

DOMINION  
VOTING™

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# State of Colorado UNIFORM VOTING SYSTEM REQUEST FOR PROPOSAL

RFP # CDOS-UVS-2013-01

Business Proposal



Prepared for: Al Davidson, Department of State

Proposal Due Date: December 4, 2013

Denver

Toronto

Dallas

Jamestown

San Leandro

Belgrade

## Proposal Cover Sheet

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## Notice of Confidentiality and Non-Disclosure

Some of the information provided in this Bid Response is Confidential and Proprietary and is marked so accordingly. The information contained herein includes Trade Secrets, Commercial and Financial Information that is exempt from any Federal, Provincial (State) or local public disclosure or Freedom of Information Act requests. This information is provided in the strictest confidence and is not meant for public disclosure.

Please direct inquiries regarding this matter to:

Dominion Voting Systems Inc.  
Office of General Counsel  
1201 18th St., Suite 210  
Denver, CO 80202  
Tel: (720) 257-5209

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## Transmittal Letter

All Vendors shall submit a Transmittal Letter positively stating their willingness and ability to comply with all work requirements, general contract requirements, and other terms and conditions specified within this RFP. If this is not the case, any exceptions or proposed deviations from requirements listed in this RFP must be described and explained. Additional requirements for the Transmittal Letter are that it:

- 1) Must be on official company business letterhead
- 2) Must identify all material and enclosures comprising your proposal
- 3) Must acknowledge receipt of all modification notices to this RFP
- 4) Must disclose all current or pending projects with the State of Colorado
- 5) Must disclose any known conflicts related to this RFP
- 6) Must disclose intended use of any subcontracts
- 7) Must itemize any objections to items in the Administrative Information section or in the contract template in *RFP Appendix G – State Contract Template*.
- 8) Must acknowledge permission for your references to release information to the State of Colorado
- 9) Must indicate if you are proposing a UVS solution that addresses all eight categories (A-H) of the requirements in RFP Appendix B – System Requirements Table. If not, specify to which of the eight categories you are proposing a solution.
- 10) Must not disclose any pricing information or elements of cost
- 11) Must be signed by an individual authorized to commit your company to the work proposed

*Page Limit: Four pages*

## 1.0 Executive Summary

The Executive Summary should provide CDOS with an overall understanding of the proposal. Include a brief review of the proposal. The review must be prepared in such a manner as to make it understandable to individuals not familiar with the terminology peculiar to a project of this type.

*Page Limit: Five pages*

### The Dominion Difference

Dominion Voting Systems, Inc. welcomes the opportunity to present our EAC VVSG 2005 certified voting system for consideration by the State of Colorado.

In today's election market, Dominion sets itself apart with a commitment to customer service, convenience, and a superior use of technology to provide you with the best tools possible in solving your election challenges. Dominion has developed new election system technologies that are designed to meet future requirements while allowing our customer partners to provide the best possible experience for their voters. Dominion's objectives are to **Increase Efficiency, Uniformity, Transparency, Scalability, Accuracy and Security - while maintaining a Low Cost of Ownership**. The electoral technology developed by Dominion is robust and innovative, yet easy to use – **Dominion, engineered simplicity!**

In addition to Dominion's unparalleled technological offering, Dominion can implement these election solutions in accordance with the State Colorado's election code, certification requirements and the requirements of this Request for Proposal. Dominion's proposal is based on developing and maintaining a long-term relationship with the State and each of the Counties. Dominion has the experience in implementing, training and providing continuous support for our voting solutions throughout the United State and Internationally.

Dominion's offer to the State of Colorado starts with our Democracy Suite®<sup>1</sup> Election Management System, which handles all activities related to your election. The System produces ballots and tabulator information, and its versatility is enhanced by Dominion's Core Technologies, Dual-Threshold Technology and the AuditMark®<sup>2</sup>. Dominion utilizes Dual-Threshold technology as a means to ensure that each and every voter's ballot will be read the same every time no matter the tabulation method. The system has a configurable low and high threshold. If a voter marks their ballot but does not fill in the oval completely and this mark falls in the user-defined marginal mark zone, the system will inform the voter that they have a *Marginal Mark* and the onus of clearly defining their intent is on the voter not the Election Official.

The AuditMark technology was developed by Dominion to further increase the transparency of the voting process and augment stakeholder confidence. **AuditMark is the only technology that provides a clear and fully auditable single cast vote record for every ballot cast in Colorado, enabling the State to meet the 2017 Risk-Limiting Audits requirement.** Dominion's system digitally stores the ballot image and appends to the image how the tabulator read the voter's intent. When reviewing, recounting, canvassing or performing risk-limiting audits,

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<sup>1</sup> Democracy Suite® is a registered trademark of Dominion Voting Systems Inc.

<sup>2</sup> AuditMark® is a registered trademark of Dominion Voting Systems Inc.

the ballot image with the AuditMark allows easy review of each ballot by precinct, vote center, early voting, and mailed-in ballots etc. The State and Counties have full access to these images at any time and for any use.

These unique innovations set Dominion apart from all of its competitors, and provides customers with state-of-the-art technology that gives the voters confidence that the election process is fair, accurate and transparent.

### The Dominion Offer

After careful review and analysis of the requirements of this Request for Proposal, current election statistics and the voting methodology of each of the 64 Colorado Counties, Dominion is honored to provide the State of Colorado the following offer. Dominion understands that Colorado counties are diverse in size, complexity, geography and political make up. Additionally, the State of Colorado has a desire to unify the electoral process in order to provide the citizenry fair, accurate and transparent elections. Dominion is the election partner of choice. The company is looking forward to further investing in Colorado and developing all the necessary relationships to ensure complete success, both at the individual County level and for the State.

Dominion's proposed solution is based on our understanding of the recent changes for Colorado voters. The move to Vote by Mail, along with the use of Voting Service Centers, requires a greater focus on central tabulation, and the need to provide HAVA-compliant yet flexible options for Voting Service Centers.

Our solution includes, Democracy Suite (EMS), ImageCast Central with ImageCast Adjudication and the ImageCast Evolution. No matter the size or complexity of the County, Dominion is offering a system that is efficient, uniform, transparent, scalable, accurate, secure, and cost-effective, enabling the Counties to have successful elections.

### **Democracy Suite: Election Management System**

Each County will be equipped with Dominion's Democracy Suite Election Management System, which is comprised of several modules to manage an election project from start to finish. The Democracy Suite is composed of two main components. Through the Election Event Designer (EED), the election definitions of each jurisdiction such as districts, races, and candidates can be input or imported. The second key component - Results Tally and Reporting (RTR) - allows the counties to bring in results from the election through a quick read of each memory card and from the central tabulators, rapidly produce results which are then reported via paper or web-based. Dominion understands that each jurisdiction has different reporting needs and requirements, and, as such, the system allows for the configuration and creation of a wide range of reports that can be easily accessed or customized. The State can maintain a uniform core report that all counties submit as well. Democracy Suite has the capability to output in a file structure that is compatible with Colorado's current Election Night Reporting system.

Any county that wishes to perform their own Ballot Programming throughout the contract period can be trained by Dominion to be able to independently program their election projects. For those counties choosing not to perform Ballot Programming, RTR will be installed and trained. Dominion will provide Ballot Programming services as detailed in this response.

Democracy Suite Election Management System is offered in two configurations: 1. Express, on a single computer, which may be a laptop or 2. Standard, on a desktop server, with or without attached client laptops. Depending on their existing hardware environment, Dominion will collaboratively determine the need for additional equipment with each county.

The Democracy Suite Election Management System is robust and provides a single, powerful and versatile platform for election management. It is designed to suit the needs and requirements of jurisdictions large and small. Democracy Suite can be easily scaled to support nationwide elections, as in Mongolia and the Philippines, where Dominion's Democracy Suite Election Management System was the backbone of successful, transparent national level elections.

### Central Tabulation of Mail Ballots

Dominion offer includes a state-of-the-art mail ballot processing system; ImageCast Central. The scalability of this system for all Colorado counties makes it the **only** offer with efficiency, uniformity, and transparency that is cost effective! All Colorado Counties will benefit by the use of this system. It is a matter of using more or less units to process ballots based on the counties volume.

**ImageCast Central:** Dominion's central tabulation was designed with efficiency in mind. Most central count solutions that exist in the market today are large, expensive, proprietary solutions that are not efficient or easy to use or maintain. Dominion's ImageCast Central uses software and "commercial off the shelf" (COTS) scanners from Canon. Currently, we utilize the G1130.

This solution is cost effective and efficient. The ImageCast Central can tabulate ballots at a rate of 15" per second. The operator simply put the ballots into the scanner and pushes the scan button on the software. When completed, the operator pushes the accept batch button. The system automatically electronically out-stacks all ballot images that need to be reviewed. Our ImageCast Adjudication application then takes over. The ImageCast Central operator does not need to pause ballot scanning, due to exception conditions such as a blank ballot

**ImageCast Adjudication:** ImageCast Adjudication is an application that allows the county to complete central count, end-to-end, in real time. The application allows for multiple teams to review out-stacked ballots. Out-Stack conditions include over votes, under votes, blank ballots, marginal marks and write-ins.

The users log into the secure system and begin reviewing ballots as they are scanned. Each ballot scanned in our system has an AuditMark. When a ballot is adjudicated, a log is created and an additional Adjudication AuditMark is securely appended to the image. Now anyone reviewing the ballots will be able to see how the voter marked their ballot, how the machine interpreted the intent and then how the ballot was adjudicated.

ImageCast Adjudication has a complete activity log, and can be audited team by team. This addition to our ImageCast Central tabulation saves the county tremendous amount of time and money because there is no need to review, duplicate, buy additional ballots, re-scan and document. The system does this for you. Dominion is committed to adding further functionality to the ImageCast Adjudication application. Currently, Provisional Ballot adjudication is in development



## Dominion's Voting Service Center Tabulator

Dominion is proposing one tabulator, ImageCast Evolution. The Democracy Suite Election Management System drives the unit seamlessly.

**By choosing Dominion, The State of Colorado can reduce the need of precinct tabulators by at least 50% of current equipment and our competitions offers. This choice will reduce the cost of licensing, storage, drayage, maintenance, repair and training.**

**The ImageCast Evolution** is our newest model. This is an all-in-one precinct tabulator and ADA Ballot Marking Device. The ImageCast Evolution was designed to exceed the EAC VVSG 2005, and provides the voter with special needs, the ability to cast a paper ballot without having to "walk around" or cast their ballot on another voting machine.

Voters mark their ballots and feed the ballot into the unit. Simple! The ImageCast Evolution features a consistent throughput of 3 to 5 seconds per ballot, and the ability to load all ballot styles in any election with all language requirements, The ImageCast Evolution is the only choice for Colorado's Voting Service Centers. For those with special needs, The ImageCast Evolution is the **only digital scan tabulator on the market today that uses a single ballot path**, allows for greater flexibility in meeting the access needs of all voters. With the ImageCast Evolution, counties can truly meet the HAVA requirement for voters to be able to vote "privately and independently"

The unit is highly configurable and provides second chance voting. The unit comes with a specially designed ballot box, which features four spinning casters for easy transportation and a power source. The unit does come with a backup battery producing two additional hours of use. The Image Cast Evolution is "plug and play". The poll worker only has to plug it into the wall and lift the tabulator screen to turn it on. All parts are connected before it leaves the election warehouse. **One unit makes a Voting Service Center fully HAVA compliant.** Dominion does offer a lower cost collapsible Ballot Box for those counties who want an alternative.

## Dominion Election Support and Implementation

As per the Request For Proposal's requirement for a phased in implementation over five years, Dominion suggests that we pilot this system in the state starting with an area of the state that has small, medium and large counties in a region allowing for all counties involved to work together in implementation, training, and voter outreach. This will allow the counties to test the system and services and it will allow Dominion to massage the process for the other regions.

