

Presentation to NIST

May 10, 2005



Election Systems & Software

Maintaining voter confidence.
Enhancing the voting experience.



EXPERIENCE
RELIABILITY
SECURITY
INNOVATION

Election Systems & Software: An Introduction

An Industry Leader



Experience.

Reliability.

Innovation.

Security.

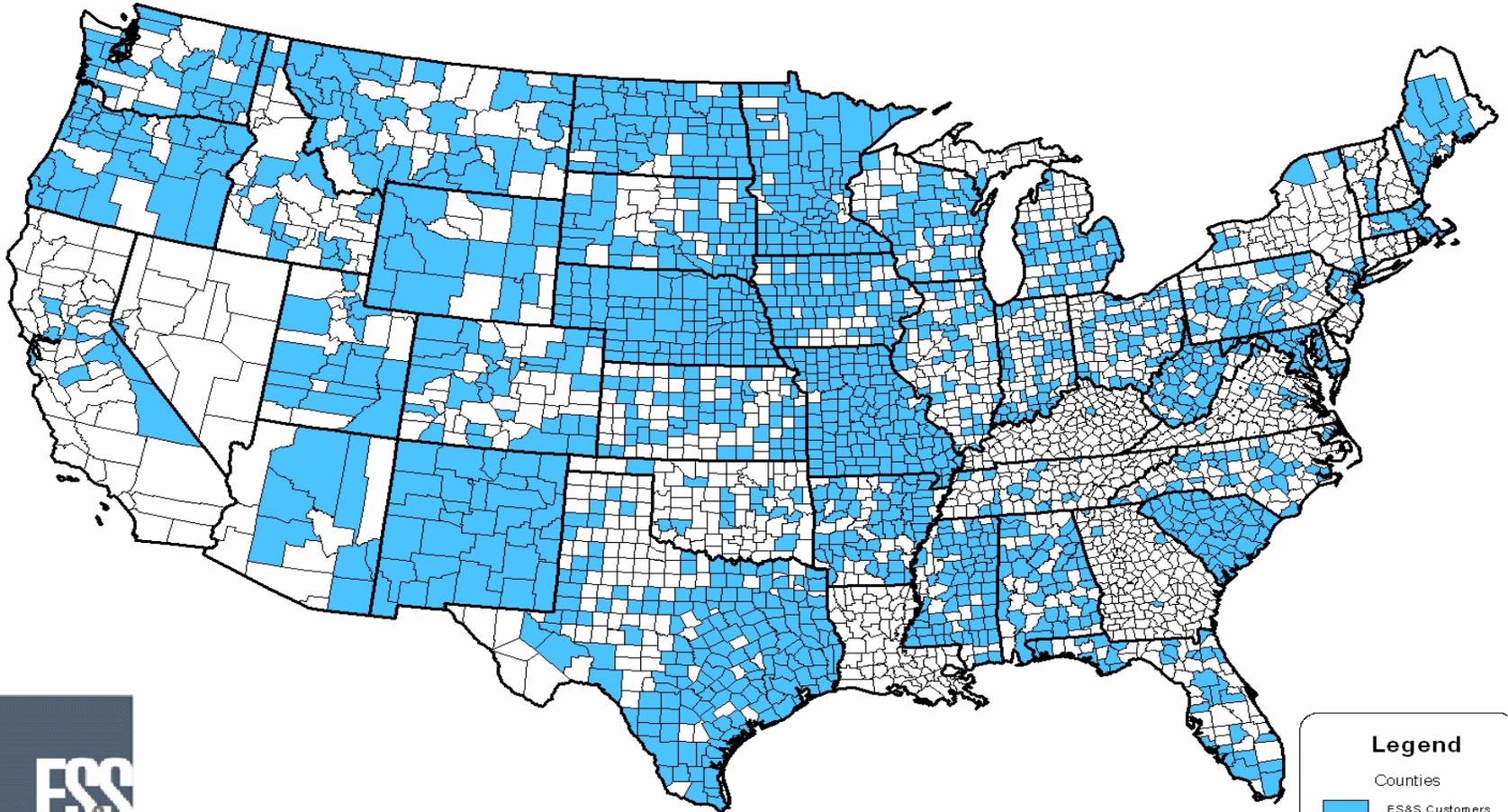
Mark of excellence in the election management industry.

And, what sets ES&S apart from the rest.

