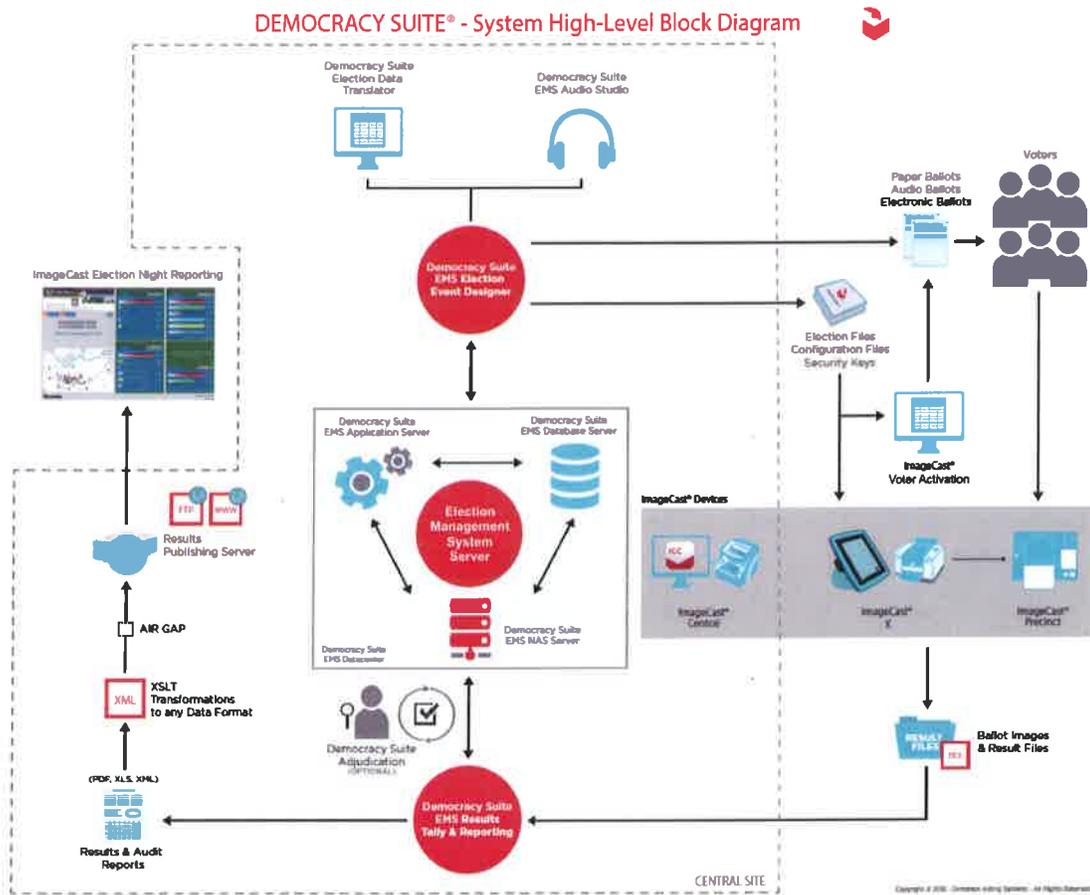
Tested Marking Devices:

Sharpie brand markers, black ink.

Language capability:

System supports Bengali, Chinese, English, French, Hindi, Japanese, Korean, Spanish, Thai.

Democracy Suite 5.0 System Diagram



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
EMS Election Event Designer (EED)	5.0.15.1		Windows 8.1 Pro	EMS

System Component	Software or Firmware Version	Hardware Version	Operating System or COTS	Comments
EMS Results Tally and Reporting (RTR)	5.0.15.1		Windows 8.1 Pro	EMS
EMS Application Server	5.0.15.1		Windows Server 2012 R2 Windows 8.1 Pro	EMS
EMS File System Service (FSS)	5.0.15.1		Window 8.1 Pro	EMS
EMS Audio Studio (AS)	5.0.15.1		Windows 8.1 Pro	EMS
EMS Data Center Manager (DCM)	5.0.15.1		Windows Server 2012 R2 Windows 8.1 Pro	EMS
ImageCast Voter Activation (ICVA)	5.0.15.1		Windows 8.1 Pro	EMS
EMS Adjudication (ADJ)	5.0.0.17002		Windows 8.1 Pro	EMS
EMS Adjudication Services	5.0.0.17002			
EMS Election Device Management (EDM)	5.0.15.1		Windows Server 2012 R2 Windows 8.1 Pro	EMS
Smart Card Helper Service	5.0.15.1		Windows 8.1 Pro	EMS
Election Firmware	5.0.1-US	PCOS-320A PCOS-320C	uClinix	ICP
Firmware Updater	5.0.1-US	PCOS-320A PCOS-320C	uClinix	ICP
Firmware Extractor	5.0.1-US	PCOS-320A PCOS-320C	uClinix	ICP
Kernel (uClinix)	5.0.1-US	PCOS-320A PCOS-320C	Modified COTS	ICP
Boot Loader (COLILO)	20040221	PCOS-320A PCOS-320C	Modified COTS	ICP
ImageCast Central Application	5.0.1-0001	Canon DR-G1130	Windows 8.1 Pro	ICC
ICX Application	5.0.6149.28963		Android 4.4 (Avalue) Android 5.0 (Samsung)	ICX
ICX Security Certificate	N/A			ICX
ICX Security Certificate Password	N/A			ICX
Microsoft Windows Server	2012 R2 Standard		Unmodified COTS	EMS Server SW Components
Microsoft Windows	8.1 Professional		Unmodified COTS	EMS Client/Server SW Components; EMS SW Build
.NET Framework	3.5		Unmodified COTS	EMS Client/Server SW Components; EMS SW Build
Microsoft Visual J#	2.0		Unmodified COTS	EMS Client/Server SW Components; EMS SW Build

System Component	Software or Firmware Version	Hardware Version	Operating System or COTS	Comments
Microsoft Visual C++ 2013 Redistributable	2013		Unmodified COTS	EMS Client/Server SW Components
Java Runtime Environment	7u76		Unmodified COTS	EMS Client/Server SW Components
Java Runtime Environment	8u77		Unmodified COTS	EMS Client/Server SW Components
Microsoft SQL Server 2012 Standard	2012 Standard		Unmodified COTS	EMS Client/Server Unmodified COTS SW Components
Microsoft SQL Server 2012 Service Pack 2	2012 SP2		Unmodified COTS	EMS Client/Server SW Components
Microsoft SQL Server 2012 SP@ Express with Advanced Services	2012 SP2		Unmodified COTS	EMS Client/Server SW Components
Cepstral Voices	6.2.3.81		Unmodified COTS	EMS Client/Server SW Components
Arial Narrow Fonts	N/A		Unmodified COTS	EMS Client/Server SW Components; EMS SW Build
Maxim iButton Driver	4.04		Unmodified COTS	EMS Client/Server SW Components
Adobe Reader DC	AcrobatDC		Unmodified COTS	EMS Client/Server SW Components; EMS SW Build
Microsoft Access Database Engine	2010		Unmodified COTS	EMS Client/Server SW Components
Open XML SDK 2.0 for Microsoft Office	2.0		Unmodified COTS	EMS Client/Server SW Components
Infragistics NetAdvantage Win Forms 2011.1	2011 Vol. 1		Unmodified COTS	EMS SW Platform; EMS SW Build
Infragistics NetAdvantage WPF 2012.1	2012 Vol. 1		Unmodified COTS	EMS SW Platform; EMS SW Build
TX Text Control Library for .NET	16.0		Unmodified COTS	EMS SW Platform; EMS SW Build
SOX	14.3.1		Unmodified COTS	EMS SW Platform; EMS SW Build
Log4net	1.2.10		Unmodified COTS	EMS SW Platform
NLog	1.0.0.505		Unmodified COTS	EMS SW Platform; EMS SW Build
iTextSharp	5.0.5.0		Unmodified COTS	EMS SW Platform; EMS SW Build
OpenSSL	1.2		Unmodified COTS	EMS SW Platform; EMS SW Build
SQLite	1.0.65.0		Unmodified COTS	EMS SW Platform; EMS SW Build
Lame	3.99.4		Unmodified COTS	EMS SW Platform; EMS SW Build

System Component	Software or Firmware Version	Hardware Version	Operating System or COTS	Comments
Speex	1.0.4		Unmodified COTS	EMS SW Platform; EMS SW Build
Ghostscript	9.04		Unmodified COTS	EMS SW Platform; EMS SW Build
PdfToImage.dll	1.2		Unmodified COTS	EMS SW Platform; EMS SW Build
SharpSSH package	1.1.1.13		Unmodified COTS	EMS SW Platform; EMS SW Build
One Wire API for .NET	4.0.2.0		Unmodified COTS	EMS SW Platform; EMS SW Build
Avalon-framework-cvs-20020806	20020806		Unmodified COTS	EMS SW Platform; EMS SW Build
Batik	0.20-5		Unmodified COTS	EMS SW Platform; EMS SW Build
Fop	0.20-5		Unmodified COTS	EMS SW Platform; EMS SW Build
Microsoft Visual J# 2.0 Redistributable Package – Second Edition (x64)	2.0		Unmodified COTS	EMS SW Platform
Entity framework	4.3.1		Unmodified COTS	EMS SW Platform; EMS SW Build
Spreadsheetlight	3.4.3		Unmodified COTS	EMS SW Platform; EMS SW Build
Open XML SDK 2.0 for Microsoft Office	2.0.5022.0		Unmodified COTS	EMS SW Platform; EMS SW Build
Open SSL	1.1.2		Unmodified COTS	ICP
PNG Reference Library	1.2.24		Unmodified COTS	ICP
Zlib	1.2.3		Unmodified COTS	ICP
ASP.NET AJAX Control Toolkit	15.1.4.0		Unmodified COTS	ICX incl. EDM
Entity Framework	6.1.3.net45		Unmodified COTS	ICX incl. EDM
Ionics Zip Library	1.9.1.8		Unmodified COTS	ICX incl. EDM
NLog Library	1.0.0.505		Unmodified COTS	ICX incl. EDM
SQLite	1.0.98.0		Unmodified COTS	ICX incl. EDM
Google Text-to-Speech Engine	3.8.16		Unmodified COTS	ICX incl. EDM
OpenSSL	1.2.3		Unmodified COTS	ICC SW Build Library
1-Wire Driver (x86)	4.04		Unmodified COTS	ICC Runtime SW
1-Wire Driver (x64)	4.04		Unmodified COTS	ICC Runtime SW
Kofax VRS	4.5 Build 269		Unmodified COTS	ICC Runtime SW
Kofax VRS Service Pack 1	4.5.1		Unmodified COTS	ICC Runtime SW
Canon DR-G1130 Driver	1.2 SP4		Unmodified COTS	ICC Runtime SW
Canon DR-G1130 Component Installer	4.50		Unmodified COTS	ICC Runtime SW
Visual C++ 2013	12.0.30501		Unmodified COTS	ICC Runtime SW

System Component	Software or Firmware Version	Hardware Version	Operating System or COTS	Comments
Redistributable (x86)				
Zxing Barcode Scanner	4.7.5		Modified COTS	ICX SW
SoundTouch	1.9.2		Modified COTS	ICX SW
7-Zip	9.20 (64 Bit)		Unmodified COTS	EMS SW Build
Internet Information Server (IIS)	6		Unmodified COTS	EMS SW Build
Visual Studio 2013 Premium	2013.5		Unmodified COTS	EMS SW Build
ImgBurn	2.5.7.0		Unmodified COTS	EMS SW Build
Active Perl	5.20.2		Unmodified COTS	EMS SW Build
Patch	2.5.9-7			EMS SW Build
ISOnewspaper	30.4		Unmodified COTS	EMS SW Build
Ogg Vorbis Encoder	2.88		Unmodified COTS	EMS SW Build
Ogg Vorbis Encoder	1.10.1		Unmodified COTS	EMS SW Build
Prism Mvwm	1.1.1		Unmodified COTS	EMS SW Build
PDF Printing	2.9.5.2		Unmodified COTS	EMS SW Build
WiX	3.10		Unmodified COTS	EMS SW Build
NASM Assembler	2.09.07		Unmodified COTS	ICC SW Build
Open SSL	1.2.3		Unmodified COTS	ICC SW Build
Ajax Control Toolkit	15.1.4		Unmodified COTS	EDM SW Build
SQLite	1.0.98.0		Unmodified COTS	EDM SW Build
Ionic	1.9.1.8		Unmodified COTS	EDM SW Build
Google Text-to-Speech Engine – Architecture Arm	3.8.16		Unmodified COTS	EDM SW Build
Google Text-to-Speech Engine – Architecture x86	3.8.16		Unmodified COTS	EDM SW Build
Microsoft Enterprise Library	5.0		Unmodified COTS	Adjudication SW Build
Microsoft Prism	4.0-November 2010		Unmodified COTS	Adjudication SW Build
Microsoft Identity Foundation	4.0		Unmodified COTS	Adjudication SW Build
Toggle Switch Control Library	1.1.1		Unmodified COTS	Adjudication SW Build
Infragistics NetAdvantage 2013.1	2013.1		Unmodified COTS	Adjudication SW Build
iTextSharp	5.5.1		Unmodified COTS	Adjudication SW Build
CLR Security	June 2010		Unmodified COTS	Adjudication SW Build
Open SSL	1.0.2e		Unmodified COTS	Adjudication SW Build
Community MSI	1.4		Unmodified COTS	Adjudication