With our personal past experience in the State of Colorado, Dominion understands the need for on-site support. Dominion's proposal includes:

- ✓ Ballot Programming
- ✓ Hardware Training
- ✓ Software Training
- ✓ Technician Training
- ✓ on-going e-Training
- ✓ Election Support
- ✓ Logic and Accuracy Support
- ✓ Project Management

- ✓ Technical Support, and
- ✓ Media Relations

We are committed to the state for the long run and look forward to working alongside the Secretary of State, the staff and Clerks from each County. With our headquarters in Denver Colorado and our global parts and equipment warehouse in McKinney, Texas you have a broad range of skills at your disposal. Dominion will provide on-site support in each county as requested. A statewide Project Manager will be assigned to coordinate delivery of all services and support as needed, and to ensure a smooth and efficient roll-out.

## The Choice

Dominion Voting is the only choice for The State of Colorado's Uniform Voting System Request for Proposal. Based on all desired outcomes, here is how we stack:

- **Low Cost of Ownership:**
  - 50% reduction in units,
  - Managed Services Program (lease option)
  - COTS solutions
- **Increase Efficiency:**
  - Central tabulation with electronic adjudication
  - Voting Service Center all-in-one device
- **Transparency:**
  - Open Source Code
  - AuditMark
- **Accuracy & Security:**
  - **Protocols exceed EAC VVSG 2005 requirements**
  - Symmetric and Asymmetric encryption
  - **Manufacturing facilities, meet rigorous certification and compliance standards** in accordance with AS9100, IPC Class III, US ITAR, US FAR, ITC, ISO9001, ISO14001
- **Flexibility & Scalability:**
  - Large or small, all counties can use the same equipment.
- **Uniformity:**
  - **Democracy Suite (EMS) - one system**
  - **ImageCast Central with ImageCast Adjudication**
  - **ImageCast Evolution**
  - **AuditMark**
  - **Secure Digital Ballot Images**
  - **Ballot Review and look up**
  - **Elections Partner**

**Dominion, Engineered Simplicity!**

## 2.0 Company Overview

In this document you will provide information about your company; its capabilities, why it should be selected for this project; evidence of company stability, ability to perform required work for this project, number of years in business, number of employees, employees with voting systems experience, and company locations, including any offices in Colorado. You may provide any additional information that demonstrates the strengths your company can bring to this project.

You must indicate the company form of organization (i.e., partnership, non-profit corporation, Colorado Corporation, Non-Colorado Corporation, or some other structure). Non-Colorado corporations must register as a foreign corporation to conduct business in Colorado and appoint a resident agent to receive process. You must certify that your company has a Certificate of Good Standing or Certificate of Existence to do business in Colorado. Proof of the certification must be provided upon request by CDOS.

If the proposing company is owned or controlled by a parent company, the name, main office address and parent company's tax identification number must be provided. The tax identification number of the company proposing to the RFP must be provided in the Proposal Cover Sheet requested in RFP Section 5.3.1 State of Colorado Request for Proposal Cover Sheet.

This section should also include the following:

- 1) A brief statement of understanding and compliance with the terms and conditions as set forth in RFP Section 2 Administrative Information.
- 2) A statement of understanding of the work and system requirements associated with the Uniform Voting System project. It is important that your company understand the size and scope of this project.
- 3) Any information you wish to add that is pertinent to your company doing business with the State of Colorado.
- 4) Disclosure of non-U.S. ownership of all or any portion of your company.

**Page Limit:** *Five pages*

Dominion Voting Systems Inc. (Dominion) is pleased to respond to RFP # CDOS-UVS-2013-01. Dominion understands and complies with the terms and conditions set forth in Section 2, Administrative Information.

As described in the Executive Summary above, Dominion understands the size and scope of the project, and the State of Colorado's desire to implement a Uniform Voting System across all counties in the state. Dominion is providing support for large and small Colorado counties today, and the company is familiar not only with the unique needs of our current customers, but also with the legislative and electoral environment in Colorado. Over the past thirty years, Dominion personnel have worked with Colorado counties of all sizes, giving our company a sophisticated understanding of how to deliver a uniform elections solution.

Dominion is a company that has distinguished itself by pursuing excellence in customer service by implementing a technical culture focused on achieving the highest levels of accuracy, reliability and transparency. Founded in 2003, Dominion has grown to roughly 200 employees, consisting of a mix of seasoned election veterans with a solid grasp on technology and engineering experts that understand elections. Dominion works relentlessly to maintain and enhance its best assets: its people, technology and reputation.

Dominion Voting Systems, Inc. is a wholly owned subsidiary of Dominion Voting Systems Corporation which has been operating under its present name since its inception in 2003. Dominion Voting Systems Inc. incorporated in the United States in the fall of 2009 and shortly thereafter established our company headquarters in Denver. With the acquisitions of Premier and Sequoia assets in 2010, Dominion hired a large number of employees, and had to decide whether to maintain Denver as the company headquarters. We once again chose Denver, moving to our current location at 18th and Lawrence.

Thanks to Dominion's continued success around the country in the past three years, we have continued to increase the Denver staff. With the recent addition of the State of New Mexico as a customer, we anticipate staffing levels to rise again. If we were fortunate enough to be the vendor of choice for the State of Colorado, we anticipate further hiring, perhaps as many as 20 more full time positions, based on our understanding of the current requirements. As a Colorado based company that already spends millions of dollars on salaries and expenses in Denver, your investment in our growth will be repaid with excellent products, local services and experience, Colorado job creation, increased tax revenue, and other benefits that can only come from "buying" local.

Dominion currently services and supports over 1,200 jurisdictions in 33 states. As part of its national footprint, the company has deployed tens of thousands of voting devices and successfully conducted thousands of elections – large and small – with our Dominion, Premier, and Sequoia product lines. Dominion's ImageCast Precinct tabulator is the most widely used tabulator in the world, with over 100,000 units in the field. Our Democracy Suite platform, including the ImageCast Precinct, is certified to EAC VVSG 2005 standards, and is currently widely deployed and in operation, serving the needs of voters.

With over 1,500 people-years of elections experience, Dominion has the knowledge and expertise to support our customers in conducting accurate and successful elections. . Today, Dominion is one of the largest providers of elections technology solutions in the United States. As an example, during the U.S. Presidential Elections in November 2012, roughly 35% of registered American voters cast their ballots using our equipment. Elections are Dominion's only business.

Dominion's commitment to producing the highest quality election products is reflected in our heavy investment in development and engineering – ensuring that customers have the product options they need. Developed from the ground up as an integrated system of digital scan components, Democracy Suite was created specifically around present and future customer needs. It is not wrapped around a legacy platform nor an outdated software and hardware engineering effort. Instead, Dominion believes that election officials need something new and robust that can be adapted to market conditions and trends. As their requirements shift, or legislative and voter confidence requires changes in a mandate, so too can our systems evolve. Dominion offers a wide range of election automation products and related services, including full project management, training, and support.

Election automation is a highly demanding and rapidly changing discipline – and customers making long-term investments need to know their future requirements will always be met. Therefore, Dominion's commitment to producing the highest quality election solution in the world is reflected in our response to this proposal and our interest in becoming the election systems provider for the State of Colorado.

### 3.0 Company Financial Status

You must provide company financial information. If the company is publicly traded, include a financial statement for the last two years, which includes at a minimum, a profit and loss statement and a balance sheet. If the company is not publicly held, submit a copy of the most recently audited financial statement and organization/financial structure of your company. Unaudited financial statements or Dun and Bradstreet reports alone are unacceptable and, if submitted without additional supporting documentation, may be grounds to eliminate the company from consideration. You must identify any financial information (except public information for a publicly held company) that should be treated as confidential and should be used for the proposal evaluation only.

You must also include a statement of your other contractual obligations that might have an influence on your capabilities to perform the conditions of a contract resulting from this RFP process. Examples of influences are personnel constraints or a financial condition deemed to be a risk to CDOS for successful performance of a subsequent contract.

CDOS may disqualify from consideration any Vendor who is involved in bankruptcy proceedings.

*Page Limit: None*

Financial information to meet this requirement is provided in a separate, confidential package. Please see binder marked "Confidential Financial Information". Only one copy of this document is provided. Should the State require additional information, please contact us.

## 4.0 Relevant Business Experience

You must provide adequate detail, including contacts of any state where you performed a multi-jurisdictional implementation of your product and served as the prime contractor. A minimum of three references should be submitted. Each implementation referenced must be in production and serve as the official system for the respective election jurisdictions. Information provided for additional implementations is encouraged. If you have implemented your proposed system in all jurisdictions (statewide) for a state, include the implementation as part of the required references.

Each referenced implementation must include both a primary and secondary client contact person, with name, current telephone, fax number and email address for each. For each referenced project, describe if the project was completed on time and within the original bid amount. If not, identify and explain any time and cost overages. Additionally, disclose any litigation you have been involved with over contract performance. CDOS reserves the right to contact and verify the quality of products and services and the degree of satisfaction with your performance, with any clients with whom you have been known to have conducted business.

Each reference should include the following information:

- 1) Description of the project
- 2) Reference contact information
- 3) Project timeline from start to finish (planned and actual)
- 4) Contract performance issues, if any
- 5) Quantity, type and version of voting equipment and software installed
- 6) Poll worker training provided
- 7) Election staff training provided
- 8) Support provided for early voting, election day voting and post-election activities
- 9) Any problems reported regarding election results accuracy and, if so, how handled
- 10) Any problems reported regarding equipment availability and, if so, how handled
- 11) Description of project management services you provided to the project

If the product you are proposing has not been implemented in a production environment (e.g. pending certification, implementation in process, etc.), please provide whatever information you can for this section regarding your business experience in the voting arena.

**Page Limit:** 20 pages

State of Louisiana		
1	Description of the project	The state of Louisiana uses a blend of Dominion products for precinct, Early Voting and absentee voting. The AVC Advantage, a full-face DRE voting device is used for precinct voting. The AVC Edge, a DRE touch screen voting device is used for Early Voting. The ImageCast® Central is used for mail voting. This statewide voting system in all 64 parishes. The complete system is administered and managed by the Secretary of State with support from the Dominion Team and administered at the local level by the Registrar of Voters and Clerk of Court in each parish.
2	Reference contact information	Angie Rogers



		Commissioner of Elections LA Secretary of State's Office 225-922-0900 Angie.rogers@sos.louisiana.gov
3	Project timeline from start to finish (planned and actual)	The implementation of all units has been over a 20 year period. In December of 2005, we began a contract to complete the remainder of the state using HAVA funds. This included purchasing and implementing approximately 5,000 of the AVC Advantages and 600 of the AVC Edges. This was completed as planned in October 2006.
4	Contract performance issues, if any	None
5	Quantity, type and version of voting equipment and software installed	Equipment: 9,542 AVC Advantages (Precinct DRE), 565 Edges (Early Voting DRE), 110 ImageCast Central (Central Absentee Scanners) Software: WinEDS Election Management System and ParishManager an importing/election preparation program developed for Louisiana to bridge over election data from the State EMS to WinEDS to save manual duplication of data.
6	Poll worker training provided	We assisted the State in developing a Poll Worker Training program. The State did the actual training. We supported the trainers.
7	Election staff training provided	Yes. We trained all technicians and election programmers. As part of our on-going services contract, we train technicians once a year and election programmers prior to each major election.
8	Support provided for early voting, election day voting and post-election activities	Yes. We have an Annual Service Agreement to provide all of these services. It is defined as to the type of service and the number of days that are included and a daily rate in the event the State exceeds the number of days provided.
9	Any problems reported regarding election results accuracy and, if so, how handled	Through the years, there has been issues arrive due to equipment failure or human error that has slowed the vote count in isolated incidents, but there has not been an accuracy problem. There are recounts conducted occasionally for various reasons, but the recount has always supported the vote count accuracy.
10	Any problems reported regarding equipment availability and, if so, how handled	None.
11	Description of project management services you provided to the project	We have had and still have contracts with the State. The largest contract was the one signed in 2005. We had a team of 6 people that provided oversight, training and technical support for the entire process. We had a contract in Louisiana to



provide the ImageCast Central Absentee Ballot Tabulators in 2011. We provided training, technical services and support, plus we helped to configure the product to meet their needs. We have an annual contract, renewable each year to provide ongoing support and services. Also it included an Extended Hardware Warranty for the AVC Advantages and AVC Edges.