Industry Leader



ES&S Customers



0 400 800 1200 Miles

Legend

Counties

 ES&S Customers

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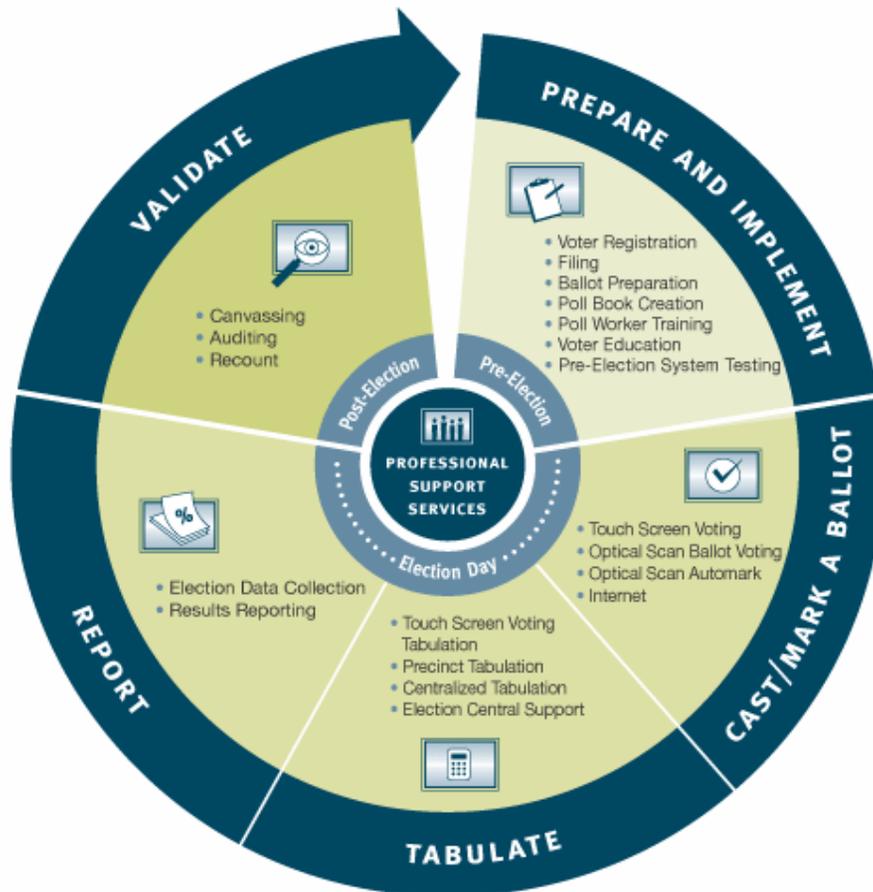


Our Experience



- Based in Omaha, NE, 350+ employees
- More than three decades of experience with a strong track record of quality results
- Support thousands of elections, every year
- Partner with more than 1,700 jurisdictions in the U.S. and several countries around the world
- Will produce over 100 million ballots during this U.S. presidential election year
- Proven experts you can rely on, every day

End-to-End Solutions



ES&S is the industry leader in providing end-to-end integrated election solutions — supporting every phase of the election process.

Reliable Voting Solutions



- Unrelenting commitment to maintaining voter confidence and enhancing the voter experience
- Industry's only provider of end-to-end integrated hardware & software voting solutions
- Strive for excellence and trouble-free elections
- Support every phase of the election process, with secure, accurate and reliable voting solutions
 - Preparing & implementing an election
 - Casting & marking a ballot
 - Tabulating votes
 - Reporting & validating results

A Commitment to Security



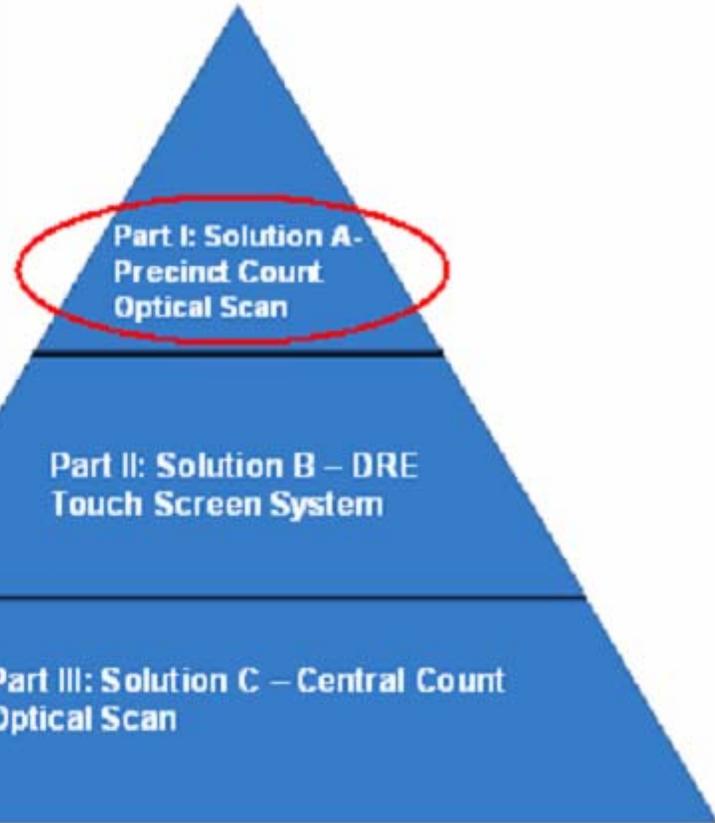
- Believe very strongly that security measures must be built into the entire election cycle – before, during, and after an election
- Designed unique product features to provide the best protection in the industry
 - Proprietary hardware and software
 - Redundant memory and audit functions
- Integrate comprehensive and complementary checks and balances to ensure security of the entire process