System Component	Software or Firmware Version	Hardware Version	Operating System or COTS	Comments
Extensions				SW Build
TreeViewEx	3.0.0.0		Unmodified COTS	Adjudication SW Build
SharpZibLib	0.86.0		Unmodified COTS	ICL SW Build
Microsoft Visual Studio 2013 Installer Projects Extension	2013		Unmodified COTS	ICL SW Build
Visual Basic Power Packs	12.0		Unmodified COTS	ICL SW Build
G++(GNU C++ compiler)	gcc3.4.0-20040603		Unmodified COTS	ICP Election Firmware Compiler
Ubuntu 10.04 LTS – Long-term support	10.04		Unmodified COTS	ICP Firmware Build
Toolchain Installation Script	NA		Unmodified COTS	ICP Firmware Build
M68k uClinux tools base gcc	3.4.0-20040603		Unmodified COTS	ICP Firmware Build
M68k uClinux tools c++ gcc	3.4.0-20040603		Unmodified COTS	ICP Firmware Build
M68k uClinux tools gdb	20040603		Unmodified COTS	ICP Firmware Build
OpenSSL	1.1.2		Unmodified COTS	ICP Firmware Build
Ubuntu	14.04.4		Unmodified COTS	ICP Firmware Build
ImageCast Precinct Optical Scanner	5.0.1-US	PCOS-320C		Available from Dominion Voting
ImageCast Precinct Optical Scanner	5.0.1-US	PCOS-320A		Available from Dominion Voting
ICP Ballot Box		BOX-330A		Available from Dominion Voting
ICX UPS Inline EMI Filter		1.0		Available from Dominion Voting
ICX Tablet	5.0.6149.28963	Samsung		Available from Dominion Voting
ICX Tablet	5.0.6149.28963	Avalue 15" Tablet (SID-15V)	COTS	
ICX Tablet	5.0.6149.28963	Avalue 21" Tablet (SID-21V)	COTS	
Server		Dell PowerEdge R630	Windows Server 2012 R2	
Client HW		Dell Precision T3420 PC	Windows 8.1 Pro	
Client HW		Dell Latitude E7450 Laptop	Windows 8.1 Pro	
Printer		HP LaserJet Pro Printer M402dn	COTS	
ICC Workstation HW		Dell OptiPlex 7440 All in One	Windows 8.1 Pro	
ICC Workstation HW		Dell OptiPlex 9030 All In One	Windows 8.1 Pro	
Scanner		Canon imageFormula DR-	COTS	

System Component	Software or Firmware Version	Hardware Version	Operating System or COTS	Comments
		G1130		
Monitor		Dell Ultrasharp 24" Monitor U2414H	COTS	
Monitor		Dell Monitor KM632	COTS	
Monitor		Dell Monitor P2414Hb	COTS	
Ballot Printer		Brother Laser Printer HL-L2300D	COTS	
CD/DVD Reader		Dell DVD Multi Recorder	COTS	
iButton Programmer		Maxim iButton Programmer DS9490P# with DS1402	COTS	
UPS		APC Smart-UPS SMT1500	COTS	
Network Switch		Dell X1008 Network Switch	COTS	
Network Switch		Dell X1018 Network Switch	COTS	
Network Switch		Dell X1026 Network Switch	COTS	
Network Switch		Dell PowerConnect 2808 Network Switch	COTS	
Interface Hub		Tecla ShieldDos KDL-02001	COTS	
Sip and Puff		Enabling Devices Sip and Puff	COTS	
Headphones		Cyber Acoustics Headphones ACM-70	COTS	
Joystick		4-way joystick controller S26	COTS	
Paddles		Enblemart #88906 Rocker (Paddle) Switch	COTS	
Footswitches		ABLENET Jelly Bean Twist 10033400	COTS	
CF Card Reader		IOGEAR SDHC/microSDHC 0U51USC410 Card Reader	COTS	
CF Card Reader		Lexar USB 3.0 Dual-Slot reader	COTS	
CF Card Reader		Hoodman Steel USB 3.0 UDMA Reader 102015	COTS	
CF Card Reader		Lexar Professional CF card reader workflow CFR1	COTS	
ATI		ATI handset		Available from

System Component	Software or Firmware Version	Hardware Version	Operating System or COTS	Comments
				Dominion Voting
ATI		ATI-USB handset		Available from Dominion Voting
Smart Card Reader		ACS PC-Linked Smart Card Reader ACR39U	COTS	

System Limitations

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

Characteristic	Limiting Component	Limit	Comment
Ballot positions	The ballot	462	Both
Precincts in an election	EMS	1000; 250	Standard; Express
Contests in an election	EMS	4000; 250	Standard; Express
Candidates/Counters in an election	EMS	40000; 2500	Standard; Express
Candidates/Counters in a precinct	Tabulator	462	Both
Candidates/Counters in a tabulator	Tabulator	10000; 2500	Standard; Express
Ballot Styles in an election	Tabulator	4000; 750	Standard; Express
Ballot IDs in a tabulator	Tabulator	200	Both
Contests in a ballot style	Tabulator	125	Standard; Express
Candidates in a contest	EMS	462; 231	Standard; Express
Ballot styles in a precinct	Tabulator	5	Both
Number of political parties	Tabulator	30	Both
"vote for" in a contest	Tabulator	30	Both
Supported languages in an election	Tabulator	5	Both
Number of write-ins	The ballot	462	Both

Functionality

2005 VVSG Supported Functionality Declaration

Feature/Characteristic	Yes/No	Comment
Voter Verified Paper Audit Trails		
VVPAT	N/A	
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)	YES	
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	

Feature/Characteristic	Yes/No	Comment
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.	NO	
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	YES	
Slate & Group Voting: one selection votes the slate.	YES	
Ballot Rotation:		
Rotation of Names within an Office; define all supported rotation methods for location on the ballot and vote tabulation/reporting	YES	Equal time rotation
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.	N/A	
Split Precincts: Reporting of voter counts (# of voters) to the precinct split level; Reporting of vote totals is to the precinct level	YES	
Vote N of M:		
Vote for N of M: Counts each selected candidate, if the maximum is not exceeded.	YES	
Vote for N of M: Invalidates all candidates in an overvote (paper)	YES	
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)	NO	
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 nd 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 nd contest.)	NO	

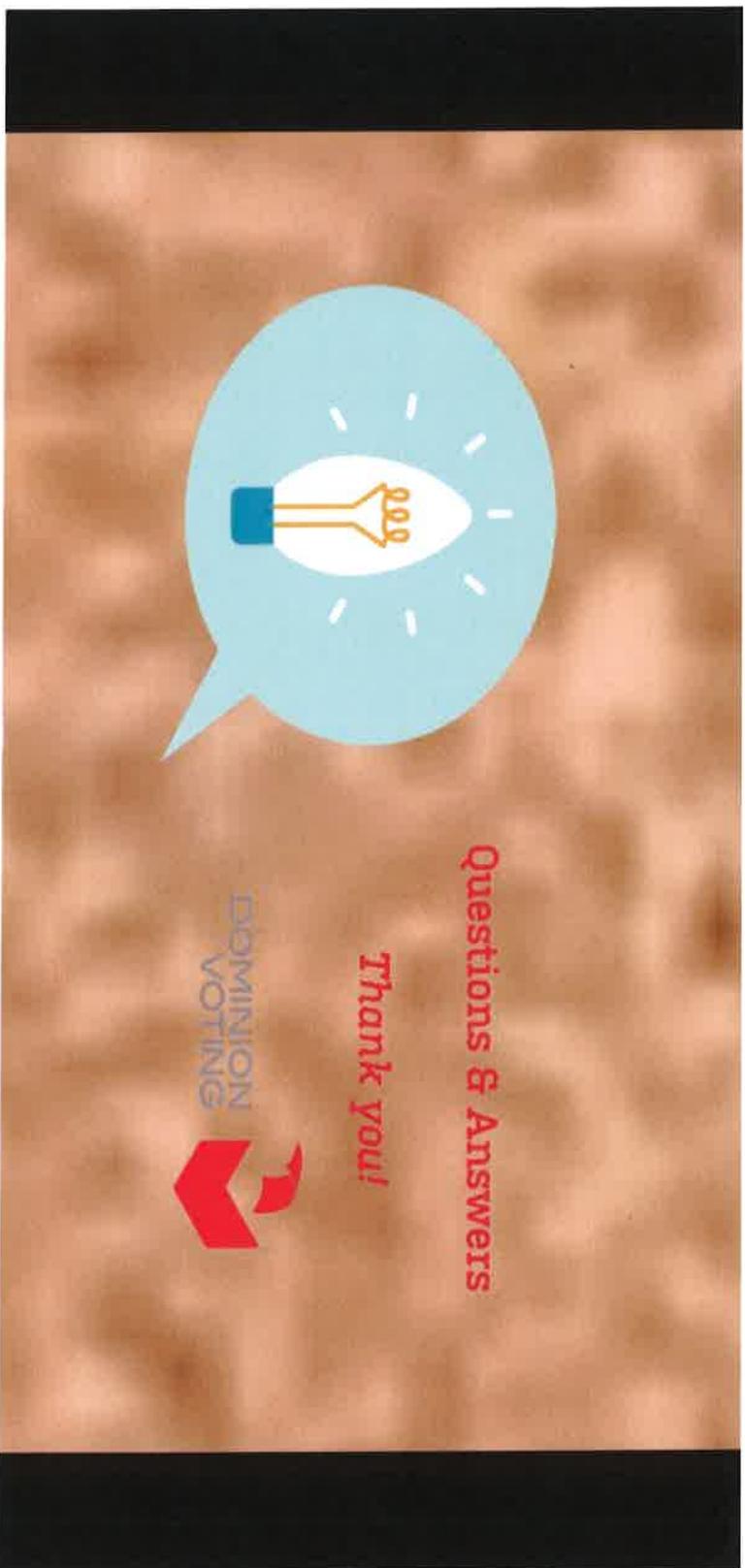
Feature/Characteristic	Yes/No	Comment
Cumulative Voting		
Cumulative Voting: Voters are permitted to cast, as many votes as there are seats to be filled for one or more candidates. Voters are not limited to giving only one vote to a candidate. Instead, they can put multiple votes on one or more candidate.	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	
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	NO	
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 cause a warning to the voter and can be configured to allow voter to override.
Overvotes: DRE: Prevented from or requires correction of overvoting.	N/A	
Overvotes: If a system does not prevent overvotes, it must count them. Define how overvotes are counted.	YES	If allowed via voter override, overvotes are tallied separately.
Overvotes: DRE systems that provide a method to data enter absentee votes must account for overvotes.	N/A	
Undervotes		
Undervotes: System counts undervotes cast for accounting purposes	YES	

Feature/Characteristic	Yes/No	Comment
Blank Ballots		
Totally Blank Ballots: Any blank ballot alert is tested.	YES	Precinct voters receive a warning; both precinct and central scanners will warn on blank ballots.
Totally Blank Ballots: If blank ballots are not immediately processed, there must be a provision to recognize and accept them	YES	Blank ballots are flagged. These ballots can be manually examined and then be scanned and accepted as blank; or precinct voter can override and accept.
Totally Blank Ballots: If operators can access a blank ballot, there must be a provision for resolution.	YES	Operators can examine a blank ballot, re-mark if needed and allowed, and then re-scan it.
Networking		
Wide Area Network – Use of Modems	NO	
Wide Area Network – Use of Wireless	NO	
Local Area Network – Use of TCP/IP	YES	Client/server only
Local Area Network – Use of Infrared	NO	
Local Area Network – Use of Wireless	NO	
FIPS 140-2 validated cryptographic module	YES	
Used as (if applicable):		
Precinct counting device	YES	ImageCast Precinct
Central counting device	YES	ImageCast Central

Baseline Certification Engineering Change Orders (ECO)

Not applicable in new system test campaign.