## City of Chicago, IL and Cook County, IL

1	Description of the project	Cook County and the City of Chicago selected Sequoia Voting Systems as their voting system vendor of choice and implemented a blended poll-site based voting system, consisting of the Insight PCOS and the EDGE 2+ DRE, and the HAAT (hybrid activator accumulator transmitter), which provides remote cellular transmission of results to Election Central. Dominion continues to support and improve this system today.
2	Reference contact information	<p>Chicago Board of Elections Commissioners Lance Gough, Executive Director Chicago Board of Elections 69 W. Washington St. Suite 800 312-269-7970 <a href="mailto:lgough@chicagoelections.net">lgough@chicagoelections.net</a></p> <p>David Orr Cook County Clerk 69 West Washington St., Ste. 500 Chicago, IL 60602 (312) 603-0996 <a href="mailto:clerk.david@cookcountyil.gov">clerk.david@cookcountyil.gov</a></p>
3	Project timeline from start to finish (planned and actual)	The implementation of the full system used by Cook County and the City of Chicago began in 2005 with a contract to deploy several thousand units to in excess of 5, 000 precincts with a configuration of DRE touchscreen, Optech Ballot Scanner and Card Activator/ Transmitter at every polling location, as well as several 400C units for use as the central count solution. The implementation included the WinEDS / HAAT Listener election management system, designed with the capacity to allow election results to be consolidated and transmitted from each polling place into the tabulation system located in the customer's downtown Chicago location. The full

		installation, testing, and acceptance of the system ended the Summer of 2006 for use in their Mid-term elections in November 2006. This same system, with on-going upgrades to firmware and software - developed through continued service to customer requirements, remains in use for the upcoming 2014 elections. It is projected for 2015 our customers will implement an upgrade over a period of time as part of an integrated system to replace the older legacy equipment with Dominion's newest technology.
4	Contract performance issues, if any	None
5	Quantity, type and version of voting equipment and software installed	City of Chicago: Qty. 3,142 Edge 2 Plus v. 1.2.77, Qty. 2,800 HAAT 100 v. 2.6.39, Qty. 2,866 - Optech Insight v. 1.44/2.16, Qty. 4 - 400C v. 1.16.15 Suburban Cook County: Qty. 5,737 Edge 2 Plus v. 1.2.67, Qty. 2,553 HAAT 100 v. 2.6.34, Qty. 2,457 - Optech Insight v. 1.44/2.16, Qty. 4 - 400C v. 1.16.15 (Note: plans to upgrade equipment to the same versions of the City are currently in progress.)
6	Poll worker training provided	We assisted the jurisdictions in their Poll worker training by providing a week long session of "Train the Trainers" classes. Training the City and County's Judges of election trainers. We also provided easy-to-follow sets of instructions to further the understanding of the poll worker and implement in their Judges of Election training manuals.
7	Election staff training provided	Yes, we provided and continue to provide training of their Election Staff at the customer's request.
8	Support provided for early voting, election day voting and post-election activities	Yes, we have an annual service and maintenance agreement with the jurisdiction. We support the activities from creation of the election database, pre-logic and accuracy testing of the full scope of equipment, equipment technical support during Preventative Maintenance, Pre-lat, Grace Period, Early Voting and Election Day, Election Day help desk, and post-Election activities such as technical support of equipment during a 5% recount as well as the final election results reporting.
9	Any problems reported regarding election results accuracy and, if so, how handled	We have had some issues reported over the 7 election cycles the equipment has been used, mostly related to human error, but any error caught was caught as a matter of due diligence in testing by the test authorities or acute monitoring of the equipment for compliance during every pre-lat,

		preventative maintenance, or during a live election. Nothing impacted the integrity of election results - the overall system fail-safes prevent this type of problem. We believe in granting the voter every opportunity to ensure their vote counts.
10	Any problems reported regarding equipment availability and, if so, how handled	As the voting system is aging, Dominion Voting technical staff has worked to identify replacement parts where some components became obsolete.
11	Description of project management services you provided to the project	The City of Chicago and Cook County have had on-site Project Management and on-site Product line technical support for seven (7) years, and both accounts continue to renew their service agreement with the same on-site service. Our existing team has a proven track record of outstanding performance and we have developed great, long-standing relations with the Election Administration staff.

## Monroe and Westchester Counties, New York

1	Description of the project	In the State of New York, 52 out of its 58 counties selected Dominion Voting Systems as their voting system vendor of choice and the ImageCast® Precinct (ICP) ballot marking device and tabulator as their preferred voting system. Each County uses at least one ICP per precinct. The purchase decisions were made in time for use in the 2008 and 2010 election cycles.
2	Reference contact information	<p><b>Monroe County, NY</b> 39 W. Main Street, Room 106 Rochester, NY 14614</p> <p>Tom F. Ferrarese Commissioner, Democratic E-mail: <a href="mailto:TFerrarese@monroecounty.gov">TFerrarese@monroecounty.gov</a> Work: +1 (585) 753-1560</p> <p>Peter M. Quinn Commissioner, Republican E-mail: <a href="mailto:PQuinn@monroecounty.gov">PQuinn@monroecounty.gov</a> Work: +1 (585) 753-1550</p> <p><b>Westchester County, NY</b> 25 Quarropas Street White Plains, NY 10601</p> <p>Reginald A. LaFayette Commissioner, Democratic</p>

		<p>E-mail: <a href="mailto:ral4@westchestergov.com">ral4@westchestergov.com</a> Work: +1 (914) 995-5705</p> <p>Douglas Colety Commissioner, Republican E-mail: <a href="mailto:dac7@westchestergov.com">dac7@westchestergov.com</a> Work: +1 (914) 995-5703</p>
<b>3</b>	Project timeline from start to finish (planned and actual)	The implementation of the full system used by both Monroe and Westchester Counties began in 2008 with an initial phase to deploy over 800 ImageCast Ballot Marking devices to meet HAVA requirements. Deployment of an additional 1,375 precinct based tabulators commenced resulting in a complete conversion from levers to paper ballot elections. The implementation included the Democracy Suite election management system, allowing customers to configure, program, and create ballots as well as consolidated tabulation of results. The full installation, testing, and acceptance of the system ended in the summer of 2009 for use in their Primary elections in September 2009. This same system, with on-going upgrades to firmware and software, remains in use for the upcoming 2014 elections.
<b>4</b>	Contract performance issues, if any	None
<b>5</b>	Quantity, type and version of voting equipment and software installed	<p>Monroe County: 425 ICP-BMD, v4.9, 375 ICP v.4.9, EMS v4.9</p> <p>Westchester County: 420 ICP-BMD, v4.9, 1000 ICP v.4.9, EMS v4.9</p>
<b>6</b>	Poll worker training provided	We assisted the counties in their Poll worker training by providing multiple day sessions of "Train the Trainers" classes. Training the County's staff election trainers. We also provided easy-to-follow sets of instructions to further the understanding of the poll worker and implement in their poll worker training and user manuals.
<b>7</b>	Election staff training provided	Yes, we continue to offer training to county and election staff upon request.
<b>8</b>	Support provided for early voting, election day voting and post-election activities	Early voting is not available in New York. We continue to provide election day support upon request as well as post-election tally support. In addition, we provide onsite technical and rover support, maintenance support, pre-election logic and accuracy testing support, and help desk support.
<b>9</b>	Any problems reported regarding election results accuracy and, if so, how handled	We have had some issues reported over the 5 election cycles that were mostly related to human error. There have also been issues related to ballot printing and improper marking devices

		used but nothing experienced has impacted the integrity of election results.
<b>10</b>	Any problems reported regarding equipment availability and, if so, how handled	None
<b>11</b>	Description of project management services you provided to the project	Customers had a regional project manager assigned to them during the initial 4 election cycles at no additional charge. The project manager coordinated all service deliverables including technical support, configuration support, and election support to the respective counties as required either remotely or onsite. All project management was based in state to allow for quick response and support as needed.

The Democracy Suite ImageCast Precinct (ICP) tabulator has been in use in New York State since 2008, with associated implementation and training and support services. This system which includes 52 of 58 counties in New York includes the ICP precinct scanner and the ICP with Ballot Marking Device (BMD) as a single device. This implementation involved approximately 10,000 ICPs and an implementation plan appropriate to the rather complex effort in training, supporting, and engaging in voter outreach associated with an engagement across the state (a sample project plan from the NY implementation is provided in section 8). Dominion utilized a well-planned regional approach that identified and took advantage of cultural and geographic similarities within each region. Many members of the implementation team reside in New York, and continue to provide election coding and support as needed. This effort included assisting with the training of local ballot printing companies' staff. Across the state, Dominion engaged in a partnership approach with great success and few problems.

Related versions of this Democracy Suite precinct scanner product have been used and supported in Canada since 2004. The ICP precinct scanner technology proposed has been used globally in nations such as Mongolia and the Philippines. The Mongolian implementation in 2012 for their presidential election cycle involved 2,500 devices across a very diverse geography and demographic. This mix of very dry to mountainous terrain created many interesting challenges, from high static environments to high altitudes. With poll workers and voters ranging from more urban and sophisticated to very rugged and rural, our implementation team, led by the project leader proposed here, executed flawlessly and the country continues to use this system with great success as measured by their satisfaction. As with all of our customers we invite you to contact or visit at your convenience to confirm our claims.

In 2010, Dominion acquired assets and hired employees from Premier Election Solutions, Inc. and Sequoia Voting Systems, Inc. As a result, Dominion's current combined history and experience dates back over 100 years, with over 1,500 people-years of elections expertise. With these asset and experienced personnel additions, including, Dominion's current 1,200 customers in 33 states, Dominion is a stable, mature and diversified election solutions provider with broad geographic reach, offering a complete and innovative product line and associated services provided by election industry professionals with decades of experience.

Our installation and support resume includes counties from the State of Colorado and California, as well as 19 of 21 counties in New Jersey, 52 of 58 counties in New York, the City of Chicago

and Cook County, IL.

Our statewide installation and support experience includes the states of Louisiana, Nevada, Maryland, Georgia and Mississippi. Dominion has further implemented and serviced country-wide elections in Mongolia. Dominion was recently awarded a contract to be the election systems vendor for the entire State of New Mexico.

This mix is a good representation of both our skills in designing reliable voting systems and our personnel and their ability to achieve successful partnerships with our customers as we solve complex election issues as a team. Below is a table which summarizes these engagements, the dates of the period of service, and a description of these services.

List of relevant engagements	Dates of period of service	Description of services
California	2003-present	Mix of ongoing services, support, and training. Runs from a full support service in San Francisco providing everything except the poll workers and poll sites, to fully self-supporting counties.
New York	2008 – present	Dominion Democracy Suite system implemented in 52 of 58 counties. Dominion has been providing training and technical support.
Louisiana	1993-Present	Statewide AVC Advantage and Democracy Suite Absentee system. Dominion provides a mix of coding and support services statewide, as well as on-site or regional technician training and certifications, EMS training and certifications and presentations as needed.
Nevada	2006-present	State-wide DRE and optical scan implementation and Absentee system. Dominion provided election coding and support statewide. Dominion provides additional local training, support, and presentations as needed.

Mongolia	2012 – present	Country-wide implementation of ImageCast Precinct and full election support services
Philippines	2010-present	Country-wide use of Dominion technology including Democracy Suite precinct optical scan system. <ul style="list-style-type: none"> <li>• Largest single PCOS use in history, with 82,000 tabulators deployed on 7100 islands.</li> <li>• Largest single optical scan election in history, with 51 million ballots printed</li> </ul>
Chicago, IL	2006 – present	2,500 precinct optical scan system implementation + EDGE with DRE, and remote transmission
Cook County, IL	2006 – present	2,500 precinct optical scan system implementation + EDGE with DRE, and remote transmission
Maryland	2002-2004	Full DRE implementation, training, voter outreach statewide
Georgia	2002-2006	Full DRE implementation, training, voter outreach statewide
Utah	2005 – 2009	Full implementation, training, voter outreach statewide
Mississippi	2006-2009	Full implementation, training, voter outreach statewide
New Jersey	1994-present	AVC Advantage in 19 of 21 Counties and Democracy Suite Absentee system in 6 Counties. Included on site or regional technician training and certifications, EMS training and certifications, election day support, acceptance testing, State election conference training

		sessions on request, and other miscellaneous training, support, and presentations as needed.
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The engagements listed above demonstrate the company's depth and breadth of experience in installing, supporting and maintaining different kinds of technology for a diverse set of customers, each with unique needs. Every individual assigned to the Colorado Project Team has honed their skills through their work on the engagements listed above, and each of them brings a great deal of real-world election solution experience and complete dedication to customer satisfaction to your project.

