



United States Election Assistance Commission

Certificate of Conformance



ES&S Unity 3.4.1.0
Election Systems & Software

The voting system identified on this certificate has been evaluated at an accredited voting system testing laboratory for conformance to the *2002 Voting System Standards (2002 VSS)*. 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: Unity

Model or Version: Version 3.4.1.0

Name of VSTL: NTS

EAC Certification Number: ESSUnity3410

Date Issued: April 4, 2014

*Chief Operating Officer & Acting Executive Director
U.S. Election Assistance Commission*

Scope of Certification Attached

Manufacturer: *Election Systems & Software*
System Name: *Unity 3.4.1.0*
Certificate: *ESSUnity3410*

Laboratory: *Wyle Laboratories*
Standard: *VSS 2002*
Date: *April 4, 2014*



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:

ES&S Unity 3.4.1.0 is a paper-based, digital scan voting system made up of the Election Management System (EMS), Vote Tabulation Devices, Polling Place American Disability Act (ADA) Devices, and Central Count Digital Scanners. The system has the following components: AutoMARK Information System (AIMS), Audit Manager (AM), Election Data Manager (EDM), Hardware Programming Manager (HPM), ES&S Ballot Image Manager (ESSIM), Election Reporting Manager (ERM), Log Monitor Service, and VAT Previewer. The system can be setup to support one or more of the following hardware components: DS200 Precinct Tabulator, Model 100 Precinct Tabulator, AutoMARK Voting Assist Terminal, Model 650 Central Tabulator, and DS850 Central Tabulator.

The ES&S Technical Data Package was the source for much of the information in this document.

DS200 Precinct Tabulator

The DS200 is a digital scan paper ballot tabulator designed for use at the polling place level. After the voter marks a paper ballot, their ballot is inserted into the unit and immediately tabulated. The tabulator uses a high-resolution image-scanning device to image the front and rear of the ballot simultaneously. The resulting ballot images are then decoded by a proprietary recognition engine.

Model 100 Precinct Tabulator

The Model 100 is a precinct-based, voter-activated paper ballot tabulator that uses Intelligent Mark Recognition (IMR) visible light scanning technology to detect completed ballot targets. The Model 100 is designed to alert voters of overvotes, undervotes and blank ballots. It accepts ballots inserted in any orientation. Once the ballot is scanned by the Model 100, it is passed to the integrated ballot box.

AutoMARK Voter Assist Terminal (VAT)

The AutoMARK VAT assists voter with disabilities by marking optical scan ballots. The AutoMARK VAT includes two user interfaces to accommodate voters who are visually or physically impaired and voters who are more comfortable reading and/or hearing instructions or choices in an alternative language. The AutoMARK is equipped with a touch screen and keypad. The touch screen interface includes various colors and effects to prompt and guide the voter through the ballot marking process. Each key had both Braille and printed text labels designed to indicate function and a related shape to help the voter determine its use.

Model 650 Central Tabulator

The Model 650 is a high-speed and optical scan central ballot counter. During scanning, the Model 650 prints a continuous audit log to a dedicated printer and can print results directly from the scanner to another printer. The M650 can transfer results to a Zip Disk that officials use to generate results using Election Reporting Manager. The M650 is capable of sorting write-ins, blanks, overvotes and illegal ballots.

DS850 Central Tabulator

The DS850 is a high-speed and digital scan central ballot counter. During scanning, the DS850 prints a continuous audit log to a dedicated audit log printer and can print results directly from the scanner to a second connected printer. The scanner saves results internally and to results collection media that officials can use to format and print results from a PC running Election Reporting Manager. The DS850 has an optimum throughput rate of up to 365 ballots per

minute and uses cameras and imaging algorithms to image the front and back of a ballot, evaluate the results and sort ballots into discrete bins to maintain continuous scanning.

AutoMark Information System (AIMS)

AIMS is a windows-based election management system software application used to define election parameters for the VAT including functionality to import election definition files produced by the Unity EMS and create VAT flash memory cards.

VAT Previewer

The VAT Previewer is an application within the AIMS program that allows the user to preview audio text and screen layout prior to downloading election-day media for the AutoMARK.