5.0 SYSTEM RECERTIFICATION QUESTIONS



TO LEARN MORE ABOUT OUR TECHNOLOGY, PEOPLE AND SERVICES,
VISIT DOMINIONVOTING.COM TODAY

Q & A



**DOMINION
VOTING**



Our customers come first.

OCTOBER 09, 2017

**DOMINION VOTING
DEMOCRACY SUITE 5.0 CERTIFICATION
FOR THE STATE OF TENNESSEE**

This document is submitted in confidence and contains some or all of the following types of information: Trade secrets, scientific information, financial information, technical information, commercial information, and labor relations information. Disclosure of any of the information contained in any of the documents herein would result in undue loss to Dominion Voting Systems.

DEMOCRACY SUITE 5.0 CERTIFICATION OVERVIEW

- Dominion Voting Systems company and system overview – Masha Boshan
- Democracy Suite 5.0 system demonstration—Cathi Smothers
- Q & A – Cathi Smothers and Masha Boshan

PRESENTATION OVERVIEW

DOMINION
VOTING



DOMINION VOTING SYSTEMS OVERVIEW

- Founded in 2003, headquartered in Denver, CO
- 250+ people globally
- Over 100,000 ImageCast tabulator deployments
- Over 1,200 jurisdictions around the world
- Fully integrated, multi-channel voting systems
- All proprietary hardware manufactured in the U.S.



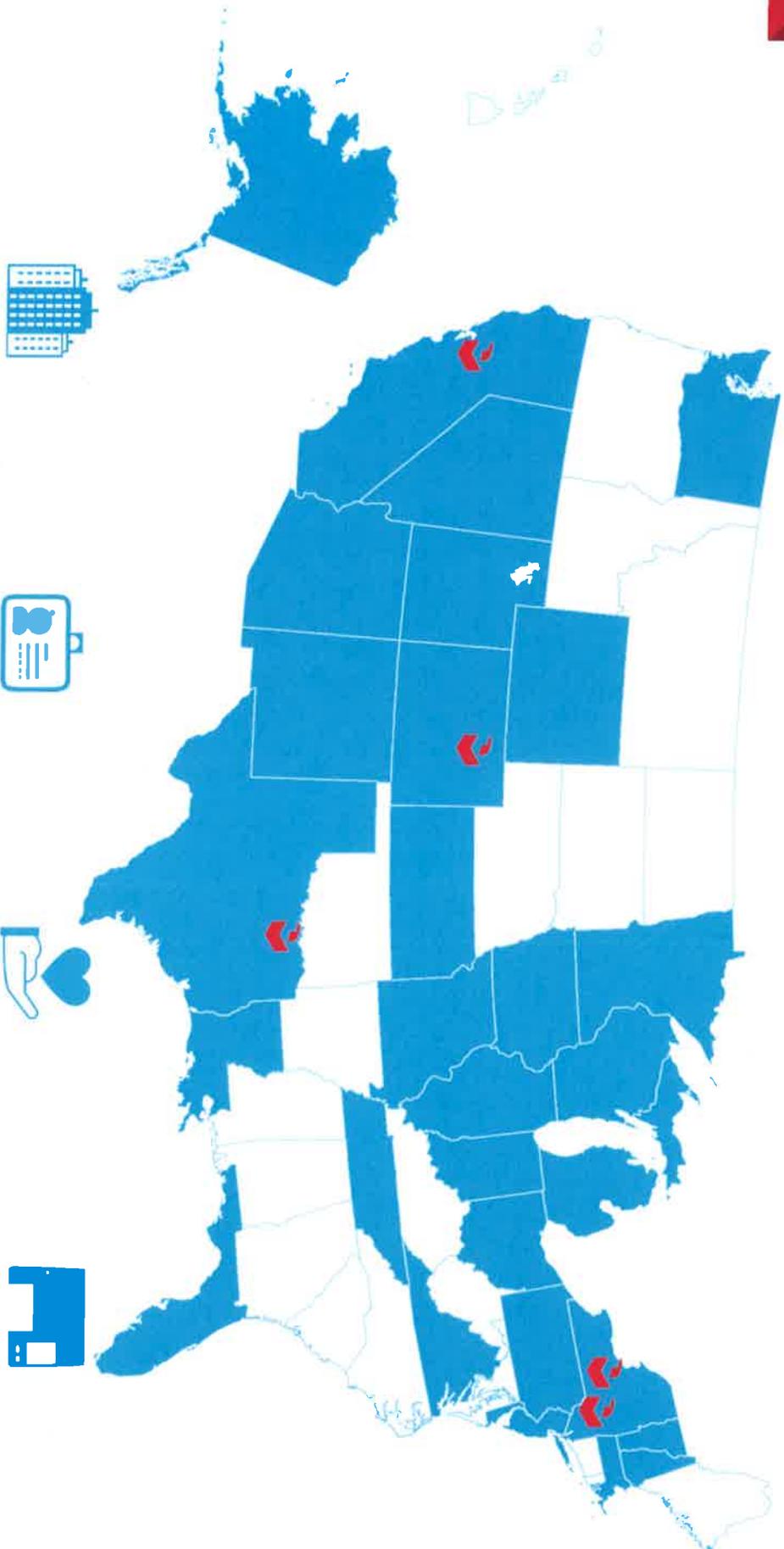
Photo credit: The Daily Jeffersonian

ELECTIONS ARE OUR ONLY BUSINESS

DOMINION
VOTING



DOMINION VOTING SYSTEMS GEOGRAPHICAL DISTRIBUTION



6 OFFICES

Spread across four time zones in North America

250+ EMPLOYEES

Working alongside our customers

1,200+ CUSTOMERS

Using Dominion technology

100,000+ TABULATORS

Deployed globally for use in various elections.

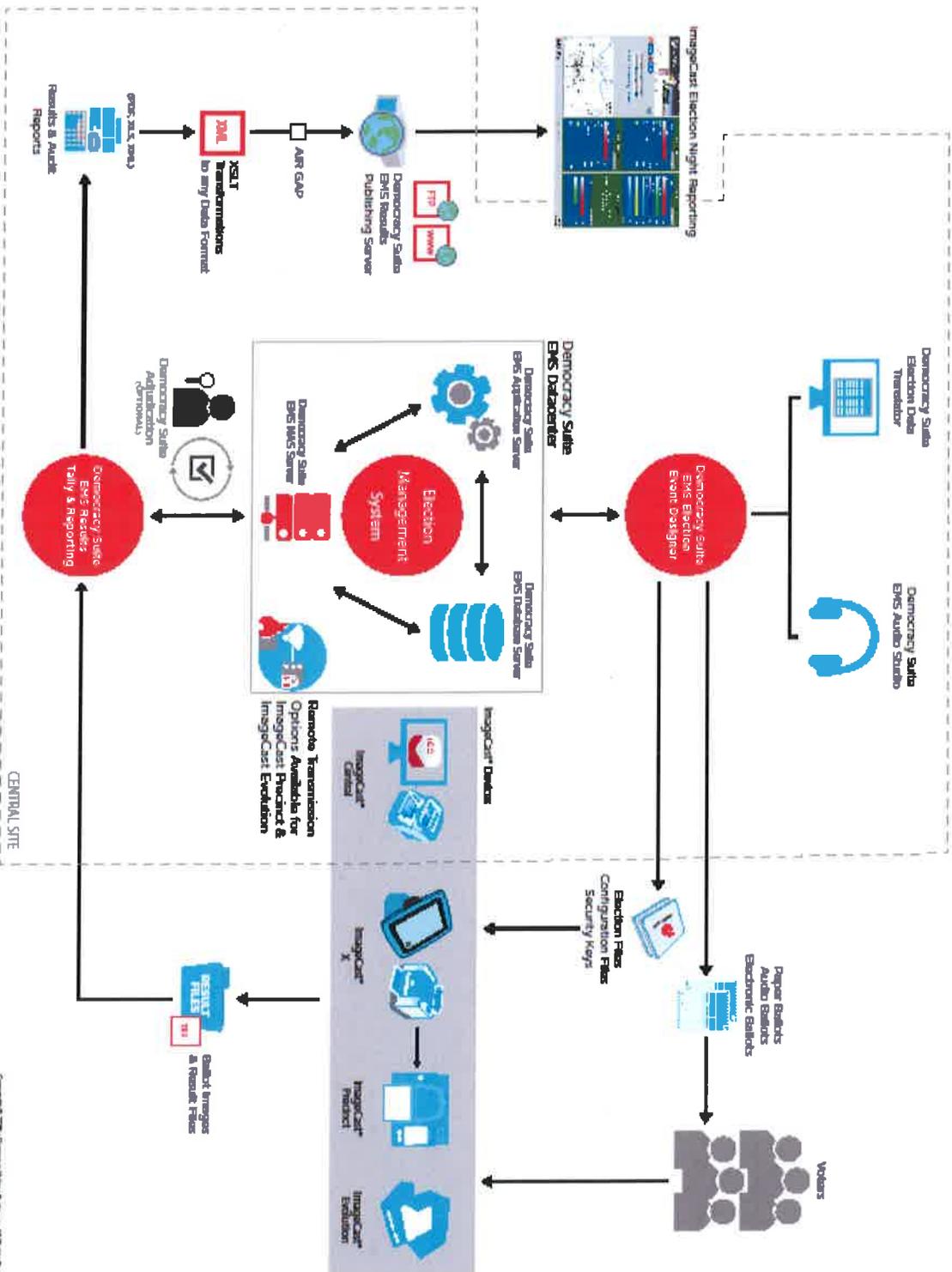
5 U.S. OFFICE LOCATIONS SUPPORTING JURISDICTIONS IN 33 STATES

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DEMOCRACY SUITE HIGH-LEVEL SYSTEM OVERVIEW

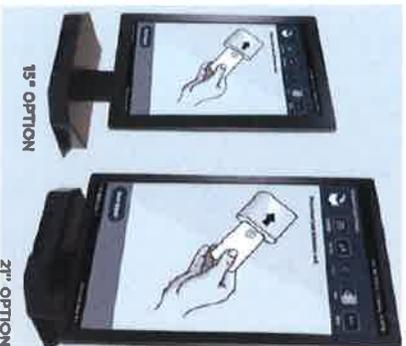
DEMOCRACY SUITE - System High-Level Block Diagram



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SYSTEM OVERVIEW

DEMOCRACY SUITE 5.0 TABULATORS/OPTICAL SCANNERS AND BALLOT MARKING DEVICES



IMAGECAST® X

Universal tabulator and ballot marking device



IMAGECAST® Precinct

Lightweight, affordable precinct tabulator



IMAGECAST® Central

Scalable, efficient central count solution

SYSTEM OVERVIEW: TABULATORS

DOMINION
VOTING



DEMOCRACY SUITE 5.0 TABULATORS/OPTICAL SCANNERS - ICP



Compact
Lightweight
Robust



Over 100,000 units deployed in the field



SYSTEM OVERVIEW: IMAGECAST PRECINCT

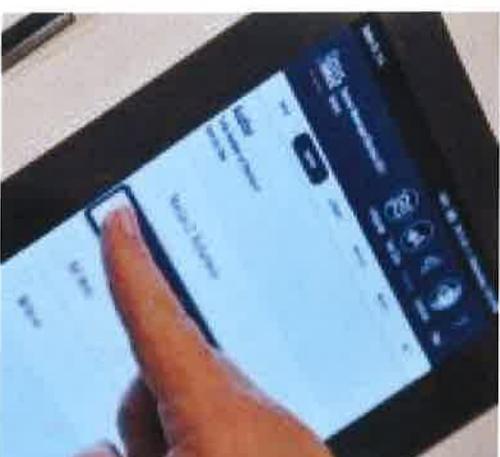
DOMINION
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DEMOCRACY SUITE 5.0 TABULATORS AND BALLOT MARKING DEVICES - ICX

IMAGECAST® X: SECURE, FLEXIBLE, SIMPLE AND EFFICIENT

- Driven by Dominion's powerful Democracy Suite® software, with flexible configurations to meet jurisdictional needs
- Leverages commercially available hardware, making it cost-effective, flexible and sustainable
- Provides a range of accessibility options, allowing all voters to use the same device to vote privately and independently
- Intuitive touchscreen interface for poll workers and voters



- Comes with a commercially available compact laser printer that prints a paper ballot directly in the voting booth.
- Paper ballots can be scanned on an ImageCast® tabulator in the voting location or in the central office.