A Spirit of Innovation



- Continually innovating to meet evolving requirements and customer needs
- Focused on delivering ever-improving voting solutions
- Leader in making the election process more accessible for all
 - **iVotronic™** Audio Ballot supports touch screen voting
 - **ES&S AutoMARK™** supports optical scan voting
- Anticipating the election of the future with Anywhere Voting Architecture™

Total Election Management



Software Solutions

Pre-Election and Voter Registration



The **PROFILE**TM line of software provides database development and maintenance solutions from local to statewide election management.

PROFILE products provide powerful tools for managing voter registration databases, candidate qualification and database management, and single-source software for the entire election process.

Software Solutions

Pre-Election and Voter Registration



POWERPROFILE 's ® fully integrated modules provide local election officials with the ability to register voters, qualify candidates and conduct elections.

POWERPROFILE also supports absentee and early voting, election worker training, voter database maintenance, and petition validation.

Software Solutions

Pre-Election and Voter Registration



For medium and large jurisdictions, the ES&S **MEGAPROFILE**® modular application supports voter registration, candidate qualification and petition validation.

Absentee and early voting, voter history maintenance, election worker and polling place management and results reporting are also securely supported.

Software Solutions

Pre-Election and Voter Registration



ES&S STATEPROFILE® is a powerful and flexible database management solution that enables states to securely maintain clean voter rolls, eliminating intercounty duplications. Because **STATEPROFILE** efficiently provides consistent statewide voter data to the entities that need it, the quality of government is enhanced and your expenses reduced.

STATEPROFILE offers a end-to-end solution for collecting, managing and distributing candidate data. It allows state and local election offices to define office and candidate criteria, verify candidate eligibility, track candidate status, and maintain a candidate database.

Software Solutions

Total Election Management



The **Unity™ Election System** is the complete suite of solutions for total election management. **The Unity Election System** is certified to meet the 2002 Federal Voting Systems Standards. **Unity** enables a client to:

- create and maintain a central database of jurisdiction and election information
- format ballot layouts and program election equipment for use in conducting voting within a jurisdiction
- collect, accumulate, and report the voting results files directly from the tabulation equipment

Software Solutions

Total Election Management



Unity Election Data Manager™ (EDM) is a foundation software application that enters, maintains and stores all election-related information (e.g., precincts, districts, candidates and referenda) in one database.

Software Solutions

Total Election Management



Unity Ballot Image Managers™ (BIM) create the image of an optical scan ballot populated by information from the **Unity Election Data Manager** database.

Software Solutions

Total Election Management



Unity Ballot On Demand® (BOD) is an easy-to-use software application that enables local laser printing of a voter-specific ballot on demand for pre-election day, absentee and early voters.

Software Solutions

Total Election Management



Unity Hardware Programming Manager™ (HPM) is a proprietary software solution that seamlessly programs election tabulation hardware — whether touch screen electronic, OMR paper-based or punch card.

Software Solutions

Total Election Management



Unity Data Acquisition Manager™ (DAM) is a powerful client service application that collects and transmits voting data to the host election server for the accumulation of election results.

Software Solutions

Total Election Management



Unity Election Reporting Manager™ (ERM) is a versatile, user-friendly software application that formats election results and generates customized paper or electronic reports.

Software Solutions

Total Election Management



iVotronic® Image Manager™ (iVIM) provides **iVotronic®** touch screen clients with an easy-to-use, **Unity Ballot Image Manager** interface. Users may select a ballot display template, adjust the line position of ballot data, validate **Unity Election Data Manager™** information, and generate customized ballot screens for their **iVotronic** units.

Software Solutions

Total Election Management



Unity Online™ allows **ES&S Professional Election Services** to create or convert a jurisdiction's election database and work with election officials to produce error-free ballots within a shorter time frame. **Unity Online** is used with other **Unity** software to format and print ballots, to program ballot-scanning equipment, and to produce Election Day reports.