Audit Manager (AM)

The AM utility provides security and user tracking for Election Data Manager and ES&S Ballot Image Manager. Audit Manager runs in the background of the other Unity programs and provides password security and a real-time audit log of all user inputs and system outputs. Election coders use Audit Manager to set Unity system passwords and track user activity.

Election Data Manager (EDM)

The EDM is the entry point for the Unity Election Management System. Election Data Manager is a single-entry database that stores precinct, office, and candidate information. Data entered for an initial election is stored to a re-usable database to be recalled and edited for all elections that follow. Election Data Manager is used in conjunction with other Unity software to format and print ballots, program ballot scanning equipment, and produce Election Day reports.

ES&S Ballot Image Manager (ESSIM)

The ESSIM uses ballot style information created by Unity Election Data Manager to display the ballots in a what you see is what you get design interface. Users can apply typographic formatting (font, size, attributes, etc.) to individual components of the ballot. Text and graphic frames can also be added to the ballot.

Hardware Programming Manager (HPM)

The HPM uses the election specific database created with Election Data Manager and ES&S Ballot Image Manager to program the appropriate media for ES&S tabulation devices. Hardware Programming Manager converts the ballot layout data into the format required for each ES&S tabulator. HPM then writes this data to the appropriate media required; a USB flash drive for the DS200 and DS850, a PCMCIA card for the Model 100, a CF card for the AutoMark or a Zip disk for Model 650 tabulators.

Election Reporting Manager (ERM)

ERM generates paper and electronic reports for election workers, candidates, and the media. Jurisdictions can use a separate ERM installation to display updated election totals on a monitor as ballot data is tabulated, and send results reports directly to media outlets. ERM supports accumulation and combination of ballot results data from all ES&S tabulators. Precinct and accumulated totals reports provide a means to accommodate candidate and media requests for totals and are available upon demand. High-speed printers are configured as part of the system accumulation/reporting stations- PC and related software.

Log Monitor Service

The Log Monitor Service is a Windows Service that runs in the background of any active ES&S Election Management software application to monitor the proper functioning of the Windows Event Viewer. The Log Monitor Service closes any active ES&S software application if the system detects the improper deactivation of the Window Event Viewer.

Certified System before Modification:

Election Systems & Software Unity 3.2.1.0

Certificate ID: ESSUnity3210

Election Systems & Software Unity 3.4.0.0

Certificate ID: ESSUnity3400

Anomalies and/or Additions addressed in Unity 3.4.1.0:

The Unity 3.4.1.0 provided upgrades from the Unity 3.4.0.0 to the following system hardware and components:

1. Election Management System (EMS)- Software Upgrades and introduction of Texas Audit Log Printer
 - a. Election Data Manager
 - b. ES&S Ballot Image Manager
 - c. Hardware Programming Manager
 - d. Election Reporting Manager
 - e. Log Monitor Service
2. Vote Tabulation Devices- Software and Hardware Upgrades
 - a. DS200
3. Central Count Digital Scanners- Software Upgrades
 - a. DS850

Tested Marking Devices:

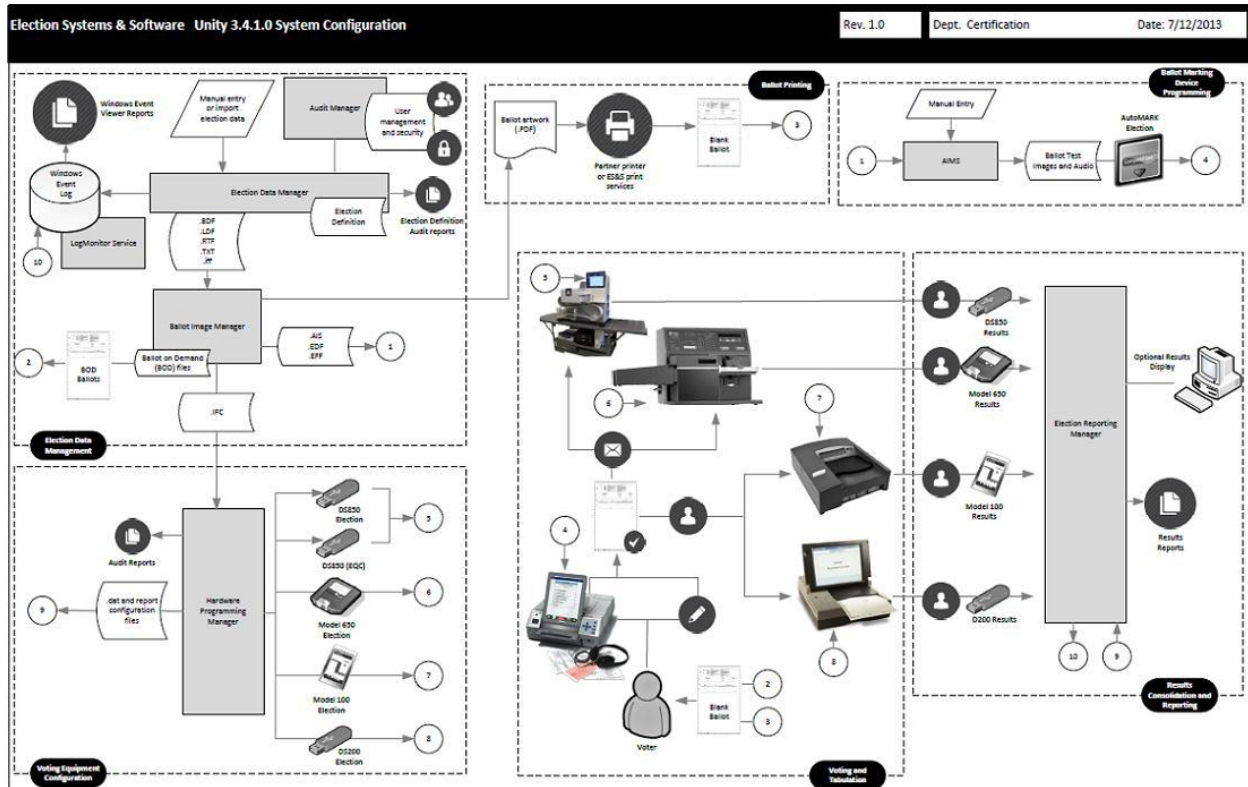
- BIC Grip Roller

Language capability:

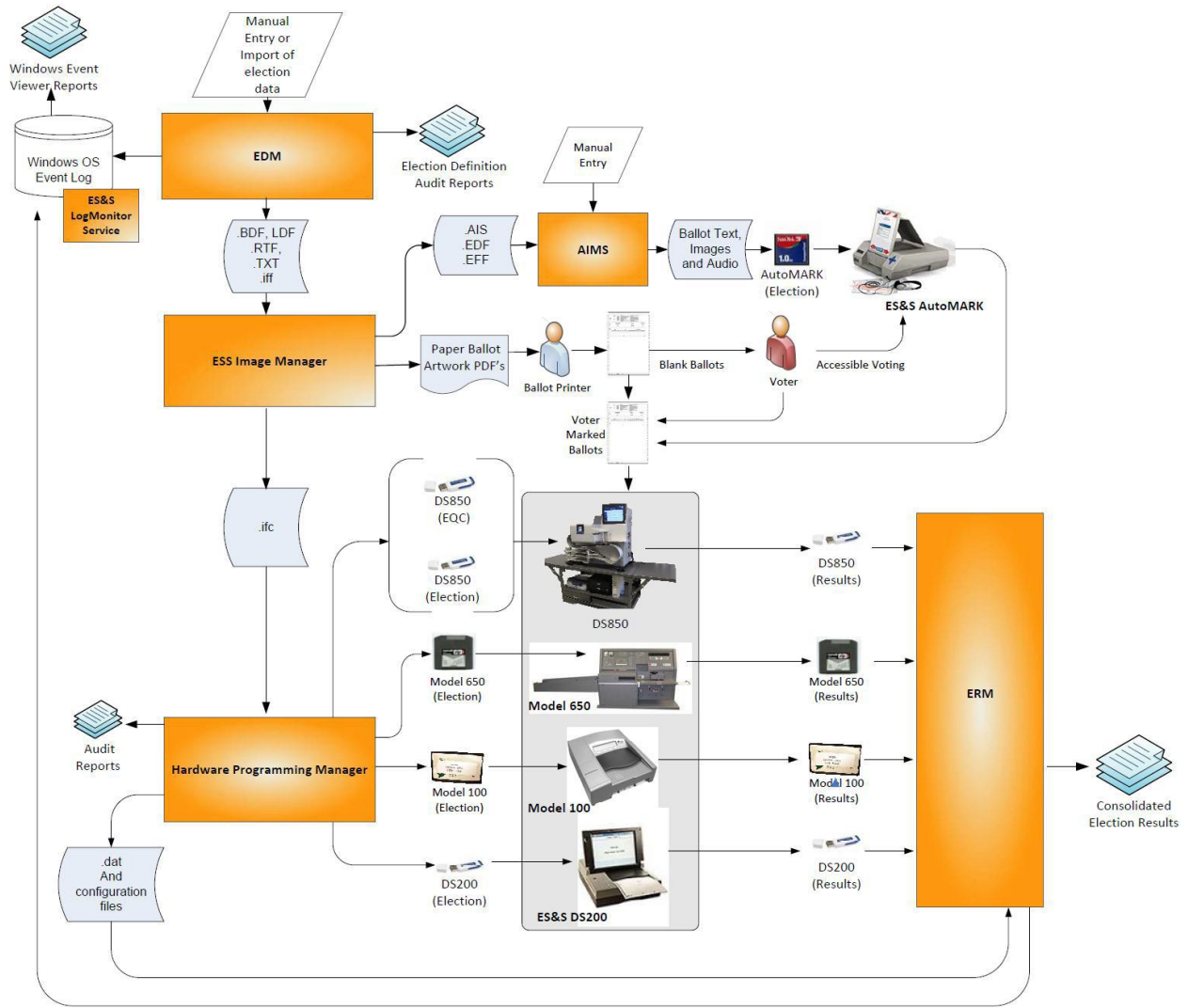
System supports English and Spanish.

Components Included:

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



System Configuration Diagram



System Overview Diagram

| System Component | Software or Firmware Version | Hardware Version | Operating System or COTS | Comments |
|--------------------|------------------------------|-------------------|--------------------------|-----------------------|
| AM | 7.5.2.0 | | | EMS |
| EDM | 7.8.2.0 | | | EMS |
| ESSIM | 7.7.2.0 | | | EMS |
| HPM | 5.9.0.0 | | | EMS |
| ERM | 7.9.0.0 | | | EMS |
| LogMonitor Service | 1.1.0.0 | | | EMS |
| AIMS | 1.3.257 | | | EMS |
| VAT Previewer | 1.3.2907 | | | EMS |
| Model 100 | 5.4.4.5 | 1.3 | | Precinct Tabulator |
| DS200 | 1.7.0.0 | 1.2, 1.2.3.0, 1.3 | | Precinct Tabulator |
| Model 650 | 2.2.2.0 | 1.1, 1.2 | | Central Tabulator |
| AutoMARK VAT A100 | 1.3.2907 | 1.0 | | Voter Assist Terminal |
| AutoMARK VAT | 1.3.2907 | 1.1, 1.3 | | Voter Assist |