SYSTEM OVERVIEW: IMAGECAST X

DEMOCRACY SUITE 5.0 TABULATORS/OPTICAL SCANNERS - ICC

EFFICIENT AND EASY TO USE
CENTRAL COUNT SOLUTION



Cost-effective central
count solution



Scalable and flexible to
meet jurisdictional needs

SYSTEM OVERVIEW: IMAGECAST CENTRAL

DOMINION
VOTING

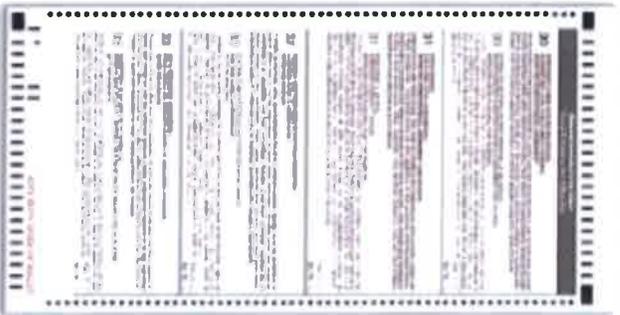


5.0 DEMOCRACY SUITE SYSTEM OVERVIEW: EMS COMPONENTS

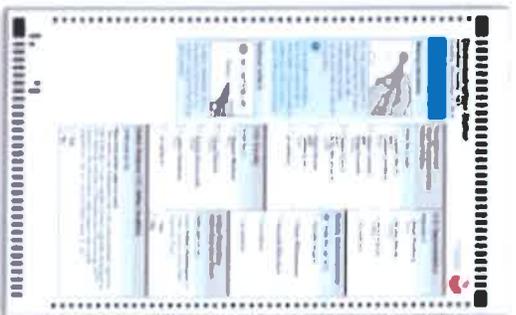


- Election Event Designer (EED)
 - Election definition, ballot styling and production, and tabulator configuration

Single or double sided
Voting target on left or right
Multiple languages



Flexibility in number of columns, font styles, headers, line weights, etc.



All ballots created out of the same database

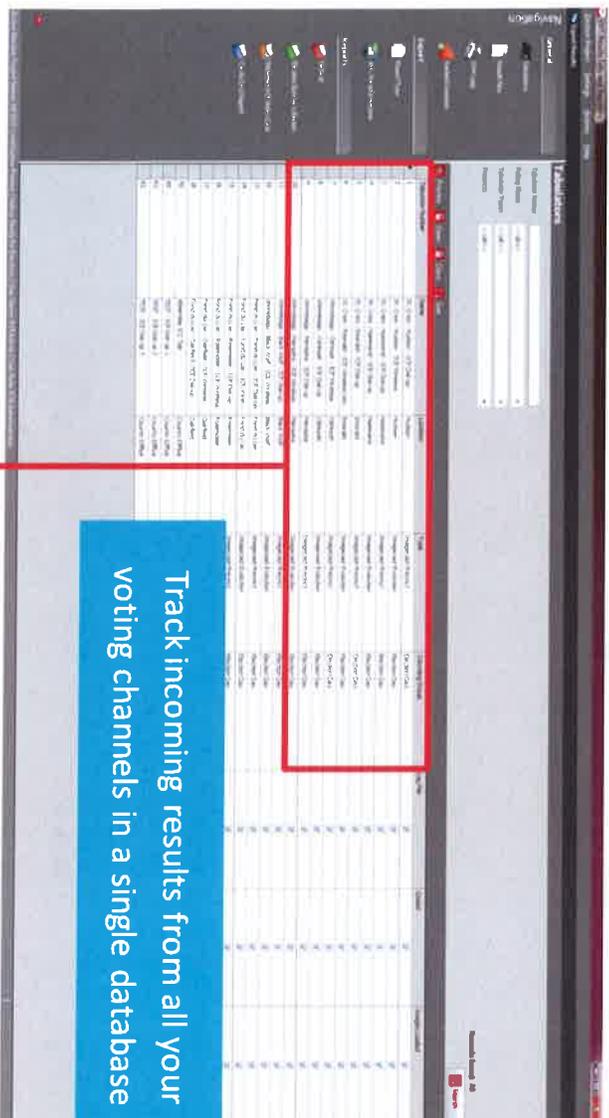
Landscape or portrait style
Variable lengths



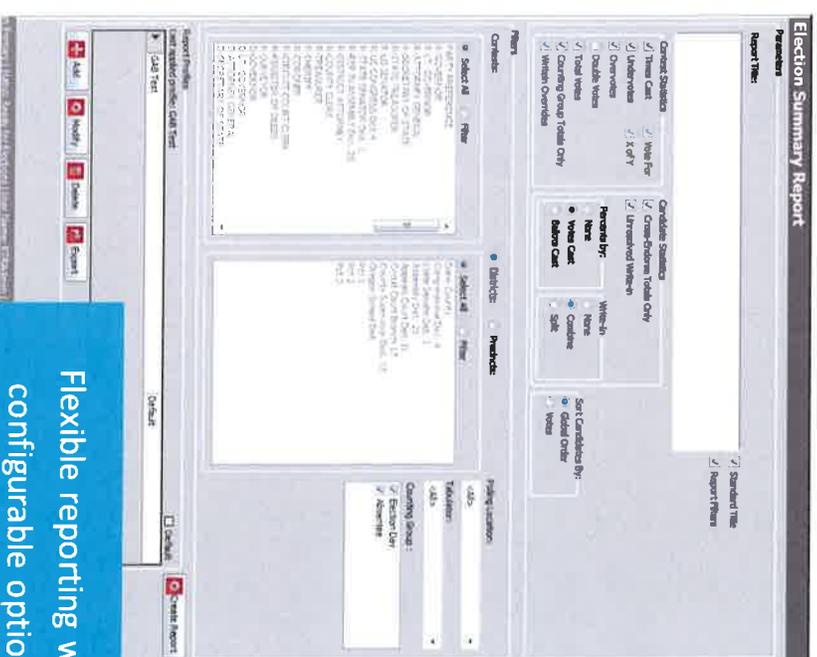
5.0 DEMOCRACY SUITE SYSTEM OVERVIEW: EMS COMPONENTS

RTR

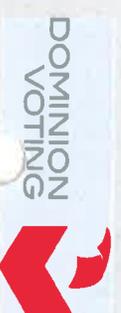
- Results Tally and Reporting (RTR)
 - Tally and publish election results



Tabulator Number	Name	Location	Type	Counting Group
1	St. Croix - Hudson - ICP Dial-up	Hudson	Imagecast Present	Election Day
2	St. Croix - Hudson - ICE Wireless	Hudson	Imagecast Evolution	Election Day
3	St. Croix - Hammond - ICP Dial-up	Hammond	Imagecast Present	Election Day
4	St. Croix - Hammond - ICE Dial-up	Hammond	Imagecast Evolution	Election Day
5	St. Croix - Emerald - ICP Dial-up	Emerald	Imagecast Present	Election Day
6	St. Croix - Emerald - ICE Wireless Ver...	Emerald	Imagecast Evolution	Election Day



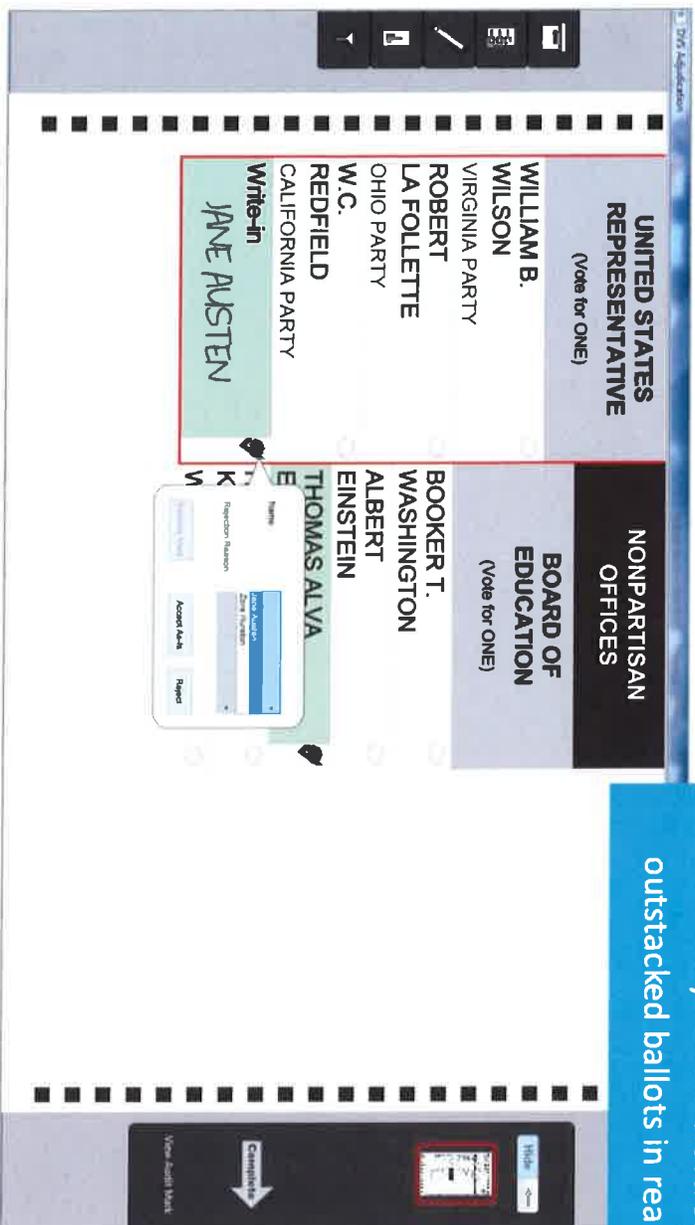
SYSTEM OVERVIEW: RESULTS TALLY AND REPORTING



5.0 DEMOCRACY SUITE SYSTEM OVERVIEW: EMS COMPONENTS



Efficiently review electronically outstacked ballots in real-time



Microsoft Partner
Gold Application Development

Full transparency and auditability
with Adjudicated AuditMark

FAMOUS NAMES
Demonstration Ballot

To VOTE: Completely fill in the oval next to your choice. Use the black mark with a blue or black ink pen or with a pencil.