Each county in Colorado will receive the same comprehensive training, project oversight, and implementation services that Dominion is acclaimed and recognized for providing to all of its customers – large, medium and small.



## 5.0 Prior Proposals

Vendor must disclose any voting system projects in which the Vendor has submitted bids or proposals (as prime or sub) for consideration by a state or territory between July 2008 and the date of this RFP. Vendors proposing a solution to a single element (e.g. Mail Ballot Tracking solution) of this RFP shall identify proposals in which the vendor offered similar bids or proposals in the past 5 years. At a minimum, this information must include:

- 1) State or territory
- 2) Contact name, telephone and email address
- 3) Date proposal submitted
- 4) Result of your bid
- 5) Brief description of your proposal

**Page Limit:** *Three pages*

State or Territory	Contact Information	Date Proposal Submitted	Bid results	Proposal description
<b>Louisiana</b>	Angie Rogers Commissioner of Elections LA Secretary of State's Office 225-922-0900 <a href="mailto:Angie.rogers@sos.louisiana.gov">Angie.rogers@sos.louisiana.gov</a>	February 2011	Won	Statewide Absentee Ballot Tabulating System using ImageCast Central.
<b>Maine</b>	State of Maine, Department of the Secretary of State  Bureau of Corporations, Elections and Commissions, Elections Division	August 2012	Lost	Statewide lease of a precinct-level Ballot Scanning and Tabulating System for approximately 125 to 250 of Maine's municipalities, for an initial 5-year contract, with the option to renew for 2 years at the discretion of the Division
<b>Michigan</b>	The Michigan Department of State	April 2011	Won	Proposal for extended

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	Department of Technology, Management and Budget Purchasing Operations			service, maintenance and warranty of voting system hardware, firmware and software.
<b>New Mexico</b>	Terry Davenport Procurement Co-Manager Office of the Secretary of State 325 Don Gaspar, Suite 300 Santa Fe, New Mexico 87501 (505) 470-1428 <a href="mailto:terry.davenport3@state.nm.us">terry.davenport3@state.nm.us</a>	July 2013	Won	Statewide optical scan ballot tabulation system. Includes ImageCast Precinct and ballot marking device, ImageCast Evolution and ImageCast Central, powered by Democracy Suite 4.14.
<b>Oklahoma</b>	The State of Oklahoma Department of Central Services, Central Purchasing Will Rogers Building 2401 N. Lincoln Blvd., Suite 116 Oklahoma City, OK, 73105	October 2010	Lost	Statewide optical scan ballot tabulation system.
<b>Puerto Rico</b>	Puerto Rico State Elections Commission Junta de Subastas Avenida Arterial B 550 Hato Rey, San Juan, Puerto Rico, 00918		Deferred	Proposal for products and services for the counties in the Commonwealth of Puerto Rico for an optical scan voting system.
<b>Virginia</b>	Ebony K. Beaver VCO, VCA Central Procurement Unit (CPU)	October 2013	Vendor not yet chosen	Proposal for products and services for the

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	1100 Bank St STE 724 Richmond VA 23219 804-786-8425 <a href="mailto:ebony.beaver@dgs.virginia.gov">ebony.beaver@dgs.virginia.gov</a>			counties of the Commonwealth of Virginia, based on the system certified by the State (VA State certificate is provided as part of this RFP response.
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## 6.0 Project Approach

CDOS envisions a multi-year conversion to the new UVS. Colorado counties have voting equipment supplied by various vendors over the past several years. Some counties are in more urgent need to convert to the new UVS than others. This need, along with budget considerations, will influence the implementation scheduling of the new UVS. Provide your proposed approach to managing the effort of converting all Colorado counties to a new UVS. Your approach, at a minimum, should address the following aspects of the Colorado UVS project.

### 6.1 Project Management

Describe the approach to project management that you propose for managing the Colorado UVS project. You may use *RFP Appendix D – Statement of Work, Track 1: Project Management* as a guide.

Dominion is a leader in the industry in project management services and support for voting system implementations having the broad experiences of implementations within Dominion, Sequoia as well as Premier/Diebold. This cornerstone in project management has been the key to the success of voting system implementations ranging in scale from large statewide projects to county and municipality projects. This strong base of experience guides our delivery of election solutions.

Dominion utilizes project management methodologies and standards that are defined by the Project Management Institute (PMI) in the Project Management Book of Knowledge (PMBOK™). We will work with Customers to institute best practices from the elections industries, as well as methodologies from PMI.

Given the high exposure of voting system implementation projects, as well as the increased scrutiny of voting systems themselves, a structured project management environment is crucial to a successful outcome. Dominion has the right people, methods and technology to achieve the optimum end result of consistently successful elections.

The critical document for project implementation will be the project plan. Attached to this response is a sample project plan developed based on our current understanding of Colorado requirements and timelines. This project plan will be revised when Dominion Voting enters an agreement with the State and individual Counties. The project plan will be completed in a collaborative manner with County officials, to ensure that it includes all critical tasks with realistic timelines.

In addition to a detailed project plan, Dominion Voting Project managers will develop and maintain a project risk register. This risk register plays two key tasks in project delivery. It guides the project team to identify potential risks to successful project implementation, allowing them to put in preventative controls, reducing their likelihood. It also allows the project team to consider the possible required responses, ensure that and necessary resources and materials are available, and reducing time to implementation, speeding recovery.

The Dominion Project Management Methodology has been developed through a number of years of experience in implementing both large and small voting system implementations by individuals who know elections. Best practices and lessons learned from each project have

refined our approach and been incorporated at each stage of this methodology to avoid any potential pitfalls associated with implementation. Our Project Management Methodology utilizes the core principles of the Project Management Institute's PMBOK and is highly scalable. The combination of a solid project management methodology and a core application that meets Colorado's existing business and technical requirements, results in a proven cost-effective solution.

Dominion Voting understands that our responsibility begins - not ends - with successful acceptance of our system. For this reason at the initiation of the contracting phase of the project, Dominion will assign two full-time, locally based resources to supplement our proven project team. Based in our Denver Headquarters, our local representatives will provide dedicated assistance to ensure that Dominion products and services continue to meet your needs long after their initial use.

### **Scope and Project Planning**

Dominion Voting has prepared an indicative project plan to assist the State of Colorado in the evaluation of offers (please see section 10). However, we cannot over emphasize the importance of a collaborating with State and County officials throughout the planning, execution and ongoing operation phases of the implementation. Immediately following the award of contract, Dominion Voting's experienced project staff will collaborate with State Officials and County representatives to insure that the implementation plan meets all requirements and expectations. This revised plan, delivered within 30 days of a signed agreement is the critical first deliverable of the project, and will be used as the overall baseline for ongoing progress reporting.

### **Schedule**

The creation of an achievable project schedule is critical to project success (a sample project schedule is provided in section 10). We anticipate first use of the statewide system for the November 2014 General election. This schedule is aggressive, but achievable, and is consistent with our goal of allowing Colorado to realize the benefits of a new system as early as possible.

### **Quality**

Dominion uses multi-level quality assurance and quality control processes to ensure that all elements of our integrated voting system perform properly with every use. Dominion uses world class contract manufacturer, recognized as the leader in the industry for manufacturing. Internal acceptance testing is performed on each voting system on receipt from the manufacturer. By the time our products are purchased by the county they have gone through three full rounds of acceptance testing. Independent reviews of election databases are conducted prior to logic and accuracy testing. We recommend (and support our clients to conduct) precinct-level pre-election testing.

In addition to this rigorous testing and control program designed to catch errors, Dominion Voting regularly conducts process audits of our acceptance testing, and programming processes to ensure that errors never occur.

### **Risk**

Risk management is ongoing throughout the length of the project. Risks are identified by all the stakeholders prior to the start of the project and mitigation strategies are implemented. A risk plan is clearly defined and all parties are aware of the mitigation strategies.

During the planning phase as risks are identified the plan will be adjusted to proactively eliminate the risk before project execution. Once in the execution phase of the project if any of the identified risks or unidentified risks arise Dominion and County officials will address the issue in accordance to the risk mitigation plan. In addition, Dominion would propose regularly scheduled meetings between the County Project Manager and the Dominion Project Manager. Discussion and resolution of any identified risks will be the purpose of those meetings.

The Dominion Project team expects to participate in a collaborative approach to project risk management with County team members. The table below defines the specific steps of our proposed risk management process:

- Step 1 - Identify issue or risk
- Step 2 - Investigate issue or risk
- Step 3 - Resolve issue with customer
- Step 4 - Determine containment measures for risk
- Step 5 - Review risks periodically

Communication is a fundamental and vital aspect of an effective risk management program. Open and effective communication by all project team members is crucial. Colorado counties can be confident that the Dominion team is committed to fully support communication processes.

County Officials or Dominion Project team members may identify project risks. Specific risks will be identified during the planning phase and throughout the project life cycle. A continuous process must be established to ensure the risk management plan and detailed work plans correlate and are integrated throughout the project.

- Specific risks may be identified in the following ways:
- Reviewing the risk management plan
- Reviewing detailed work plans
- Reviewing risk profiles from similar projects
- Review of issues reported through the issue resolution process
- Review of changes requested through the change control process
- Interviews/discussions with business, technical, and project team members
- Workshops

To investigate project risks, the Dominion Project team will do the following:

- Investigate each risk for the potential impact on the project in terms of scope, effort, schedule, and cost. The team will explore alternative scenarios, and offer options for resolution including the option of non-action.

- Risk investigation will be performed with all stakeholder input, where possible. Alternative resolutions may involve customer business policies and practices where only the client would be able to assess the impact.
- A risk resolution can result in a change in project scope. In this case, the Change Control Process will be followed to determine the estimated cost and schedule impact of implementing the resolution.

To resolve or mitigate project risks, the Dominion Project Team will take the following steps:

- Review the options for resolution for each risk with the stakeholders, and agree on the most appropriate resolution. If a resolution cannot be agreed upon until a later date, a deferment date will be agreed upon and interim actions taken to advance the issue. The review can take the form of a regular meeting where all new risks that have reached their deferment date are discussed.
- Create a Change Request, if necessary, to implement resolution.
- If necessary, escalate issues that prove intractable to the appropriate level.

To determine risk mitigation strategies the Dominion Project Team will do the following:

- Review each risk with the stakeholders, so potential project impact is communicated openly and to appropriate team members. If the project team is aware of the risks at an early stage, then they can manage their community's expectations accordingly.
- Review the possible mitigation options for each risk, and agree on the appropriate containment measures. Use a Change Request to implement containment measures as necessary.
- Consider the cost of the containment measure for each risk versus the possible impact on the project.
- Effective risk management requires an on-going, proactive risk program. The Dominion Project Team will continue to identify, investigate, monitor, and manage the risk process throughout the project life cycle. The Dominion Project Team will participate in the customer meetings and work as an integral part of the process. The Dominion Project Team suggests the following activities to support the risk management process:
- Keep risks visible in the project management and monitoring process until they can no longer become a reality and negatively affect the project.
- Review all risks and containment measures periodically to ensure that the strategies for each are still appropriate.