Hardware Solutions

Ballot Tabulators



Model 100™ Precinct Ballot Counter

- **Ensures Ballot Integrity** — because the Model 100 alerts voters to over-voted races and under-voted ballots, it greatly enhances the ability to capture voter intent.
- **Security and Reliability** — a rugged stainless steel chassis, independent ballot containers, and other unique features make the Model 100 one of the most secure and reliable in the industry.
- **State-of-the-Art Flexibility** — driven by an Intel processor, the Model 100 utilizes QNX. Operating software which provides real-time resource management, true multi-tasking capabilities, and unparalleled election accuracy.
- **Fast Election Reporting** — immediately upon poll closing, the Model 100's internal thermal printer legibly prints out vote totals, and enables election officials to transmit results to election central.
- **Tested, Certified, Proven** — the Model 100 has been fully tested by an independent testing authority, certified to meet or exceed the rigorous standards of the federal government, and proven through the use in thousands of actual elections worldwide.



Hardware Solutions

Ballot Tabulators



Model 650™ Central Ballot Counter

- **Ideal for Large Jurisdictions** — the Model 650 suits the needs of large jurisdictions with a high number of precincts and multiple ballot types per voter.
- **Supports Multiple Ballot Lengths** — with its adjustable, straight-path design, the Model 650 flexibly supports many ballot lengths and large numbers of ballots.
- **Easy to Use Display Panel** — a simple push button control panel features a two-line, 40-character per line LED message window display that easily walks a user through its operation.
- **Ensures Ballot Integrity** — because the Model 650 automatically alerts the operator of over-votes and blank or damaged ballots, it greatly enhances the ability to capture voter intent.
- **Simple Report Generation** — the Model 650 reporting system enables a user to print Grand Total, Precinct-level, and audit record reports with just the push of a button.
- **Solid State Design**



Hardware Solutions

Voting Equipment



iVotronic™ Touch Screen Voting

- Simple 1-2-3 step voting.
- 3 independent memory paths to ensure no vote is lost.
- Proprietary Personal Electronic Ballot (PEB) device to ensure security.
- Audio ballot and Braille-embossed buttons features easily supports visually impaired voters, and its portability enables curbside and wheelchair-access voting.



Hardware Solutions

Voting Equipment



ES&S AutoMARK™

- A sip/puff tube for voters who are not able to use the touch screen or touch pad.
- An audio function allows voters with impaired vision to listen to choices.
- Protects legacy systems by allowing jurisdictions to use existing optical scanner hardware/ software solutions.
- A zoom feature that enables the voter to increase the font size of each race listed on the optical scan ballot.
- Multiple-language capability helps ensure that all citizens in a diverse population can exercise their privilege to vote.
- The ability to support write-in candidates.



Hardware Solutions

Voting Equipment



iVotronic LS™ Touch Screen Voting

- Full-face digital ballot presentation.
- Handles more than 500 ballot positions.
- Multiple-language capability.
- Audio ballot and zoom features.
- Meets or exceeds all accessibility standards.
- Real Time Audit Log enhances voter confidence that his or her ballot has been recorded.



ES&S Support Services



ES&S onsite election support in the 2005 Spain election

ES&S Support Services



- Election Programming - we can do it for you, or you can do it using our software
- On Line Support via Modem
- Toll Free Phone Support
- On-Site Support During Elections
- Complete Inventory of Election Supplies
- Ballot Printing Services
- Hardware Maintenance Programs
- Software Enhancements and Upgrades
- Monthly User Groups
- Election Management Training Center
- On-Site Product Training
- User Manuals and Videos

Election Supplies *(via supply store online)*

- Pre-printed Code Stock
- Ballot Printing Services
- Ballot Boxes
- Ballot Joggers
- Voting Booths
- Ballot Box Seals
- Compressed Air
- MRC Ink
- Ballot Layout Supplies
- “I Voted” Stickers
- Secrecy Sleeves
- Transfer/Storage Cases
- Polling Place Signs
- Replacement Parts

Certification and Disability Compliance



- ES&S is the first major vendor to achieve certification under the new 2002 federal voting system standards of all go-forward voting solutions. Certified Products:
 - **Unity Election System** software suite
 - **iVotronic** touch screen voting technology
 - **Model 650** optical scan tabulator
 - **Model 100** optical scan tabulator
- **ES&S AutoMARK** meets and exceeds HAVA (Help America Vote Act) standards.
- **iVotronic** and **AutoMARK** are ADA compliant.

Discussion Topics



- Security
 - Set-up and Validation
 - Dual Verification, VVPAT and RTAL
 - Network and Wireless Transmissions
 - Source code standards, COTs, Open Source, etc.
- Transition to New VSS (and further updates)
 - Current Deployed System Limitations
 - Product Development Cycle, Certification, etc.
 - Timing, Change Management and Migration of Market
- Open Q&A

RTAL Voting Booth Set-Up