FEDERAL OFFICES	STATE OFFICES	PROPOSITIONS
UNITED STATES SENATOR (Vote for ONE) WILLIAM B. WILSON VIRGINIA PARTY ROBERT LA FOLLETTE OHIO PARTY W.C. REDFIELD CALIFORNIA PARTY Write-in JANE AUSTEN	STATE SENATOR 37th DISTRICT (Vote for ONE) FLORENCE NORTHGALE ANDREW CARNEGIE FRANCIS SCOTT KEY CALIFORNIA PARTY Write-in	
UNITED STATES REPRESENTATIVE (Vote for ONE) WILLIAM B. WILSON VIRGINIA PARTY ROBERT LA FOLLETTE OHIO PARTY W.C. REDFIELD CALIFORNIA PARTY Write-in JANE AUSTEN	NONPARTISAN OFFICES (Vote for ONE) BOOKER T. WASHINGTON ALBERT EINSTEIN THOMAS ALVA EDISON HELEN KELLER Write-in	

Adjudicated at 2:48 PM on 12/12/2013 by: admun

UNITED STATES SENATOR
Vote for EVERETT DIRKSEN

UNITED STATES REPRESENTATIVE
Adjudicated: Write-in accepted for JANE AUSTEN

STATE SENATOR 37TH DISTRICT
Vote for ANDREW CARNEGIE

BOARD OF EDUCATION
Vote for THOMAS ALVA EDISON

UNITED STATES SENATOR
Vote for EVERETT DIRKSEN

UNITED STATES REPRESENTATIVE
Adjudicated: Write-in accepted for JANE AUSTEN

STATE SENATOR 37TH DISTRICT
Vote for ANDREW CARNEGIE

BOARD OF EDUCATION
Vote for THOMAS ALVA EDISON

SYSTEM OVERVIEW: ADJUDICATION



5.0 DEMOCRACY SUITE SYSTEM CHANGE NOTES

- **In the EMS EED module:**
 - Improved performance and creation of ballot objects when advancing to Election Project Styling phase.
 - Added ability to indicate which Ballot Groups should have their ballots consolidated and vice versa
 - Added the ability to generate a printer calibration sheet.
 - Added ability to manage Voter Activation Codes.
 - Added automatically created security key and election identification element for the Voter Activation process for every election project.
 - Added ability to program security elements for Poll Workers onto Smart Cards from EED.
 - Added extended support for QR Ballots - ICP election files extended to contain QR code information
 - Added support to enter text for languages with ligatures (Bengali, Hindi, Arabic, etc.)
 - Removed surplus DCF files from the EMS build resources.
 - Corrected the removal of a Base/Audio Language from a Choice Prototype.
 - Corrected the RTF Text editing for Elector Groups.
 - Corrected Title and Description radio button behavior when modifying Referendum contests.
 - Removed a surplus audio license key to allow proper audio generation.
- **In the EMS RTR module:**
 - Added option for SoVC and CCR reports to be broken down by precinct portion.
 - Corrected results loading
 - Corrected Election Summary report page breaks and page counts

5.0 DEMOCRACY SUITE SYSTEM CHANGE NOTES

➤ In the Adjudication module:

- Supported by Microsoft Windows 8.1
- Support for adjudication ballots produced by ImageCast® X BMD ballots
- Added scrollbar when there are numerous write-ins in a project with barcoded ballots
- Added ability for the Write-in pop-up window to disappear when scrolling to find a different write-in contest
- Added new report to show how write-ins were resolved
- Updated the AuditMark to reflect the original AuditMark where all contest results are recorded, not just adjudicated actions
- Added ability for user to filter ballots based on specific contests selected
- Added ability to receive/submit batches from/to the CVR service
- Added ability to warn user if they try to select a dis-abled choice
- Improved the application installation process, including security key management
- Improved the Setup Wizard to allow setting up an election to be easier and more intuitive
- Added ability to suspend/resume a project

D-SUITE 5.0 CHANGES FROM 4.14D

D-SUITE CHANGES

- **Election Device Management**
 - Added new product to Democracy Suite
- **ImageCast® Voter Card Activator**
 - Added new product to Democracy Suite
- **ImageCast® X Ballot Marking Device (BMD)**
 - Added new product to Democracy Suite

D-SUITE 5.0 CHANGES FROM 4.14D

DOMINION
VOTING



TABULATORS CHANGES (ICP AND ICC)

➤ In the ImageCast® Central tabulator

- Supported by Microsoft Windows 8.1
- Added support for ImageCast® X BMD ballot scanning and to auto-detect a hand-marked or QR code
- Added support for exporting CVRS
- Improved application installation process

➤ In the ImageCast® Precinct tabulator

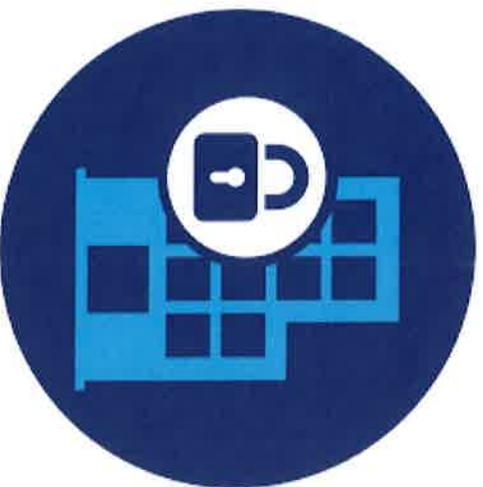
- Improved write-in tape printing
- Improved AVS Ballot Review to only prompt to cast if there are no errors that could be reversed
- Modified the text “CONFIRM” to “Confirm” on the Re-open Polls confirm button to fit text on a single line
- Clarified messaging to user on steps to perform when experiencing a paper jam
- Corrected behavior on LCD and in log when a ballot is returned to the user
- Corrected audio files – pronunciation corrected for “deselected” file and English language selection
- Added ability to configure AVS volume minimum

D-SUITE 5.0 CHANGES FROM 4.14D

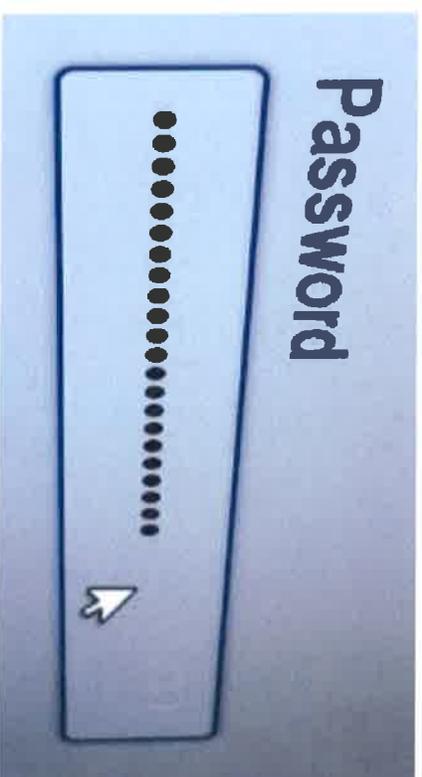
DOMINION
VOTING



DEMOCRACY SUITE 5.0 SECURITY



Secure Central Office



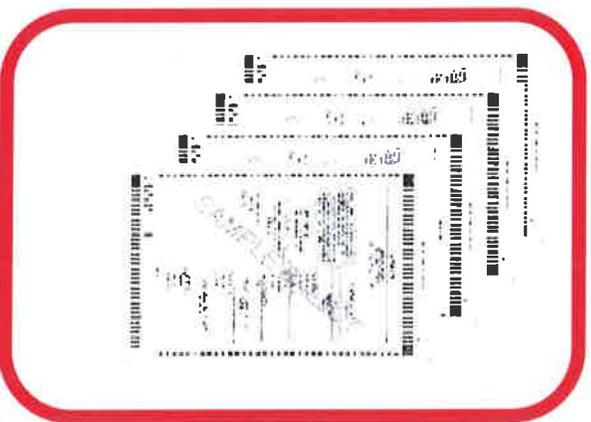
Strong Password

EMS Server, clients, and network access points located in central office with physical access control and disconnected from public networks.

EMS access requires strong passwords and each access attempt is logged.

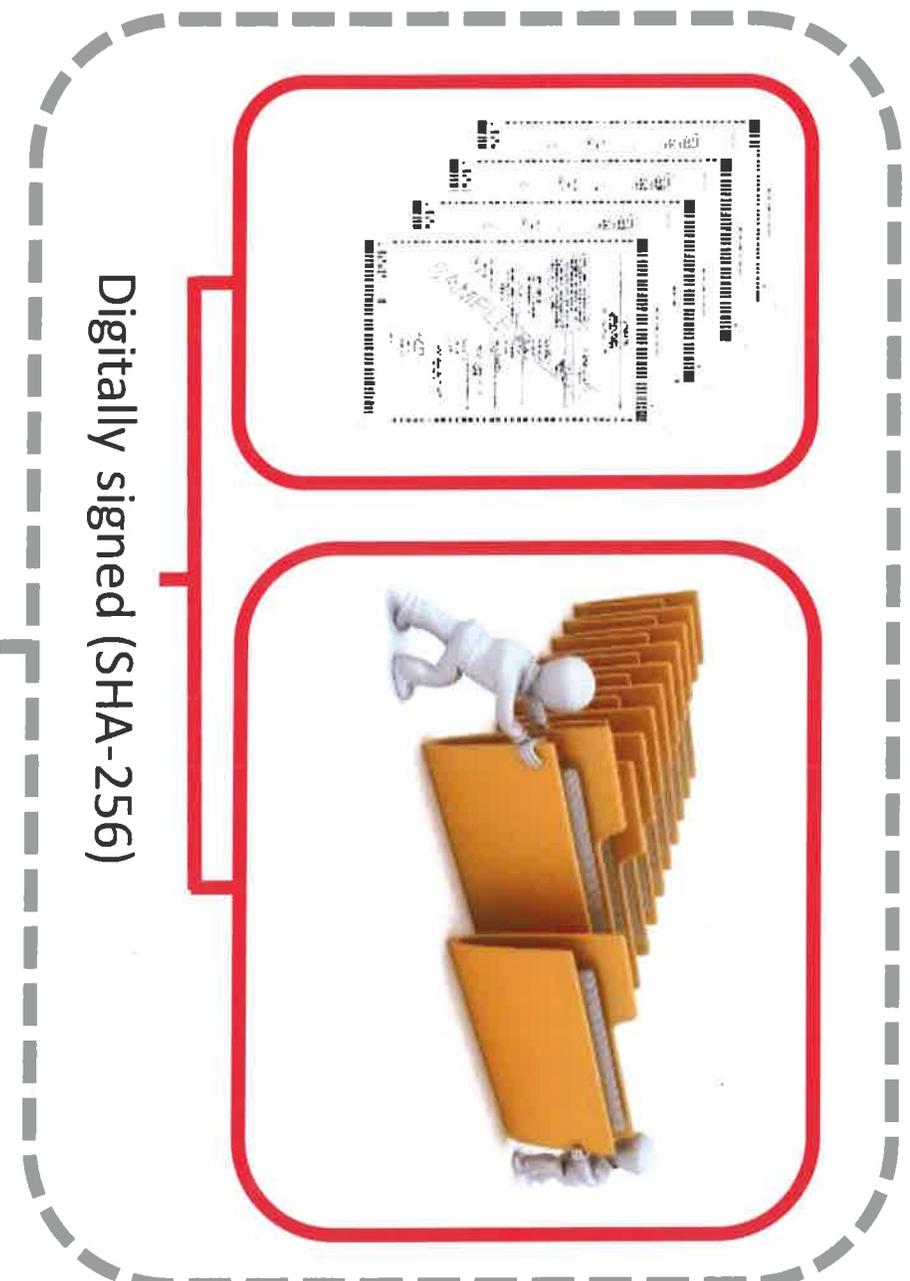
DEMOCRACY SUITE 5.0 SECURITY – EMS ELECTION FILES (1/4)

Both ballot images and election files are digitally signed and encrypted



Digitally signed (SHA-256)

DEMOCRACY SUITE 5.0 SECURITY – EMS ELECTION FILES (2/4)



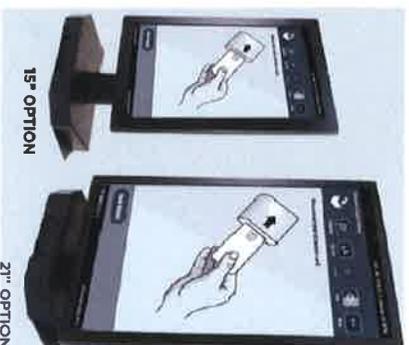
Digitally signed (SHA-256)

Stored on encrypted EMS Server hard drive array

DEMOCRACY SUITE 5.0 SECURITY – TABULATORS AND BALLOT MARKING DEVICE



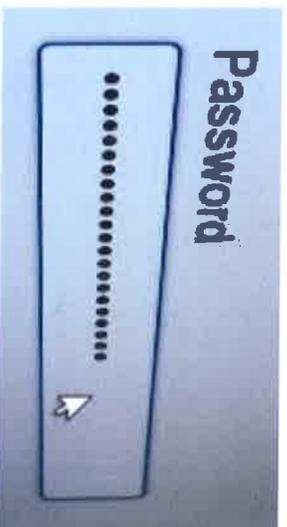
ImageCast Precinct



ImageCast X



ImageCast Central



Password



Security Tokens

5.0 SYSTEM RECERTIFICATION QUESTIONS



TO LEARN MORE ABOUT OUR TECHNOLOGY, PEOPLE AND SERVICES
VISIT DOMINIONVOTING.COM TODAY

Q & A



Unisyn

Freedom Vote 2.0 Ballot
Demonstration

October 9, 2017

Presenters:

Dustin Vanderburg – VP of Henry M.
Adkins and Sons, Inc.