Typical risks associated with a project of this caliber could consist of:

- Availability of County key resources
- Inability of County staff to attend scheduled training
- Inability of County to accept deliveries as scheduled

In addition to the project schedule, the project risk management strategy is a critical component of the overall implementation plan. An early project activity is to collaborate with stakeholders to

understand potential risks and to implement measures which reduce the probability and potential impact of these uncertain events. A sample listing of risks is provided below:

Risk	Mitigation Strategies	
	Prevention	Recovery
<b>Line-ups</b> <ul style="list-style-type: none"> <li>- Long line-ups result for a lack of voter experience on the new election system</li> </ul>	<ul style="list-style-type: none"> <li>- All Dominion Voting systems products are designed to be simple to use – no advance training in the use of the voting machine is necessary</li> <li>- Dominion provides simple, graphical voter instructions to the county for use at polling locations</li> <li>- Training and support in poll location set-up to optimize</li> </ul>	<ul style="list-style-type: none"> <li>- Each ballot box contains an auxiliary bin that can house ballots cast but not scanned.</li> </ul>
<b>Hardware Risk</b> <ul style="list-style-type: none"> <li>- Failure of voting machine during acceptance testing</li> </ul>	<ul style="list-style-type: none"> <li>- EAC certification of voting systems ensures it meets the highest standard</li> <li>- Manufacturing performed by class “A” CEM</li> <li>- Rigorous testing during and at completion of manufacturing</li> <li>- Employs industry best practice in tracking components</li> </ul>	<ul style="list-style-type: none"> <li>- Dominion manufactures 110% of the required number of voting machines to ensure that it can fully honor its warranty immediately</li> <li>- Hardware engineers on site during acceptance testing to identify and address any failures</li> </ul>
<b>Hardware risk</b> <ul style="list-style-type: none"> <li>- Failure of voting machine on election day</li> </ul>	<ul style="list-style-type: none"> <li>- Designs for use – all Dominion Products are designed with the end user in mind. Only under extra-ordinary circumstances are poll workers required to change thermal paper, clear papers jams, or conduct other maintenance</li> <li>- Rigorous test procedure and preventative maintenance followed</li> </ul>	<ul style="list-style-type: none"> <li>- Standard Dominion practice with new installations is to conduct a test election prior to the election event. This provides an additional level of confidence the voting machines have not been damaged during distribution, and will function on Election Day.</li> <li>- Poll worker training to provide skills prevent</li> </ul>



	during pre-election testing to ensure programming and voting machine are fully election ready	and recover from common errors i.e. paper jams <ul style="list-style-type: none"><li>- First level call center support to assist poll operators to address common problems</li><li>- Technician level training for county officials, giving them the independence to conduct routine interventions on voting machines unassisted</li><li>- Trained roving teams are available during the election to repair any failed voting system.</li><li>- Dominion Voting machines are designed so that in the event of an Election Day failure a replacement can be installed without the loss of data. Spare voting machines are held in pre-determined locations around the county to replace failed systems that cannot be repaired by roaming teams.</li><li>- In the rare event of an Election Day failure that cannot be recovered from, and where a spare tabulator is not available Dominion products offer inter-operability between the high-speed central count scanners and the precinct level tabulators. This allows precinct officials to collect optical scan</li></ul>
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		ballots in the ballot box for scanning at a designated location at the end of the election event without significant delay to results reporting.
<p>Election Management</p> <ul style="list-style-type: none"> <li>- Errors in programming that are not uncovered prior to election day</li> </ul>	<ul style="list-style-type: none"> <li>- Comprehensive pre-election testing of each voting machine</li> <li>- A test election prior to Election Day. The results reported by each voting machine are compared with a known result to ensure accuracy.</li> </ul>	<ul style="list-style-type: none"> <li>- Dominion technicians are available throughout the election period to respond to any unforeseen challenges that could arise</li> </ul>
<p>Election Management</p> <ul style="list-style-type: none"> <li>- Error uploading election results</li> </ul>	<ul style="list-style-type: none"> <li>- Pre-election testing ensures that the results from each voting machine can be successfully uploaded into the election database</li> </ul>	<ul style="list-style-type: none"> <li>- Dominion's voting machines include redundancy in their memory cards. In the extremely unlikely event of a failure, a back-up card is available to ensure that election results are not lost.</li> </ul>
<p>Election Reporting</p> <ul style="list-style-type: none"> <li>- Reports produced do not meet county requirements</li> </ul>	<ul style="list-style-type: none"> <li>- The Dominion Voting project manager works closely with county officials from the beginning of the project to ensure that report templates meet their needs</li> <li>- Reports are produced following the pre-election test and the test election event providing officials with the opportunity to see reports of actual election results</li> </ul>	<ul style="list-style-type: none"> <li>- Dominion Voting's election management system provides a high degree of flexibility in the design of election reports. When called upon Dominion engineers are able to customize reports extremely quickly ensuring the all requirements are met.</li> </ul>
<p>Logistics</p> <ul style="list-style-type: none"> <li>- Delays in supply chain result in a short-fall of critical election supplies prior to the election</li> </ul>	<ul style="list-style-type: none"> <li>- Dominion maintains an inventory of critical components in its warehouses around the country.</li> <li>- Dominion Voting's</li> </ul>	<ul style="list-style-type: none"> <li>- Preferred supplier arrangements allow immediate response for most items.</li> <li>- Dominion maintains strong relationships</li> </ul>

	<p>rigorous and proven project management systems identify long-lead time items early in the project, and project managers work with county officials to arrange delivery</p>	<p>with major shipping firms, including a strategic partnership with one major independent shipper. In the past we have successfully used these relationships to assist customers.</p>
<p>Ballot</p> <ul style="list-style-type: none"> <li>- Poor quality ballot printing results in rejected ballots</li> </ul>	<ul style="list-style-type: none"> <li>- Dominion Voting works to certify printers prior to the Election Day. This includes more than just auditing their product quality - it includes training on required ballot parameters and ballot auditing procedures.</li> <li>- Certification of paper vendors. The success of an optically tabulated election depends on the consistency of the ballots. Dominion has worked with paper suppliers to develop product specifications that provide the optimal paper for use in elections.</li> <li>- Dominion Voting conducts pre-election testing and the test election on ballots produced by the official ballot printer. This provides additional confidence that the Election Day ballots will meet necessary specifications.</li> </ul>	<ul style="list-style-type: none"> <li>- Where appropriate the Dominion Voting project manager works with County officials to implement best practices in ballot handling and distribution to ensure that robust, expedient processes – in line with county regulations – exist to ensure that failed ballots do not disrupt the election.</li> </ul>
Unidentified risks	<ul style="list-style-type: none"> <li>- Ongoing collaboration with key stakeholders and within project team to update and revise risk register and</li> </ul>	<ul style="list-style-type: none"> <li>- Defined during ongoing risk management processes</li> </ul>

	to put in place risk mitigation strategies	
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### **Communications and Status Reporting**

Communication is the responsibility of the dedicated Dominion Project Manager. During the development of the project plan a series of communication measures are agreed between Dominion, the Counties and the Secretary of State's office. These may include, but are not limited to, regularly scheduled meetings, conference calls, the distribution of written progress update reports, or the creation of an information and document repository. In addition the Dominion Project Coordinator is always available to respond to requests for information.

Effective internal project team communications are achieved via a number of manners. Dominion has pre-assigned a highly experienced team, who has a proven ability to work effectively together. Once assigned, this team will remain in place throughout the implementation, ensuring the knowledge and expertise created during the project, stays with the project. The Project Director will use a variety of tools to ensure that the information required by the team to achieve their objectives is readily available. These include regularly scheduled team meetings, technology based collaborative workspaces, and messaging systems. All formal communication is documented and remains available to the project team.

### **Project website**

Dominion understands that the State will provide and maintain a project web presence on the Colorado Secretary of State website for internal and external stakeholders, and will support the State in the implementation of this item as needed.

### **Test Strategy Plan**

Please see section 6.6 for a comprehensive overview of Dominion's approach to system testing.

### **Training Plan**

As timing of purchase of election equipment will be determined by the Counties, training will be offered on a fee for service basis. Where implementation timing and geography allow, Dominion will work with purchasing Counties to coordinate training in regional centers, in order to reduce overall costs.

Please see section 6.7 for a detailed overview of Dominion's training plan.

### **Security Plan**

#### **Physical Security**

The IT environment that will host the Dominion Election Management System, should be housed in an access restricted area that is physically secured in a locked area with security access control in place. No access to this area should be permitted by non-authorized personal.

An access control system should be utilized that will automatically log each individual access to the data center environment. Such systems include the use of electronic passes or biometrics to access entry into the secure area. Along with electronic control access a CCTV system inside of the restricted area should be also included.

In addition, all personnel should be required to sign in and out when accessing the secure area. The access log should include: name, organization, purpose of access, date, time in, time out,

and signature.

These physical security measures may not be practical for canvassing sites, however, access to those areas be restricted to authorized personnel at all times.

The State of Colorado has traditionally required these types of security measures - the Democracy Suite voting system is amenable to continuing and enhancing these practices.

#### **Network Security**

The networks used as part of the Dominion Electoral Management System will be physically and logically isolated from all other networks not forming part of the system, with no outside connections to public networks or the internet. Links between parts of the system hosted at different location will either be via a secure dedicated link, or via a VPN connection.

#### **Data Security**

Dominion understands that data security is part of overall system security – it is what we are attempting to secure. Dominion staff will follow these policies and attempt to foster them at the customer site:

Users will access only data required for their job. Users will not make or permit unauthorized use of any data. They will not seek personal or financial benefit or allow others to benefit personally or financially by knowledge that may have come to them by virtue of their work assignment.

Users will enter, change, and delete data only as authorized within their job responsibilities. They will not knowingly include or cause to be included in any record or report a false, inaccurate, or misleading entry, nor will they knowingly alter or expunge from any record or report, or cause to be altered or expunged, a true and proper entry.

Users will not release data in any format except as required in the performance of their job. Users will not remove an official record, report, document or copy of same, from the office where it is maintained, except as may be necessary in the performance of their job. They will not exhibit or divulge the contents of any official record, report, or document to any person except in the conduct of their work assignment and in accordance with Dominion policies and procedures.

All reasonable steps should be taken to ensure that damaged or redundant magnetic media or CPUs containing a hard or fixed disk which are to be disposed of or sold must not be released for sale or replacement until all data are physically erased.

Computer printouts and other hard copy documentation holding sensitive or confidential information must be locked away when not in use. Any computer printout or disk containing sensitive, confidential or personal information must be disposed of under secure conditions.

Before the disposal of any obsolete computer equipment, personal computers and other such devices can occur, all data must be eradicated from the device. No software may be passed on with the device if it contravenes the terms and conditions under which it was purchased.

Critical IT information and materials on paper and/or electronic media will be stored in lockable

fireproof cabinets and/or maintained in an off-site archive. All essential system backups and archives will be stored locally and in a separate secure offsite location.

On site, off-line and offsite backup copies of server information, data files, and databases will be routinely made.

### **Organizational Change Management Plan**

Dominion understands the importance of working with County Officials to ensure a smooth transition to the new election platform. In our experience it is practical hands-on experience with the systems that give election officials the confidence to implement successfully. To achieve this, and to allow the customer to realize the benefit of cost reduction, Dominion proposes that onsite acceptance and logic and accuracy testing be completed by County officials, supervised and assisted by Dominion staff. In addition, Dominion prides itself on tailoring implementation and training manuals to the specific needs of customer, meaning that - where practical - existing county processes are retained, easing the transition. Dominion will work with State and county officials to update all documentation identified in Appendix D prior to implementation.

## 6.2 UVS Software

Provide a detailed description of the software proposed for the Colorado UVS. Describe your desired process for clarifying requirements and determining gaps between your software solution and the system requirements of CDOS.

Describe the programming language(s), along with version numbers, used to develop your system's software.

If your proposed application utilizes any 3<sup>rd</sup> party software, please identify such and explain how you will work with the 3<sup>rd</sup> party to resolve any problems.

Describe your position on access to application source code by CDOS.

Describe your position on escrowing your software. Also describe any processes, such as hash functions or trusted builds, which will ensure software code being executed in an election is the same as the escrowed code.

### Gap Analysis

After an initial gap analysis, which brings to light immediate shortcomings between the existing system and the ideal scenario, simulation testing further uncovers implementation, deployment, usability and customization requirements. All of these details are funneled into Dominion's Agile development process, which includes (as realistically as possible) the customer in multiple development iterations.

### Software Verification and Source Code

Democracy Suite is compliant with VVSG 2005 requirements for software set-up and subsequent verification. The Technical Documentation Package contains instructions for using third party hashing software to determine the hash values for both installer and installed software. Dominion Voting produces a System ID Guide, which can be obtained from either Dominion Voting or the US EAC. The System ID Guide contains the complete list of hash values for all system software components.