| System Component | Software or Firmware Version | Hardware Version | Operating System or COTS | Comments |
|-----------------------------|------------------------------|---------------------------|------------------------------------|---------------------------------|
| A200 | | | | Terminal |
| DS850 | 2.9.0.0 | 1.0 | | Central Tabulator |
| Ballot Box | | 1.3, 1.4 | | Plastic Ballot Box |
| Ballot Box | | 1.0, 1.1, 1.2 | | Metal Box with/without Diverter |
| COTS Components | | | | |
| Client PC | | Dell OptiPlex 3010 | Windows 7 Professional SP1 | |
| Server PC | | Dell PowerEdge T110 II | Windows Server 2008 R2 Sp1 | |
| Ballot on Demand Printer | | OKI C9650 | | |
| Report Printer | | HP LaserJet 4050N | | |
| Headphones | | Avid FV 60 | | |
| Dell OptiPlex | | 760, GX110 | Windows XP SP3 or Vista, QNX 4.22A | |
| Dell Keyboard | | Model L100 | | |
| Dell Mouse | | Model XN966, Model DHY933 | | |
| ACER Monitor | | Model AL1716 | | |
| Dell Precision | | T3500 | Windows 7, Linux | |
| CPU Intel Inside Zenon DELL | | | Linux 6.2.5 | |
| Logitex keyboard | | Y-ST39 | | |
| Microsoft Intellimouse | | 1.3A PS/2 compatible | | |
| Corsair Orbit PC | | | | |
| WhiteSanport 17" Monitor | | H996 BBM | | |
| Logitec keyboard | | Y-SG13 | | |
| Microsoft Intellimouse | | 1.2A PS/2 compatible | | |
| Acer LCD Monitor | | AL1716 | | |

System Limitations

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

| Characteristic | Limiting Component | Limit | Comment |
|----------------|--------------------|-------|---------|
|----------------|--------------------|-------|---------|

| Characteristic | Limiting Component | Limit | Comment |
|--|---------------------------------|---|-------------------------------------|
| Maximum precincts allowed in an election | HPM/ERM (ballot sequence code) | 2900(1639 if using paper ballot coded by precinct) | Limited by the ballot sequence code |
| Maximum precinct included per poll (reporting limit) | ERM | 1900 | |
| Maximum candidate/counters | ERM | 21000 | |
| Maximum candidates | HPM | 9900 | |
| Maximum contest allowed in an election | ERM | Depends on election(limited by 21,000 maximum counters) | |
| Maximum candidates/counters allowed per precinct | ERM Import | 1000 | |
| Maximum ballot styles allowed per precinct | | 99 | |
| Maximum ballot styles allowed per election | HPM(ballot sequence code) | 5500(1639 if using paper ballot coded by style) | |
| Maximum contests allowed per ballot style | HPM | 200 or number of positions on a ballot | |
| Maximum precincts allowed per ballot style | HPM | 1500 | |
| Maximum candidates(ballot choices) allowed per contest | HPM | 175 | |
| Maximum count for any precinct element | ERM report (ERM results Import) | 500,000 (65,550 from any tabulator media) | |
| Maximum number of parties allowed | HPM | 18 | |
| Maximum 'Vote for' per contest | HPM | 90 | |
| Maximum districts of a given type | | 40 | |
| Ballot Target Limits | | | |
| Ballot Size (ovals per inch Left or Right) | | Positions per Column x Row | |
| 8 ½ x 11" (4 ovals per inch) | | 36 rows x 3 columns = 108/side | |
| 8 ½ x 14" (3 ovals per inch) | | 36 rows x 3 columns = 108/side | |
| 8 ½ x 14" (4 ovals per inch) | | 48 rows x 3 columns = 144/side | |
| 8 ½ x 17" (3 ovals per inch) | | 41 rows x 3 columns = 123/side | |
| 8 ½ x 17" (3 ovals per inch) | | 45 rows x 3 columns = 135/side | |

| Characteristic | Limiting Component | Limit | Comment |
|------------------------------|--------------------|--------------------------------|---------|
| 8 ½ x 17" (4 ovals per inch) | | 60 rows x 3 columns = 180/side | |
| 8 ½ x 19" (3 ovals per inch) | | 51 rows x 3 columns = 153/side | |
| 8 ½ x 19" (4 ovals per inch) | | 68 rows x 3 columns = 204/side | |

Component Limitations

Paper Ballot Limitations:

1. The paper ballot code channel, which is the series of black boxes that appear between the timing track and ballot contents, limits the number of available ballot variations depending on how a jurisdiction uses this code to differentiate ballots. The code can be used to differentiate ballots using three different fields defined as: Sequence (available codes 1-26,839), Type(available codes 1-30) or Split(available codes 1-40).
2. If Sequence is used as a ballot style ID, it must be unique election-wide and the Split code will always be 1. In this case the practical style limit would be 26,000.
3. If Sequence is used as a precinct ID, the number of styles allowed in a precinct is limited to 1200 (30 types x 4 splits).