Wes Wagner – Senior Account
Representative –

Barry Herron – Director of Sales for
Unisyn

- EAC – Certification Number
EAC NUMBER PENDING



October 2, 2017

Mark Goins
 Director of Elections
 312 Rosa L. Parks Avenue, 9th Floor
 William R. Snodgrass Tower
 Nashville, Tennessee 37243

Dear Mr. Goins,

Please accept this letter as Unisyn Voting Solutions requests to formally begin the Tennessee State Certification process on the OpenElect Voting System 2.0. The system completed VSTL testing at Pro V&V on August 31, 2017. The test report has been submitted to the EAC for final review and should be approved shortly.

The system consists of the following components:

System Component	Software or Firmware Version	Hardware Version	Description
OVO	2.0		Precinct Ballot Scanner
FVT – Tablet Voting Device	2.0		Ballot Marking Device Early voting station Accessible voting station
OVI – 15’ Screen	2.0		Ballot Marking Device Early voting station Accessible voting station
OVCS	2.0	2.0	Central Scanner – M160
OVCS	2.0	2.0	Central Scanner- DRX10C
OVO Ballot Box 1	--	1.1	Metal Rolling
OVO Ballot Box 2	--	1.2	Plastic Rolling
OVO Ballot Box 3	--	1.2	Plastic Rolling
OVO Ballot Box 4	--	1.2	Plastic (collapsible corrugated)
OVO Ballot Box - 5	--	1.3	Plastic Rolling
OVO Ballot Box - 6	--	1.3	Plastic Rolling
Ballot Layout Manager	2.0	--	EMS

Election Manager(EM)	2.0	--	EMS
Software Server(SS)	2.0	--	EMS
Election Server(ES)	2.0	--	EMS
Tabulator Client(TC)	2.0	--	EMS
Tabulator(Tab)	2.0	--	EMS
Tabulator Reports(TR)	2.0	--	EMS
Adjudicator	2.0	--	EMS
Scripter	2.0	--	EMS
Validator	2.0	--	EMS

Thank you in advance for your assistance with this matter.

Sincerely,

Chris Ortiz

Digitally signed by Chris Ortiz
 DN: cn=Chris Ortiz, o=Unisyn Voting
 Solutions, ou,
 email=cortiz@unisynvoting.com, c=US
 Date: 2017.10.02 13:50:13 -07'00'

Chris Ortiz
 Director, Business Development & Certification



- ◆ Freedom to vote via touch
- ◆ Freedom to use as Ballot Marking Device
- ◆ Freedom to incorporate ballot populated in advance from smart phone or tablet device
- ◆ Freedom to interface with industry known poll books
- ◆ Freedom to use as ADA Compliant Device
- ◆ Freedom for disabled voter to vote "using the same methodology and equipment" as sighted voter
- ◆ Freedom to use Screen Reader mode for disabled voters
- ◆ Freedom to use as an Early Voting, Election Day Vote Center and Walk-in Absentee solution
- ◆ Freedom to set on table or in custom, privacy voting booth

OpenElect FreedomVote (FVT) provides voters the option to initialize their ballot by scanning the bar code created by a poll book, navigate through the ballot like a touchscreen, use a custom designed braille encoded keypad or populate your ballot by scanning a bar code from your personal electronic device.

FreedomVote accommodates voters in Early Voting, an Election Day Vote Center and multiple precinct voting locations. FreedomVote is fully HAVA compliant and produces a printed ballot which may be reviewed by the voter prior to being scanned via secure tabulation using the OpenElect® Voting Optical Scan (OVO®) or the OpenElect Voting Central Tabulation System (OVCS).



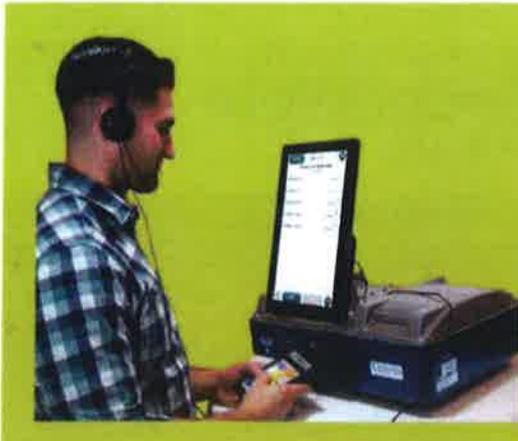
HOW IT WORKS:



Voter checks-in and receives a barcode from pollbook to initialize their ballot

Vote via personal electronic device, touchscreen or keypad

Voter receives a printed ballot to insert into an OVO to cast the vote



Americans with Disabilities Act (ADA) Features

- **Optional:** HAVA compliant keypad, sip-n-puff, zoom-in ballot and multi-lingual audio functionality
- Allows voters to prepare ballots independently and privately
- Allows voters to correct mistakes (second chance voting)
- Incorporates Screen Reader mode

Millions of voters have securely and easily cast their votes using Unisyn Voting Solutions

High Levels of Security

The FVT contains the same high level of security as all OpenElect Products. Physical measures, coupled with comprehensive procedures, ensure proper and effective security and integrity of equipment during preparation, testing and use.



Flexibility in Program Design and Support Services

Resources, best practices and leading-edge technology provides our clients with the skills and tools needed to efficiently conduct elections.

Features and Benefits

- Supports multiple languages
- Rank Choice Voting (RCV)
- Modular design provides easy transport and storage
- Easy to set up, open and close polls
- Ballots are printed in easy to read format for review
- Audio ballot review technology
- Ballots are compatible with OpenElect Voting Optical Scan
- Produces complete precinct audit logs and reports

Service and Support:

- Pre-Election Support
- Results Reporting
- Media Support
- Voter Education
- Administration Management
- Technical Support
- Maintenance
- Printing
- Supplies

Unisyn Voting Solutions was the *first* Company to offer a precinct based digital optical scanning system certified to the 2005 Voluntary Voting System Guidelines set forth by the U.S. Election Assistance Commission (EAC). We have maintained that technology leadership position with the introduction of the FVT.

Our OpenElect suite of products provides a wide array of equipment choices which allows us to provide the perfect match for the way you want to conduct your elections.

Contact our Election Specialists today to learn more!

For additional information contact:

Tel: +1 760 734-3233 Fax: +1 760 598-0219

Email: marketing@unisynvoting.com

Visit us on the web: www.unisynvoting.com

World-Class Service

Commitment to
Excellence

Professional Support

Leading Innovation in the Election Industry

Unisyn OpenElect® Voting Optical Scan (OVO) is a comprehensive and secure paper-based digital optical scan voting system that both validates and tabulates ballots at each precinct.

Supports Ranked Choice Voting (RCV)

- Familiar runoff process done in a single election
- Works equally well when there are multiple seats to fill
- Combines two elections into one, so voters only have to make one trip to the poll

Integrity, Confidence and Flexibility

- 2005 Certification of the Voluntary Voting System Guidelines (VVSG) from the United States Election Assistance Commission (EAC)
- Hardened Linux and Java platform provides multiple layers of security and flexibility



High levels of Physical and Software Security

Physical measures, coupled with comprehensive procedures, ensure proper and effective security and integrity during equipment preparation, testing, repair and use.

Transparent System that Supports Accountability

- Reviewed by an EAC-accredited Voting System Testing Laboratory (VSTL)
- Lab reports are made public as part of our transparent process
- Software code is disclosed as part of a procurement process with a jurisdiction

OVO Features and Benefits

- Self contained ballot counter includes a full color touch screen display, ballot scanner, and precinct report printer
- Provides the voter easy to follow onscreen instructions for all valid operations
- Scans ballots quickly
- Records and deposits ballots into a locked ballot box
- Prints reports and receipts
- Modular design and compact size provides easy transport and set-up



2005 VVSG Certified

Java and Hardened
Linux Platform

Questions?

Please visit: www.unisynvoting.com

Call: 1-760-734-3233

Email: marketing@unisynvoting.com

Scalability · Transparency

Flexibility

- Pre Election Support
- Results Reporting
- Media Support
- Voter Education
- Administration Management
- Technical Support
- Maintenance
- Printing
- Supplies

OpenElect Voting Optical Scan
(OVO)

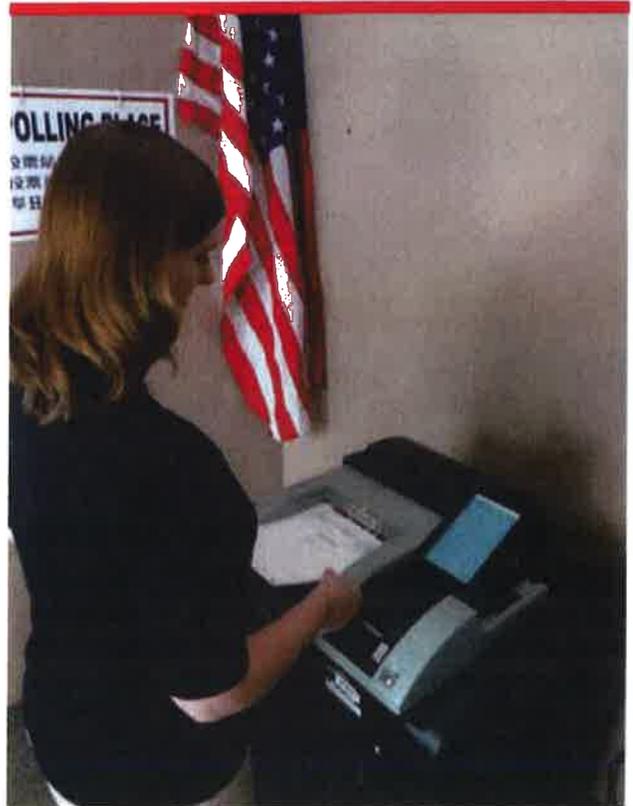
OpenElect Voting Interface (OVI)

OpenElect Voting Central Scan
(OVCS)

OpenElect Central Suite (OCS)

Flexibility in Program Design and Support Services

Resources, best practices and leading-edge technology provides our clients with the skills and tools needed to revolutionize local elections.



*"Four letters describe Unisyn Voting Solutions - **SAFE**: **Secure, Accurate, Flexible and Easy** ... No wonder that they're causing such a stir in the election community. The Unisyn OVO will change the way elections are managed in both the public and private sectors."*

Unisyn Voting Solutions® is a different kind of company! Embracing the standards set forth by the voting community, we are the *first* Company to offer a digital optical scanning system certified to the 2005 Voluntary Voting System Guidelines set forth by the U.S. Election Assistance Commission (EAC).

Our products provide a wide array of choices in selecting a voting system. Contact our Election Specialists today to learn more!