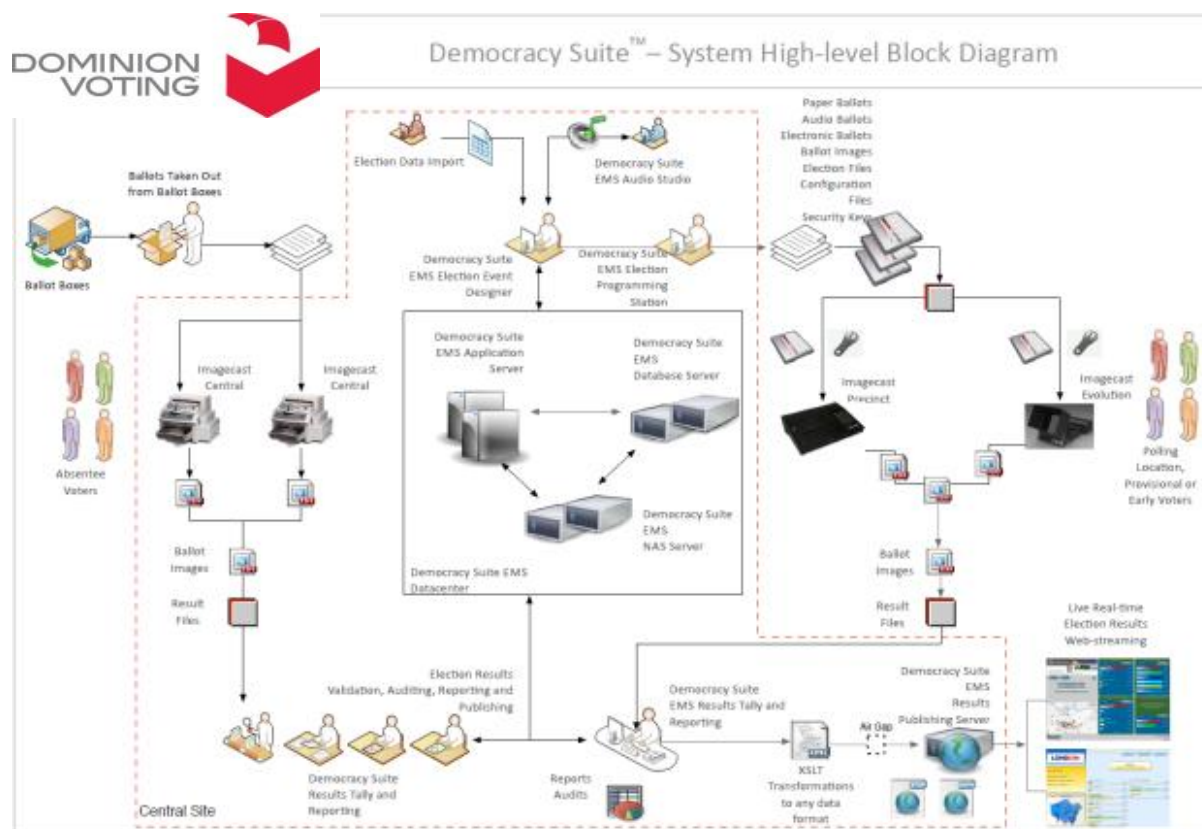
Trusted builds for all Dominion Voting products certified in the United States are available directly from the US EAC or their test laboratories.

Dominion is willing to enter into a three party Escrow Agreement with the State and an Escrow Agent. The source code will be deposited with the Escrow Agent and subject to standard release conditions. Dominion is also willing to participate in a source code review as part of the certification process and with appropriate confidentiality provisions in place.

### Programming language

Dominion develops all of its software and firmware products, including all of the applications of the Democracy Suite® Election Management System, which are designed and developed by Dominion using Visual C# object-oriented programming language on the .NET Framework 4.0 platform. The firmware and applications associated with our ImageCast product line is also developed in-house by Dominion, ensuring that Dominion has complete control over the source code, and directly manages any upgrades, enhancements or necessary modifications. This means that CDOS can have complete confidence that any software issues will be handled expeditiously by Dominion's expert team of programmers.





### Dominion's Democracy Suite Election Management System

Dominion's Democracy Suite is a robust and secure Election Management System (EMS) that is used to design and set up an election, as well as tally and report the results of the election for any of Dominion's voting platforms. It includes all hardware, software and system prerequisites. The Democracy Suite EMS consists of three major components:

- Election Event Designer Module (EED) - main application used for the definition and management of the election event
- Result, Tally and Reporting Module (RTR) client application – main application used for the acquisition, tally, reporting and publishing of election results
- Adjudication Module – main application used for adjudication of flagged election ballots

#### Election Event Designer

The Election Event Designer module manages all of the information needed to define an election. Definition of an election is a complex task, and the event definition module allows the easy entry and tracking of numerous candidate names, ballot faces, polling locations, polling subdivisions, and different types of voting technologies and voting channels, all of which are inter-connected. In addition, the Election Event Designer allows jurisdictions to choose from a variety of language options for an election project.

Jurisdictions can program contests, candidates, propositions, offices, and other election data in order to generate both paper and electronic ballots. Election details are easily entered into the user interface of the Election Event Designer, making the definition process simple and efficient. Dominion's Democracy Suite creates tabulator-ready PDF ballot artwork files. Ballot artwork files are created as complete ballot images, without trim lines or crop marks, and are designed



to directly print on digital 4-colour sheet-fed xerographic or other electro-photographic printers (most B-sized laser printers). Ballot artwork is generated in industry-standard PDF format, PDFVX-1a:2001 (PDF Version 1.3) and CMYK color space. Ballot artwork files are full-sized press-ready ballots containing all required ballot elements and the unique ballot ID barcode that distinguishes each ballot style. Each file contains one or two ballot images: a front image (if the ballot is single-sided) or paired front and back ballot images. All fonts used in the ballot artwork are embedded in the PDF file. Ballot artwork files are digitally-signed (X.509) and tied to the election project files produced by Election Event Designer, to allow for authentication and revision control.

All relevant details, such as Geographic Divisions, Voting Locations, Offices, Candidates, etc., are stored in the Election Event Designer, and ballot faces are automatically generated in PDF format for your confirmation before printing.

Additionally, Election Event Designer keeps a record of the polling locations in which the system is deployed. This includes address, telephone, contacts, optional accessibility information.

Election Event Designer will program tabulator memory cards for each tabulator in your election, so your tabulators arrive ready for your pre-election testing. Each tabulator is automatically configured to know which ballot faces to accept, whether the accessible voting functionality is operational, and how the unit should interact with voters.

#### **Results Tally and Reporting**

The results tally and reporting module is installed on a client PC at the customer's location, to be used on election night upon close of polls.

The program allows for the upload of results from each tabulator to the PC computer running the results tally and reporting module, located at your election headquarters. This upload is usually achieved by the physical delivery of each tabulator's memory cards from the voting location to election headquarters as soon as polls close, but can also be accomplished through a modem transmission.

Under this process, once the memory cards arrive at election headquarters after close of polls, the card is inserted in a standard memory card reader attached to the workstation hosting the Results Tally and Reporting client application. The program automatically uploads the result files into the results tally module, and consolidated results are verified, tabulated, and published. Once the vote data is uploaded into the result tally module, the flow of results to the public and media can be controlled. Many election officials like to review the results before releasing them, and the system provides a number of ways and reporting methods, including but not limited to a precinct-level electronics result report, number of provisional ballots cast, ballots cast during early voting, on election day, and by mail. Alternatively, the results can automatically be released for public view, bypassing the review stage entirely.

#### **Adjudication**

The primary function of the Adjudication module is to create an automated process that allows ballots with exceptions or "out-stack" conditions – such as over-votes, under-votes, blank ballots, marginal marks and certified write-ins, – to be resolved on-screen and sent to tally. This eliminates the need for additional costs, time and resources spent on duplicating and re-scanning ballots.

The Adjudication module can be utilized real time as the Jurisdiction sees fit. The Adjudication module adds to the efficiency of the system by making it scalable to as many reviewing teams as needed for the jurisdiction. The out-stacked ballots will appear on the screen for the team to review as they come available. This process is completely auditable. The system logs each adjudication team's activities for review and to assure that activities are to specification.

Additionally, when a ballot is adjudicated, the ballot image with the existing AuditMark audit trail

receives an additional Adjudication AuditMark, so all can see how the voter marked intent, how the system interrupted the intent, and how the ballot was adjudicated. These adjudicated ballots are then sent to Democracy Suite RTR for tally and reporting.

#### **Internet-based Graphical Results Report**

The Internet-based graphical display of results provides an attractive and dynamic focus on election night. The report display runs in real-time on the Internet, updating as results are released from the results tally module by officials. It can be projected on public display screens, such as County Offices, fed to local television stations, and displayed on the county or state's website. Dominion has different report layouts available, and can configure the display with customer logos and colors. The report display can be interactive, allowing website users to click on contests and geographic areas of interest to them.

The Internet-based graphical display is completely automated and runs behind the scenes. Once election officials have released a set of results, XML files are created and transferred to a local FTP directory (or via an external memory device), and the graphical display is automatically updated. This XML file is in an internationally defined election format called EML (Election Markup Language). As such, the election results are transferred in a format that can be easily read by news media, if they wish to import the XML files into their own display program (or they can simply use your Dominion graphical report for broadcast).

#### **Additional EMS Modules**

In addition, the following modules are included:

- Election Database Server – RDBMS based repository for election projects and associated data.
- Election Programming Station (EPS) client application – combination of software and COTS hardware for programming memory cards in batches
- Audio Studio (AS) client – utility used for recording audio files for audio ballot presentation for accessible voting
- Logic and Accuracy Test Studio (LATS) client – utility application for the creation of test decks and for managing overall Logic & Accuracy test activity
- Mobile Ballot Printing client application – utility application for the on-demand ballot printing – official ballots, L&A test deck ballots, sample ballots.
- Application Server– main back-end server application
- Election Database Server – Microsoft SQL Server-based repository for election projects and associated data
- Network Attached Storage Server – repository of election project file based artifacts

## 6.3 UVS Hardware

Provide a detailed description of the hardware proposed for the Colorado UVS. Describe your desired process for clarifying requirements and determining gaps between your hardware solution and the system requirements of CDOS.

Provide specifications for each of the hardware devices you are proposing for the UVS. Describe prescribed preventative maintenance schedules for each of your hardware devices.

### Gap Analysis

After an initial gap analysis, which brings to light immediate shortcomings between the existing system and the ideal scenario, simulation testing further uncovers implementation, deployment, usability and customization requirements. All of these details are funneled into Dominion's Agile development process, which includes (as realistically as possible) the customer in multiple development iterations.

### ImageCast® Evolution

The following pages describe the features and functionality of the ImageCast Evolution poll tabulator, which include:

- AuditMark®: Patented unique visual audit trail features that allow results to be audited down to each individual ballot
- Integrated accessible voting solution – everyone uses the same ballot on the same machine
- Fully digital read-head outputs
- Ability to read ballots up to 22" inches long
- 19" inch LCD screen

By selecting Dominion and our solutions, Colorado voters will benefit from our outstanding service and support, plus use a new digital ballot scanner that offers a uniform, accessible, secure and highly transparent vote counting methodology.

The ImageCast Evolution unit (ICE) is a precinct-level, digital scan, ballot marker and tabulator that is designed to perform three major functions:

- Ballot scanning and tabulation
- Ballot review and second chance voting
- Accessible voting and ballot marking



ImageCast Evolution is Dominion's most advanced and **simple to use** tabulator. It features a full LCD interface that presents a unique, all-in-one digital ballot scanning and internal ballot marking solution. The ImageCast Evolution was designed to exceed the EAC VVSG 2005. The current ImageCast Evolution functionality includes scanning and ballot marking for all targets on ballots ranging from sizes of 8 ½ inches by 11 to 22 inches in length. The ImageCast Evolution provides several different options for certain ballot parameters. For example, a jurisdiction can configure the ImageCast Evolution to automatically accept, reject or divert a ballot under certain conditions. Additionally, it can be configured to alert the voter or operator of any errors that require further action to be taken.