DS200 Limitations:

1. An ES&S DS200 coded for Election Day counting will support no more than 18 precincts.
2. Limits to a maximum of 40 ballot styles in a single absentee precinct for an election coded by style. If the election definition includes more than 40 ballot styles, additional precincts must be defined and ballots must be separated into groups for processing.
3. All ballots must be the same size and same target position capacity.
4. Results network transmission is not supported from an early voting station.
5. The ES&S DS200 configured for an early vote station does not support precinct level results reporting. An election summary report of tabulation vote totals is supported.
6. Arrow-style ballot targets are not supported.

Model 100 Limitations:

1. Supports a maximum of 18 Election Day Precincts or 450 early voting precincts.
2. The PC Card is limited to 18 precincts. No more than 18 precincts should be assigned to a Model 100 polling place from HPM.
3. Limited to a maximum of 40 ballot styles in a single absentee precinct for an election coded by style. If the election definition includes more than 40 ballots style, additional absentee precincts must be defined and ballots must be separated into groups for processing.
4. Supports a maximum of 200 contests per ballot style.
5. All ballots must be the same size and same target position capacity.
6. An early voting station does not support ballots coded "By Style."
7. An early vote station will only support a maximum limit of 450 precincts. This limit is due to the limited memory capacity of both the PCMCIA card and the internal memory of the Model 100 precinct tabulator.
8. Results network transmission is not supported from an early voting station.
9. Default precinct reporting is not supported by an early voting station.

Model 650 Limitations:

1. Supports a maximum of 3750 candidates or counters for any election.
2. Supports a maximum of 100 ballot styles for a single absentee precinct in a by-style election. If the election definition includes more styles, additional absentee precincts must be defined and ballots must be separated into groups for processing.
3. All ballots must be the same size and have same target position capacity.
4. Arrow style ballot targets are not supported.
5. Supports only one ballot input orientation.
6. The Model 650 can interpret a maximum of 1499 office group codes in an election definition. (An “office group” is defined as the collection of one or more contests (including rotation) that always appear together on any ballot style.). This limitation restricts the number of precincts allowed in an election if precinct only” offices are defined (District Type PRC) because each „precinct only” office always appears in a different office group.

DS850 Limitations

1. All ballots must be the same size and have same target position capacity.

AutoMark Limitations

1. ES&S AutoMARK capacities exceed all documented limitations for the ES&S election management, vote tabulation and reporting system. For this reason, Election Management System and ballot tabulator limitations define the boundaries and capabilities of the AutoMARK system as the maximum capacities of the ES&S AutoMARK are never approached during testing.
2. The AutoMARK recognizes ballot content by the code channel. If the Sequence code is used for Ballot Style ID and the election definition has more than one precinct that uses a specific ballot style, the AutoMARK will not determine which precinct the ballot is associated with. The user should not define ballot style names in the election definition that imply precinct.

Election Data Manager Limitations

1. In both open and closed primary elections, operational procedures to define the election in EDM must be strictly followed.
2. The user must input the Party Preference (or Pick Contest) title as “Party Preference” in the Office Title box in the Add Office Information window.
3. When the election is an open primary with a party preference race, a crossover party must be added using the Parties option under the County menu.
4. Rotation positions are limited to 99 candidates. This limit does not apply to positions that float and do not change candidate order.
5. The maximum number of languages supported is 13.
6. The ability to delete parties under the **County** and **Election** menu is not supported.
7. In a primary election, the system does not support displaying the contest(s) from another party’s ballot if a third party in the election has candidates in that contest.

Ballot Image Manager Limitations

1. Requires the installation of Open Type fonts for assurance that screen displays of the ballot match the printed ballot.
2. The user must manually assign column number or position for straight party candidates in HPM.

Ballot On Demand Limitations

1. Requires a specified Oki printer.
2. Batch ballot printing is not reflected in reports.
3. Batch ballot serial numbers are not supported with multi-page ballots.