Unisyn Voting Solutions®: 2310 Cousteau Court, Vista CA 92081
T) 1-760-734-3233 F) 1-760-598-0219 E) marketing@unisynvoting.com
W) www.unisynvoting.com © 2010



OpenElect® Central Suite (OCS)

Unisyn OpenElect® Central Suite (OCS) is a Linux-based suite of software applications that works together to define and configure an election:

Complete Control over Your Election Process

- The product suite provides maximum flexibility and customization while guiding the user through every step of the process
- User friendly graphical interface, with familiar interface conventions
- Consistent screen formats that make them easy to learn and easy to use
- Compiles and tabulates vote results
- Provides reports by precinct, by district, by county and statewide

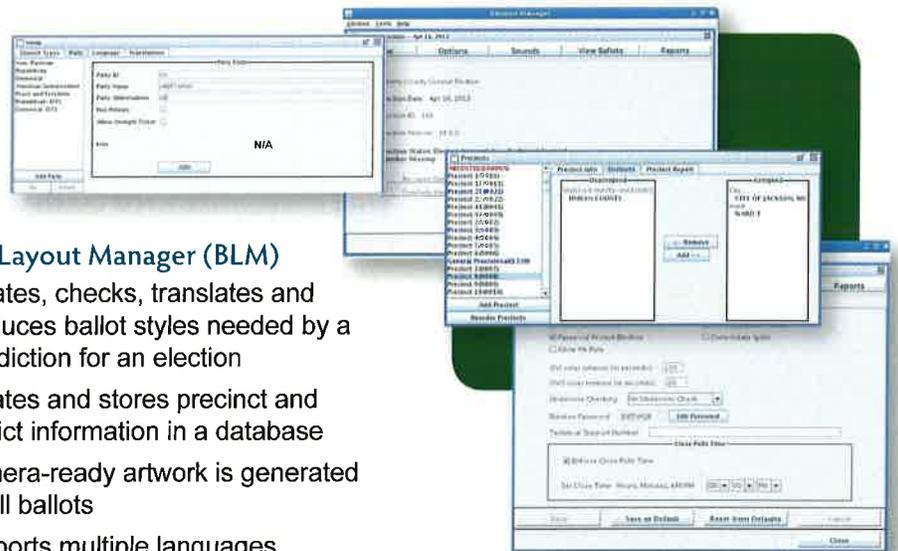


World-Class Service
Commitment to
Excellence

Professional Support

Java and Hardened
Linux Platform

The Unisyn OpenElect Central Suite (OCS) works in conjunction with our 2005 VVSG Certified Linux-platform digital scan products:



Ballot Layout Manager (BLM)

- Creates, checks, translates and produces ballot styles needed by a jurisdiction for an election
- Creates and stores precinct and district information in a database
- Camera-ready artwork is generated for all ballots
- Supports multiple languages
- Supports Ranked Choice Voting (RCV)

Election Manager (EM)

- Converts the Unisyn election definition file to a Unisyn-specific encrypted XML format
- Allows the jurisdiction to add voting device specific options
- Flexibility to check contests for undervotes, whether to allow or disallow certain features and other options
- Creates and manages Supervisor and Maintenance Technician logins and passwords
- Produces a CD containing encrypted compressed files that are loaded onto the voting devices
- CD is also used by post-election OVS components for election day vote processing

Questions?

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Call: 1-760-734-3233

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Scalability • Transparency

Flexibility

- Pre Election Support
- Results Reporting
- Media Support
- Voter Education
- Administration Management
- Technical Support
- Maintenance
- Printing
- Supplies

OpenElect Voting Optical Scan
(OVO)

OpenElect Voting Interface (OVI)

OpenElect Voting Central Scan
(OVCS)

OpenElect Central Suite (OCS)

Election Server (ES)

- Sets the correct system time on the voting devices
- Uses the Election CD created by the Election Manager component to download new election data (via a closed and secure network) to OVO and OVI voting devices

Tabulator Client (TC)

- Following an election, transport media (Flash memory) from each poll location are delivered to a central count location, uploaded and converted to a database format that the jurisdiction can use for Unofficial and Official Canvass Reporting
- Retrieves, decrypts and transfers the vote files from the transport media to the Tabulator
- Resides on the same PC as the Tabulator or on a PC that communicates with the Tabulator

Tabulator

- Unisyn's Tabulator receives and validates uploaded voting data and provides a status of uploaded files
- Provides Ranked Choice Voting (RCV) functionality
- Uses the Tabulator database to store results from all precincts

Tabulator Reports (TR)

- Accesses data from the Tabulator Database to generate the necessary Unofficial and Official reports
- As precinct results are uploaded, the vote tabulator generates and updates a number of reports including:
 - Status reports
 - Consolidated Election Report, summarized by precinct
 - Voter Turnout report and other reports such as providing election results to the media
- The vote files maintain both an administrative audit trail and a voter audit trail that provide capability to retrieve ballot images

Transparent Source Code that Supports Accountability

- Reviewed by EAC-accredited Laboratory
- Lab Reports are made public as part of our transparent process
- Software code is disclosed as part of a procedure process with a jurisdiction

*"In an industry challenged with old technology - One Company has stepped up to the plate. That company is **Unisyn Voting Solutions.**"*

Unisyn Voting Solutions® is a different kind of company!

Embracing the standards set forth by the voting community, we are the *first* Company to offer a digital optical scanning system certified to the 2005 Voluntary Voting System Guidelines set forth by the U.S. Election Assistance Commission (EAC).



Our products provide a wide array of choices in selecting a voting system. Contact our Election Specialists today to learn more!

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World-Class Service

Commitment to
Excellence

Professional Support

Java and Hardened
Linux Platform

Unisyn Voting Solutions®...Integrity and Passion in Everything We Do!

Unisyn understands that the successful implementation of any new voting system relies on the team that operates it. That is why we work closely with election management, poll workers, technicians and warehouse personnel to help your election run smoothly and efficiently. This includes:

- Partnership that provides security, transparency, flexibility and scalability
- Leading-edge technology that makes reporting easy to manage and secure
- Customized design and delivery of support services and resources
- Highly qualified personalized and interactive staff training
- Nationwide service – we are available to come to you

Public and Private Election Services

- Tabulation System Reports
- Ongoing Maintenance
- Service Bureau Ballot Layout
- Early Voting and Absentee Ballots

Headquarters Election Staff

- Layout and design of ballots
- Candidate entry
- Tabulation
- Identification and resolution of potential problems

Poll Workers

Unisyn offers a "Train the Trainers" program by providing hands-on, classroom and video instruction so that trainers can easily and effectively instruct the numerous polling place workers in all functions of the Unisyn system used in their precinct.

Technicians and Warehouse Staff

We provide training for:

- Technical service (Unisyn-qualified voting machine repair technician)
- Functionality and maintenance of machines
- All hardware components including repair and replacement of parts
- Warehouse operations, and in the proper preparation, delivery and return of voting units
- "How to troubleshoot problems on Election Day"



Questions?

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Call: 1-760-734-3233

Email: marketing@unisynvoting.com

"Unisyn provides a comprehensive and customized program that helps jurisdictions of all sizes obtain fast and accurate results. The entire company is focused on making sure that every vote will actually be counted."

Scalability • Transparency
Flexibility



- Pre Election Support
- Results Reporting
- Media Support
- Voter Education
- Administration Management
- Technical Support
- Maintenance
- Printing
- Supplies

OpenElect Voting Optical Scan
(OVO)

OpenElect Voting Interface (OVI)

OpenElect Voting Central Scan
(OVCS)

OpenElect Central Suite (OCS)

Media/Public Information Services

- A media specialist to help with public education, establishing an image of transparency with local media and providing pertinent information to enhance a positive image of the Election Office
 - Hosted news conference to introduce and demonstrate the ease of use of the new voting machines
 - Literature distribution regarding the new system, including sample ballots
 - Press release to announce the contract signing
 - "Open House" with voting units at the Election Office for people to practice how to operate the machine and how to cast their ballot
 - Staff training on how to demonstrate the voting system to others, such as the public and media

Maintenance Services

- Unisyn Voting Solutions provides a full complement of services for your election requirements, these include:
 - Service and maintenance of all voting unit components
 - Warehouse services, including storage, and set up

Printing Services

Unisyn provides jurisdiction printing services which include:

- Early Voting, Absentee and Election Day Ballots
- Poll worker manuals
- Precinct kits
- Test decks

We also provide assistance for Ballot Management programs. This includes the coordination between the election staff and the Printer that is designated to print all required ballots in all ballot formats.

Election Supplies

Unisyn offers all election supplies required to conduct a successful election. Whether you require ballots of any type, voting booths, ballot boxes, vote-here signs, sample ballots, precinct kits, security seals and miscellaneous expendable supplies, we can accommodate any need.

Unisyn is a Different Kind of Company!

We understand that there are many dynamics involved in running a successful election. For instance, ballots that violate basic design principles can cause votes to be lost. That is why we partner with you to collaboratively design and deliver printed materials, along with staff training and support materials that are tailored to achieve success. Using our expertise and leading-edge technology, we help clients to instill voter confidence, while delivering optimal service and enhancing security. Contact our Election Specialists today to learn more!

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Unisyn
Voting
Solutions

OpenElect® Voting Central Scan (OVCS)

Innovative and Versatile

2005 VVSG Certified

ADA

Early Voting

Ranked Choice Voting

Java and Hardened Linux
Platform

The OpenElect® Voting Central Scan (OVCS) resides at election headquarters. It is a bulk scanner designated to read absentee and provisional ballots, and to perform recounts. The OVCS also captures Write-In data images and produces a Write-In image report for manual processing upon request.

Enhanced Speed and Security

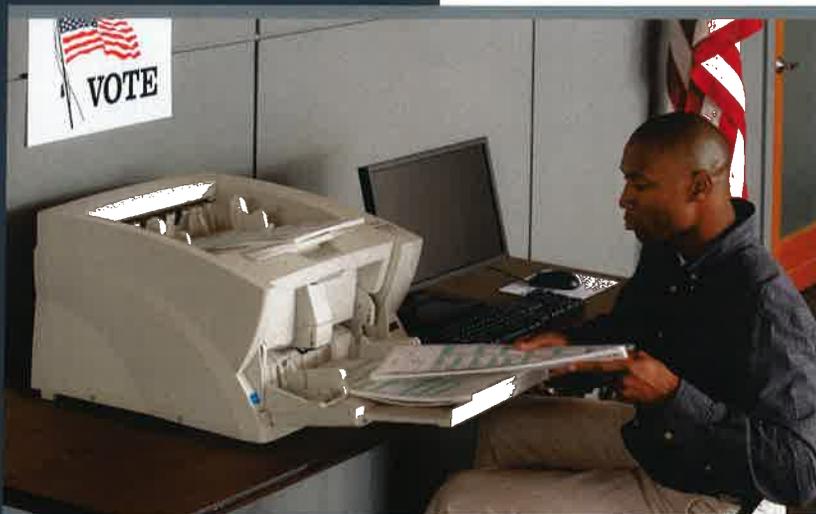
- Hardened Linux/Java multi-tiered platform provides enhanced security
- Transparent source code – available for review as part of a jurisdiction's procurement process
- Capable of uploading results directly to the tabulator without intermediate steps

Multifaceted, Flexible and Comprehensive

- Accommodates Ranked Choice Voting (RCV)
- Provides a permanent record of voter choices
- Captures full ballot images
- Extracts write-in entries from ballots and presents consolidated reports for each contest by precinct
- Can be used for central tabulation and recounts

High levels of physical and software security

Physical measures, coupled with comprehensive procedures, ensure proper and effective security and integrity during equipment preparation, testing, repair and use.



Questions?

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"When It Came To Innovation, Unisyn invested to retool the traditional election technology; adopting a new business model and nurturing a support network of peer-reviewed trusted third parties, industry authorities and skilled workers. And the change, led to the renaissance of an entire industry."

Scalability • Transparency Flexibility

- Pre-Election Support
- Results Reporting
- Media Support
- Voter Education
- Administration Management
- Technical Support
- Maintenance
- Printing
- Supplies

Adjudication

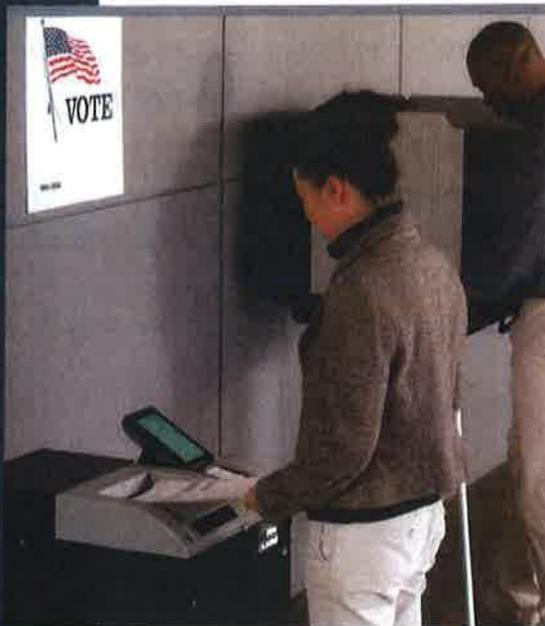
Provides adjudication whereby a qualified group is allowed to review error conditions on a ballot and adjust the ballot record according to the voter's perceived intent.