Voters make their selections by filling in the voting targets next to their choices on a paper ballot. The voter then inserts the ballot directly into the ImageCast Evolution, which performs the following functions:

- Scans the ballot
- Alerts the voter of any errors on the ballot with or without full ballot review on.
- Interprets the digital image of the ballot, and appends to the bottom of the image a record of how that ballot was interpreted by the machine (AuditMark® imaging technology, proprietary to Dominion Voting Systems).
- Redundantly stores and tallies the results
- Prints cumulative totals of all votes cast after the polls have been closed

The ICE is also equipped with an ultra-sonic multi-feed detector that prevents the device from accepting more than one ballot a time. Dominion has developed secure ballot paper that if used, is detected by the unit. If the paper is a copy or not a valid ballot, the unit will reject the ballot. Optionally, the BMD Light Pole device can be used as a visual indicator for poll workers to indicate current voting status for both Standard and Accessible Voting Sessions. At the end of the light pole cable is a connector which connects to the AVS Port located at the rear of ImageCast® Evolution tabulator. At any given time, the light status indicates whether the unit is available or in use (for both standard and accessible voting sessions), as well as if the voter requested assistance or an error requiring pollworker intervention occurred.

### Accessibility

The ImageCast Evolution is equipped with an integrated voting feature for voters needing additional assistance. It is the only optical scan tabulator using a single ballot path which does not require the voter to have to go to an additional unit to cast the vote.



The ICE unit features a 19" display that allows voters to review and cast their marked paper ballot through a customizable visual interface. In addition, the ImageCast Evolution features **several accessible voting interfaces** that allow voters with various disabilities to effectively vote, review and cast a paper ballot in a private and independent manner. The ImageCast Evolution offers the following user interfaces:

- Touch screen interface for visual ballot review and ballot casting.
- Accessible ballot marking interface (both audio and visual)
- Assistive input devices for accessible ballot navigation and voting, including an ATI (Audio-Tactile Interface), sip & puff, and paddles.

The accessible voting session uses a hand-held controller called an ATI (Audio Tactile Interface) that connects to the ImageCast Evolution via the port located on the right side of the unit. A set of headphones connects directly to the ATI controller. Following the audio voting process using the ATI controller, the integrated inkjet printer produces a marked paper ballot which serves as the official ballot record.

Dominion uses a library of human hand marks and writing to mark a ballot via the accessible voting session, which **makes machine-marked ballots indistinguishable from hand-marked ballots**.

The ATI is the handheld device that is used by a voter during an Accessible Voting Session to navigate through and make selections to their ballot. The ATI:

- Has raised keys that are identifiable tactilely without activation (i.e. raised buttons of different shapes and colors, large or Braille numbers and letters)
- Can be operated with one hand
- Includes a 3.5 mm headphone jack
- Includes a T-Coil coupling
- Has a T4 rating for interference
- Uses light pressure switches
- Can be equipped with a pneumatic switch, also known as a Sip and Puff device, or a set of paddles.



The ATI is tethered to the ImageCast Evolution via a CAT5 RJ45 cable, which can extend up to 10ft away from the unit. No key or control has a repetitive effect as the result of being held in its active position.

The general procedure for voting using an audio and visual interface is as follows:

1. An audio ballot is initiated for the voter through the Administration menu.


2. The voter, or the appropriate election official, places a blank ballot into the unit.
3. The voter uses an ATI to mark their votes.
4. The voter can verify the correctness of choices using audio playback or/and visual review.
5. If the record is correct, the voter confirms its validity and the unit marks the paper ballot, which is then scanned and converted into an electronic format.
6. The voter is allowed to verify the electronic record of the paper record using audio playback and/or visual review.
7. If the electronic record is correct, the voter confirms the validity of it before the ballot is placed into the secure receptacle. If the ballot is incorrect, the ballot is marked as void and handled in the same manner as any other voided paper ballot. The voter may start a new accessible voting session.

The display can be adjusted using the zoom and contrast buttons. The contrast button allows the voter to display the screen image in high contrast (high contrast is a figure-to-ground ambient contrast ratio for text and informational graphics of at least 6:1). There are three different zoom levels in order to provide an enlarged ballot for voters with visual impairments. Every voter configurable option is automatically reset to its default value with the initiation of each new voting session.



## DOMINION IMAGECAST VOTING EVOLUTION

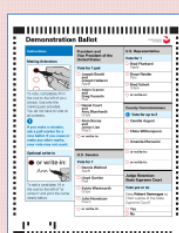
**ALL-IN-ONE ACCESSIBLE PAPER-BASED VOTING SYSTEM**



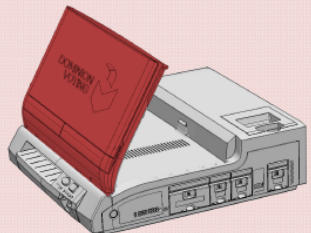
- ✓ The ICE All-In-One design enables voters with varying abilities to independently and privately mark, review, and cast a paper ballot.
- ✓ With the ICE, everyone votes on the same paper ballot, and casts their ballot on the same tabulator.
- ✓ Built in accessibility without compromising the privacy of your vote.

**Inclusive Design In Mind:**





**ONE Ballot**



**ONE System**




SEVERAL ways to mark your ballot

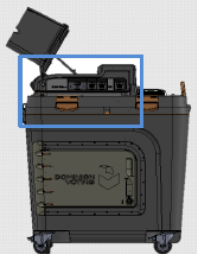
## DOMINION IMAGECAST VOTING EVOLUTION [ICE]

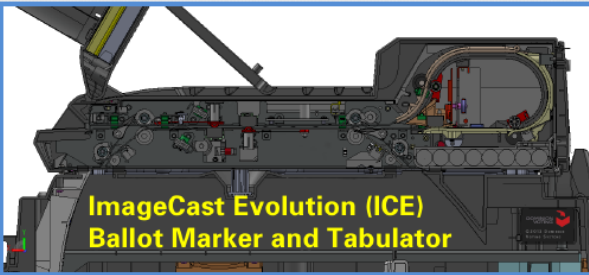
**Engineered Accessibility:  
The ICE Ballot Paper Path**



The ICE unit has an onboard printer, so once the blank ballot is inserted into the machine, the voter can begin their accessible voting session, vote in a fully HAVA compliant way, and have the unit that is actually going to count the ballot, give the voter an opportunity accessibly review how their ballot was read before independently casting it.

This is all without the ballot ever exiting the machine, thus not requiring poll worker intervention.  
  
 It is completely private.





ImageCast Evolution (ICE)  
Ballot Marker and Tabulator

Cross section of the ICE to illustrate the ballot paper path

**Virtually Indistinguishable Voting Marks**

The ICE features a collection of voting marks and write-in name fonts so a machine marked ballot is virtually indistinguishable from a hand marked ballot.

### **ImageCast® Ballot Box**

Dominion has designed an innovative, complementary ballot box for our precinct tabulators. The Ballot Boxes are built of sturdy plastic, and feature wheels and handles for ease of movement, allowing the units to be securely transported to and from the polling that can also accommodate Election Day supplies. The ballot box - along with the tabulators - was designed for easy set up by the poll worker, a feature that has always been missed with other systems. When the poll worker arrives to set up, they will unlock the lid, plug the ballot box into the wall plug, lift the screen and the system is on and ready to print the zero tape. All other components are already attached, keeping polling location issues to a minimum. For security purposes, the ballot box features five locks and multiple security seal points, preventing access and tampering with the tabulator.

#### **The Dominion Plastic Ballot Box:**

- Made from solid extruded plastic and features an interchangeable lid and internal bin baffles that vary by tabulator.
- Built to the requirements of the EAC, the ballot box capacity is sized to US polling place requirements, with 3 bins (main bin, write-in bin, and auxiliary/emergency bin).
- The tabulator locks and seals onto the ballot box, which features a cover that provides additional security and ease of transportation.
- Features a sealed plastic base and is water resistant.
- Offers multiple deployment and warehousing options, including the possibility of nesting the boxes up to three units deep.



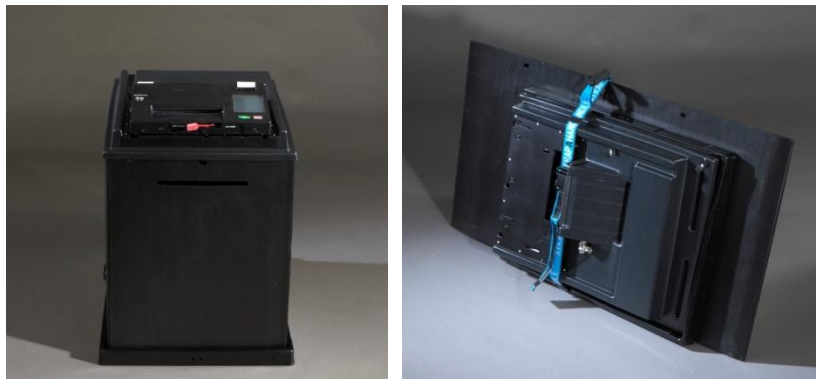
Plastic Ballot Box - with the lockable cover (left), and showing the three interior compartments (right)



### **CoroPlast ballot box**

The Dominion Plastic CoroPlast Ballot Box for the ImageCast tabulators is a unique and innovative design that offers a cost effective option with the security and durability required on Election Day, along with ease of transport. A rigid and sturdy blow-molded top provides security to lock the ImageCast tabulator in place on top of a CoroPlast constructed ballot box. Tougher than corrugated fiberboard, lighter than solid extruded plastic, waterproof, weather resistant and stain resistant, CoroPlast is lightweight and compact.

Weighing only ten (10) pounds, poll workers and warehouse staff easily transport the ballot with the nylon carry strap; making set up and tear down of the box easy, and storage efficient. The interchangeable lid and bottom make replacement simple, and can be stacked side by side to condense the amount of storage area in the warehouse. These adaptable features mean a savings in time, labor and space. The CoroPlast ballot box features three compartments and has the same capacity as the plastic ballot box.



ImageCast Precinct Tabulator on the CoroPlast Ballot Box (L). CoroPlast Ballot Box ready for transport (R)

### ImageCast® Central Count

Dominion's ImageCast Central Count (ICC), like the other ImageCast products, stores the ballot image with the secured AuditMark. **The system's flexibility allows the jurisdiction to customize electronic out-stacking conditions. From over-votes, under-votes, marginal marks, to certified write in contest, the Image Cast Central has the tools Election officials are looking for.**



READILY AVAILABLE  
SERVICE PARTS AND  
TECHNICIANS

COST-EFFICIENT

With the ImageCast Central Count solution, Dominion focused its efforts on how to create efficiency utilizing lower cost, off-the-shelf scanners which meet the VVSG 2005 standards and software that streamlines the process. It is **simple** - the operator loads the batch into the scanner; presses scan. When complete, the operator presses the accept button and moves on to the next batch. The ImageCast Central Count application interprets the ballot via the scanned image and in seconds determines whether or not the ballot is valid or needs to be **electronically out-stacked** for adjudication. The operator does nothing but process the ballots. The system's intelligence does the rest. Along with the requisite COTS hardware, the ImageCast Central provides enough flexibility to meet the needs of small, medium and large jurisdictions. The ImageCast Central application allows jurisdictions to consolidate results in an efficient environment, in real time.

This use of less expensive and compact third-party devices enables the ImageCast Central Count solution to offer higher sustained throughputs in the face of hardware failures, flexible site layouts when space is at a premium, and access to a vast pool of readily available replacement parts and certified technicians. **All of these factors translate to improved maintainability, and lower cost of ownership.**

Central scanning is typically utilized to process absentee or mail-in ballots, but the ImageCast Central Count allows a jurisdiction to process their entire election if needed. The election definition is taken from EMS, using the same data and database that is utilized to program any precinct scanners for a given election.

Multiple ImageCast Central scanners can be programmed for use in an election. The ImageCast Central application is installed and later initialized on a computer attached to the central count scanner. Ballots are processed through the central scanner(s) in batches based on jurisdictional preferences and requirements. The ImageCast Central stores ballot images by scanned batches. The scanned ballot images are migrated to the Election Management System (EMS) through computer networking or removable media. As with ballot images from any precinct scanners in use for an election, Results Tally and Reporting is the portion of EMS that processes the images to provide tabulation and operational reports to the jurisdiction. Batches can be appended, deleted, and processed in a number of ways to suit typical election workflows, intake of ballots before, during, and after Election Day, jurisdictional requirements surrounding absentee ballot tabulation, and canvassing needs. The ImageCast Central Count also features all of the technological advances present in the precinct-level tabulators – the AuditMark and the Dual Threshold technology.