Hardware Programming Manager Limitations

1. Supports no more than 18 parties for a single election. This limit is reduced to 12 parties, counting "nonpartisan" as a party, for an Open Primary election that uses two page ballots with the second page containing only non-partisan contests. Party/partisan contents CANNOT flow between pages in an Open Primary
2. When coding an election for an Open primary, the user cannot include (in total voting) the crossover party listed in the Description box in the Election Specifications window. The party type displays in the numbered description box, but the user should clear the Include check box next to the crossover party types.
3. When coding an election for an open primary, the party preference contests must be identified as nonpartisan.
4. Supports a maximum of 31 statistical party counters.
5. **Change/Add Polling Place:** A polling place may be identified to contain all precincts in the election.+A1+A1Polling places are limited to a maximum of 80 precincts assigned with the following exception: Model 100 and DS200 scanners are limited to supporting a maximum of 18 precincts per polling place.
6. **Ballot Styles:** In an Open Primary, the number of contest associated with any party (or "nonpartisan" designation) within a ballot style cannot exceed 70. For an Open Primary election, this limitation replaces the 200 contest limit.
7. **Districts:** A district is identified by a code that contains 7 positions but is constructed of a 3 position District Type code and a 4 position District code within the type. There are a limit of 19 District Types and 39 Districts for any given type except for the „PRC“ district type. The „PRC“ district type is used in an election where virtually all precincts have one or two unique precinct specific contests. When the „PRC“ district type is active, the District code is designated by the 4 position precinct ID code. The number of precincts that can use this code is a function of the election content and limited by the M650. A precinct can be associated with a maximum of 39 districts.
8. **Candidates:** The maximum number of candidate rotations per contest is 140. This includes candidate position sets where candidate order is not changed, but use alternate position numbers.

Election Reporting Manager Limitations

1. Election Reporting Manager requires a minimum monitor screen resolution of 800x600
2. Serve650 continues to run after ERM is stopped via the Windows Task Manager. If the ERM task is ended, Serve650 must also be canceled, or the PC rebooted.
3. Mixed equipment within a single SPP file is not supported. Each equipment type must have its own SPP file.
4. Dynamic Precinct Reports are not supported when updating results from iVotronic Audit Data.
5. Generating a District Canvass Report without first properly creating a .DST file can result in inaccurate totals reports and inconsistent report formatting.

6. When retrieving election data from DS200 tabulators; ERM supports a maximum of 1900 precincts for an „All Precincts Included“ Poll.
7. ERM Database Create allows 1600 Precincts Per Ballot Style.
8. There is a limit of 3510 precincts in the precincts counted/not counted display.
9. There is a limit of 3000 precincts in the precincts counted/not counted scrolling display.
10. Contest/Precinct selection pop up display limited to 2,900 contests/precincts.
11. Non-English characters are not supported in ERM.
12. Maximum page size for reports is 5,000 pages.

AutoMARK Information Management System (AIMS) Limitations

1. If the number of precincts imported from Election Data Manager exceeds 840, an election administrator must manually configure the code channel for precinct number 840 within AIMS. Code channel information for all other precincts imports properly

Functionality

2005 VVSG Supported Functionality Declaration

| Feature/Characteristic | Yes/No | Comment |
|---|--------|---------|
| Voter Verified Paper Audit Trails | | |
| VVPAT | No | |
| Accessibility | | |
| Forward Approach | Yes | |
| Parallel (Side) Approach | No | |
| Closed Primary | | |
| Primary: Closed | Yes | |
| Open Primary | | |
| Primary: Open Standard (provide definition of how supported) | Yes | |
| Primary: Open Blanket (provide definition of how supported) | No | |
| Partisan & Non-Partisan: | | |
| Partisan & Non-Partisan: Vote for 1 of N race | Yes | |
| Partisan & Non-Partisan: Multi-member (“vote for N of M”) board races | Yes | |
| Partisan & Non-Partisan: “vote for 1” race with a single candidate and write-in voting | Yes | |
| Partisan & Non-Partisan “vote for 1” race with no declared candidates and write-in voting | Yes | |
| Write-In Voting: | | |
| Write-in Voting: System default is a voting position identified for write-ins. | Yes | |
| Write-in Voting: Without selecting a write in position. | Yes | |
| Write-in: With No Declared Candidates | Yes | |