The OVCS allows for:

- Casting of ballots that cannot be read through system due to defacement of ballot
- Resolution of overvote/undervote conditions on a ballot
- Provides all-electronic handling of write-ins (without manual sorting)
- Provides method for visual validation of system function

Flexibility in Program Design and Support Services

Resources, best practices and leading-edge technology provides our clients with the skills and tools needed to efficiently conduct local elections.



Features and Benefits

- Units can be scaled, depending on number of ballots
- Flexibility to read various ballot sizes and two-sided ballots
- Capable of uploading results directly to tabulation without the need for intermediate steps

OpenElect Voting Optical Scan (OVO)

OpenElect Voting Interface (OVI)

OpenElect Voting Central Scan (OVCS)

OpenElect Central Suite (OCS)

Unisyn Voting Solutions® is a different kind of company!

Embracing the standards set forth by the voting community, we are the *first* Company to offer a digital optical scanning system certified to the 2005 Voluntary Voting System Guidelines set forth by the U.S. Election Assistance Commission (EAC).



Our products provide a wide array of choices in selecting a voting system. Contact our Election Specialists today to learn more!

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Unisyn
Voting
Solutions

Unisyn Voting Solutions OpenElect® *mini*OVCS



The Unisyn OpenElect *mini*OVCS provides a small, portable and cost efficient ballot scanning solution.

As an alternative to the Unisyn OpenElect OVCS ballot scanning system, the *mini*OVCS allows small to medium sized jurisdictions the option of a lower cost, space saving device.

The OpenElect *mini*OVCS scanning system is an ideal solution for jurisdictions that incur fluctuations in their volume of absentee ballots and are seeking a low cost solution that can be easily expanded upon as required.

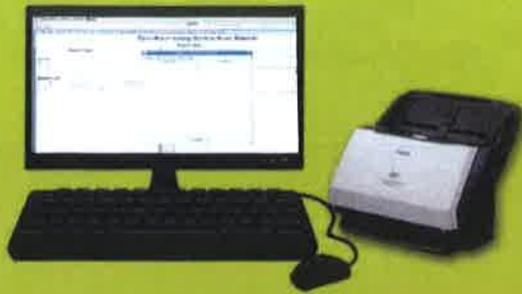
- ◆ Easy to operate; minimal training required
- ◆ Duplex scanning
- ◆ Quickly scans large volumes of ballots
- ◆ Compact size for economy of space and portability
- ◆ Fast, accurate and reliable
- ◆ Accommodates a range of differing ballot sizes
- ◆ Designed to read Absentee, Vote Center, Early Voting and Election Day ballots



OpenElect *mini*OVCS Software

Same reliable and easy-to-use software that's incorporated into the OpenElect OVCS scanner

- ◆ Hardened Linux/Java multi-tiered platform provides enhanced state-of-the-art security
- ◆ Allows for selecting and sorting of ballots that require review
- ◆ Results are uploaded directly to the OpenElect Central Suite (OCS) Tabulator
- ◆ Accommodates Rank Choice Voting (RCV)
- ◆ Provides a permanent record of voter choices
- ◆ Extracts write-in entries from ballots and presents consolidated reports for each contest by precinct
- ◆ Ideal for central tabulation and recounts



OpenElect *mini*OVCS



OpenElect OVCS

Millions of voters have securely and easily cast their votes using Unisyn Voting Solutions



High Levels of Security

The *mini*OVCS contains the same high level of security as all of the Unisyn OpenElect Products. Physical measures, coupled with comprehensive procedures, ensure proper and effective security and integrity of equipment during preparation, testing and use.

Flexibility in Program Design and Support Services

Resources, best practices and leading-edge technology provides our clients with the skills and tools needed to efficiently conduct elections.

Service and Support:

- Pre-Election Support
- Results Reporting
- Media Support
- Voter Education
- Administration Management
- Technical Support
- Maintenance
- Printing
- Supplies

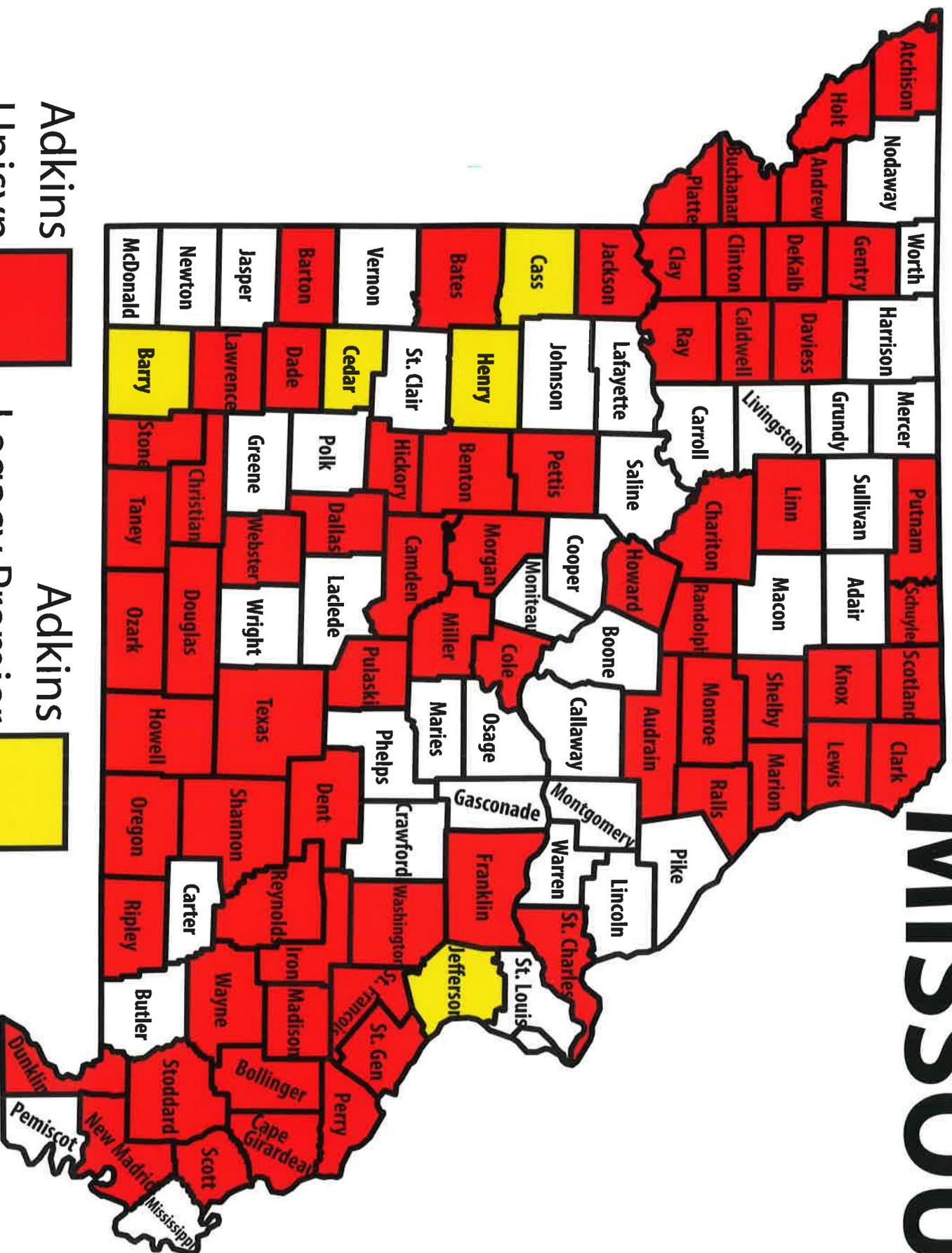
Unisyn Voting Solutions was the *first* Company to offer a precinct based digital optical scanning system certified to the 2005 Voluntary Voting System Guidelines set forth by the U.S. Election Assistance Commission (EAC).

Our OpenElect suite of products delivers a wide array of equipment choices which allows us to provide the perfect match for the way you conduct your elections.

Contact our Election Specialists today to learn more!

For additional information contact:
Tel: +1 760 734-3233 Fax: +1 760 598-0219
Email: marketing@unisynvoting.com
Visit us on the web: www.unisynvoting.com

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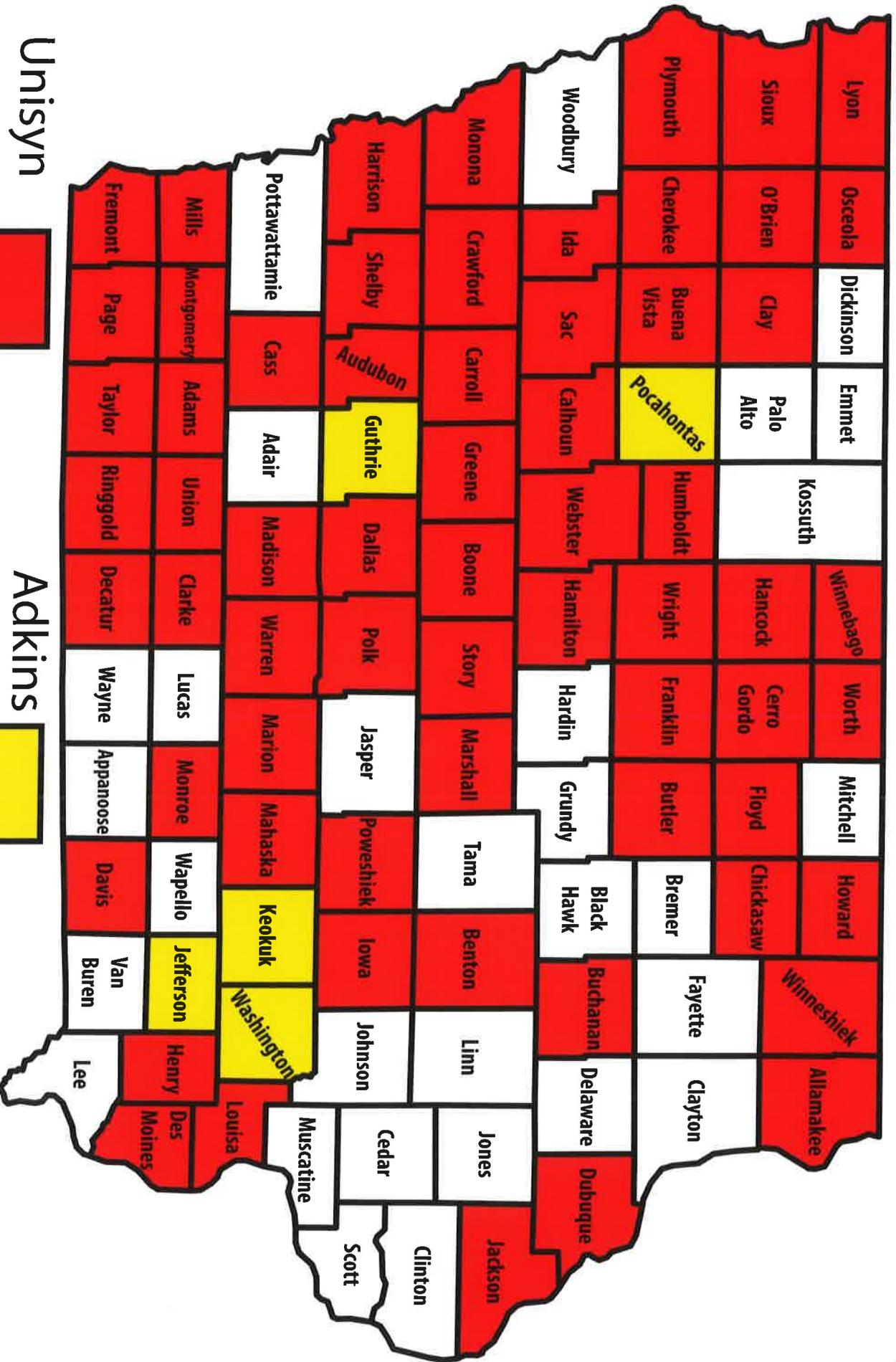
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