| Feature/Characteristic | Yes/No | Comment |
|---|--------|---------|
| Write-in: Identification of write-ins for resolution at central count | Yes | |
| Primary Presidential Delegation Nominations & Slates: | | |
| Primary Presidential Delegation Nominations: Displayed delegate slates for each presidential party | No | |
| Slate & Group Voting: one selection votes the slate. | No | |
| Ballot Rotation: | | |
| Rotation of Names within an Office; define all supported rotation methods for location on the ballot and vote tabulation/reporting | Yes | |
| Straight Party Voting: | | |
| Straight Party: A single selection for partisan races in a general election | Yes | |
| Straight Party: Vote for each candidate individually | Yes | |
| Straight Party: Modify straight party selections with crossover votes | Yes | |
| Straight Party: A race without a candidate for one party | Yes | |
| Straight Party: "N of M race (where "N">1) | Yes | |
| Straight Party: Excludes a partisan contest from the straight party selection | Yes | |
| Cross-Party Endorsement: | | |
| Cross party endorsements, multiple parties endorse one candidate. | Yes | |
| Split Precincts: | | |
| Split Precincts: Multiple ballot styles | Yes | |
| Split Precincts: P & M system support splits with correct contests and ballot identification of each split | Yes | |
| Split Precincts: DRE matches voter to all applicable races. | No | |
| Split Precincts: Reporting of voter counts (# of voters) to the precinct split level; Reporting of vote totals is to the precinct level | Yes | |
| Vote N of M: | | |
| Vote for N of M: Counts each selected candidate, if the maximum is not exceeded. | No | |
| Vote for N of M: Invalidates all candidates in an overvote (paper) | No | |
| Recall Issues, with options: | | |
| Recall Issues with Options: Simple Yes/No with separate race/election. (Vote Yes or No Question) | Yes | |

| Feature/Characteristic | Yes/No | Comment |
|--|--------|---------|
| Recall Issues with Options: Retain is the first option, Replacement candidate for the second or more options (Vote 1 of M) | Yes | |
| Recall Issues with Options: Two contests with access to a second contest conditional upon a specific vote in contest one. (Must vote Yes to vote in 2 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 | |
| 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 | | |

| Feature/Characteristic | Yes/No | Comment |
|---|--------|---------|
| Provisional/Challenged Ballots: A voted provisional ballots is identified but not included in the tabulation, but can be added in the central count. | Yes | |
| Provisional/Challenged Ballots: A voted provisional ballots is included in the tabulation, but is identified and can be subtracted in the central count | Yes | |
| Provisional/Challenged Ballots: Provisional ballots maintain the secrecy of the ballot. | Yes | |
| Overvotes (must support for specific type of voting system) | | |
| Overvotes: P & M: Overvote invalidates the vote. Define how overvotes are counted. | Yes | |
| Overvotes: DRE: Prevented from or requires correction of overvoting. | No | |
| Overvotes: If a system does not prevent overvotes, it must count them. Define how overvotes are counted. | Yes | |
| Overvotes: DRE systems that provide a method to data enter absentee votes must account for overvotes. | No | |
| Undervotes | | |
| Undervotes: System counts undervotes cast for accounting purposes | Yes | |
| Blank Ballots | | |
| Totally Blank Ballots: Any blank ballot alert is tested. | Yes | |
| Totally Blank Ballots: If blank ballots are not immediately processed, there must be a provision to recognize and accept them | Yes | |
| Totally Blank Ballots: If operators can access a blank ballot, there must be a provision for resolution. | Yes | |
| Networking | | |
| Wide Area Network – Use of Modems | No | |
| Wide Area Network – Use of Wireless | No | |
| Local Area Network – Use of TCP/IP | No | |
| Local Area Network – Use of Infrared | No | |
| Local Area Network – Use of Wireless | No | |
| FIPS 140-2 validated cryptographic module | No | |
| Used as (if applicable): | | |
| Precinct counting device | Yes | |
| Central counting device | Yes | |