The ImageCast Central is used for ballot image and election rules processing and results transferring to the EMS Datacenter. The ImageCast Central Workstation equipped with a PC and a Canon high-speed scanner, which provides electronic out-stacking as described in the Adjudication section in section 6.2 above

## Preventative Maintenance

1. **Basic maintenance** completed by county officials after each use.

### ***ImageCast Evolution:***

#### PRE-ELECTION SYSTEM SERVICE PROCEDURE

1. Verify that there is sufficient ink in the Integrated Printer Ink Cartridge. Replace cartridge if necessary.
2. Verify that the unit's battery is fully charged.
3. Verify that the paper transport path is clean. Clean if necessary.
4. Verify that sufficient thermal paper is installed on the thermal printer. Install new paper roll if required.
5. Verify the Time and Date are correct. Adjust if required.

#### POST-ELECTION SYSTEM SERVICE PROCEDURE

1. Remove and store the ink cartridge from the Inkjet Printer.
2. Verify that the unit was turned off using the soft shut down procedure (Service ON/OFF switch MUST stay on).

2. **Preventative maintenance** conducted by Dominion for the duration of the warranty period- this includes completion of simple diagnostics, internal cleaning (where required), maintenance of internal batteries. At the conclusion of the warranty period and at the discretion of county officials, responsibility for this function can be transferred to county staff (or other third party, as suggested in Section 6.9, Support), who have completed a Dominion technician training course. Dominion can also be contracted to continue to provide preventative maintenance support at our standard service rates.

### ***ImageCast Evolution***

- Preventative Maintenance (Dominion personnel or trained technicians):

#### LEVEL1 MAINTENANCE PROCEDURES

1. Paper Path Cleaning
2. Time and Date Setting
3. Software Update (if required)
4. Ink Cartridge Removal, Installation and Storage
5. Thermal Printer Paper Re-Filling
6. Unit storage
7. Basic troubleshooting

#### SCHEDULED PREVENTIVE MAINTENANCE TASK

- Battery Maintenance (re-charging) to be performed at prescribed intervals

### ***ImageCast Central***

Dominion's ImageCast Central system relies on COTS hardware. Dominion suggests that counties rely on the specific procedures provided in Canon user manuals. For informational purposes, these are the maintenance procedures suggested by Canon:

Clean the Scanner, including:  
Exterior

Document Feed Inlet and Transport Path  
Sensors  
Scanning Glass, Roller, Pad

Replace the Transport Rollers\* if needed

Clean the Imprinter (if applicable) / Replace the Ink Cartridge\*

*\*consumables are not covered under the Preventative Maintenance program.*

## 6.4 Database

Provide information regarding the database utilized by your proposed UVS application. Please address the following:

- 1) Database system being proposed, including version identification, and any supporting capabilities (e.g., utilities, special backup considerations);
- 2) Describe any techniques used by your proposed system to secure the data in the database and in any other data files;
- 3) Describe any database backup and disaster recovery plans you provide;
- 4) Describe the technical requirements of county computers used to store the database;
- 5) State your affirmation that CDOS or County will be sole owner and custodian of all election related data in the system you provide and shall have the unrestricted right to access and use this data without interference by or assistance from you.

The Dominion Voting solution uses a COTS database system, specifically Microsoft SQL 2008 R2, and supports all of its standard features. The database and the corresponding data inside is protected on a row-by-row basis by a digital hash which prevents unauthorized modification. The database can be backed-up using Election Event Designer's simplified back-up tool or third party COTS tools that interface with Microsoft SQL databases.

As per EAC requirements, all listed solutions include the necessary tested and certified hardware, which will be delivered with all software pre-requisites.

With respect to point 5 above and ownership of election related data, Dominion understands and will comply. Dominion Voting has traditionally considered all data produced in the course of the election cycle to be the property of the jurisdiction.

## 6.5 Data Migration

Describe your approach to data migration, including how data mapping between systems will be defined, cleansing/reformatting of data, testing and the final conversion to the production environment during implementation rollout. For example, explain how counties will be able to convert jurisdictional data from their existing Election Management System (EMS) to the EMS in your system.

Describe the type and level of Colorado support desired during data migration efforts. Identify any EMS of a competitor from which you have successfully converted data into your EMS.

Dominion's Democracy Suite features a customizable import adapter that works with third party systems to convert and migrate existing data to our solution with minimal effort.

Dominion believes the most optimal way to approach data migration with a new customer is to find out what specification they already support, and try to build around that. If a customer doesn't have a specification, or if the existing system interface would require extensive work on our end, Dominion will work to minimize effort for both parties.

Dominion provides a clear and concise import format specification that ensures clean reformatting of data, which has been successfully used in other US jurisdictions (New York State, Florida, Chicago) and internationally. Dominion has successfully imported data from systems developed by Premier Voting Systems (formerly Diebold) and Sequoia.

## 6.6 Test Strategy

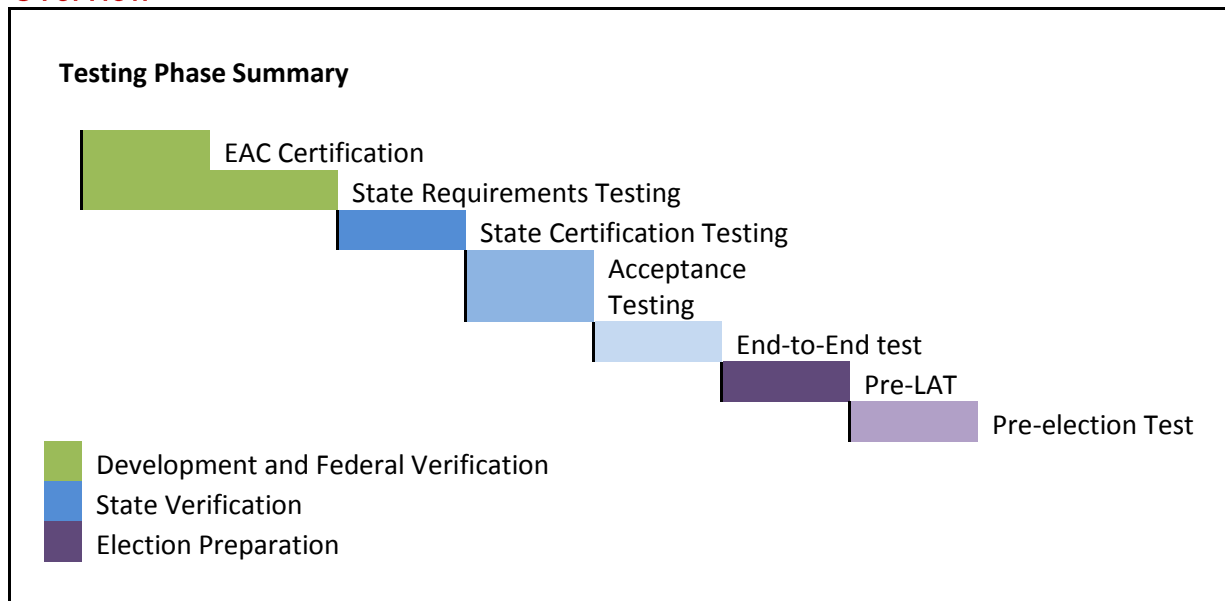
Provide a description of your proposed test standards and methods used to ensure the new UVS is working properly in each county installation. The description must address test plan creation, test case or script generation, test phases, the execution of the test plan, and proposed participation by CDOS/County staff.

You may use *RFP Appendix D – Statement of Work, Track 1: Project Management Test Strategy Plan* section as a guide.

### Purpose

The purpose of this document is to describe the plans, procedures and data used during software development and system integration to verify system logic correctness, data quality and security.

### Overview



Dominion Voting tests its equipment to the highest standards in the industry. Our test plan is multi-layered, and designed to complement County tests. Key attributes of the test plan are as follows:

1. EAC Certification – Dominion products are certified as EAC compliant. This is the highest certification standard in the industry and is your assurance that all products have undergone the highest level of testing.
2. State Requirements Testing – Dominion Engineers work to configure the EAC certified platform to meet Colorado's specific certification requirements.
3. State Certification Testing – Dominion's team works with the State board to demonstrate compliance of the system with state requirements.
4. Acceptance Testing – each component of the system is tested for functionality on site at the customer warehouse. Dominion personnel will provide training and documentation to county officials to assist them in undertaking this task.
5. End-to-End test – Dominion will work with the county to conduct end-to-end testing. We recommend that this is completed following EMS training, on a project that



reflects Election Day requirements. In this test an election project is created, and a representative sample of tabulators is programmed. Test ballots with known results are prepared and cast. Results are uploaded into the election management system and reports generated. The results are then compared to the expected outcomes to verify the system is performing properly. This test is performed on site at the customer warehouse.

6. Pre-Election Logic and Accuracy Testing – in advance of all elections Dominion Voting Systems recommends that Logic and Accuracy Testing of each voting system is tested with final Election Day ballots. This complete end-to-end test provides certainty that the system will perform as planned on Election Day. This test is performed on site at the customer warehouse.
7. Pre-election test – Dominion advocates the use of a pre-election system readiness test. Prior to the beginning of voting, following the distribution of election systems to the precincts customers have the option to run a small, mock-election. This test familiarizes poll staff in election night procedures, and provides additional assurance that all elements of the system are functioning properly after transport.
8. Automated Test Deck Creation – the creation of automated, comprehensive test decks is an optional service provided by Dominion to assist customers in conducting logic and accuracy testing. Using the Election Day database a series of pre-marked ballots are generated based by a computer algorithm designed to provide the highest assurance of system accuracy. When scanned these decks create known outcomes that can be compared with tabulated results. The elimination of error do to mistakes in hand-marking provides a higher degree of confidence in test results.

### **System Test and Verification Specification**

The development, execution and maintenance of system test and verification specifications are the responsibility of Dominion Voting's Quality Assurance (QA) department. Dominion Voting's QA department follows Standard Operating Procedures that define the department's work across the system development cycle, and are subsequently described.

#### **Software Development - QA Procedures Overview**

TestLink (version 1.8.3) is the primary tool used by the QA team. This tool implements a set of policies and procedures that help structure the department's work. Each Dominion Voting product is represented as a test project in TestLink. A number of test cases are identified and written for each test project. Test cases are organized in appropriate test suites, which group test cases according to the functionalities they are intended to verify.

A number of test plans are also defined for each test project. The QA manager creates a new build in TestLink for every testing cycle. In other words, each new build issued by Dominion Voting is recorded and tested in TestLink. Depending on the nature of the release (build), the QA manager will determine what test plan needs to be executed (Smoke Test, Sanity Test, Regression Test, etc.). For example, if a release is an unofficial intermediate development release, QA will execute Smoke and/or Sanity Test Plans. However, if a release is official, QA must execute a full Regression Test Plan.

The QA manager (or a test lead) assigns test cases from a test plan to testers. Testers execute these test cases and record the outcomes as either Pass or Fail. If testers discover a severe bug in the process of testing, they must add a test case to the appropriate test suite. New test

cases are executed in upcoming test cycles to recreate these defects. Once all test cases have been performed, the test manager determines the overall status of the release by examining the number and severity of defects recorded. Each bug found is logged in our Defect Tracking System [DTS], Atlassian JIRA, as a defect and scheduled for correction by the development lead according to its impact and severity level. The defect is tested in the next testing cycle once it has been fixed.

Each testing cycle produces an audit trail listing the outcomes of testing. The QA manager has access to the Reports and Metrics section of TestLink, where he/she can use a number of methods to report on any product (test project) release. Test cases are continuously maintained and updated. A test case's version number monitors its evolution.

TestLink is used to enforce most of the testing verification processes and procedures. For more information on the concepts and logic of the processes and procedures involved, please see the TestLink manual.

Testing of EMS requires in-depth knowledge of the system and experience using and testing all of the products involved. Therefore, all testing efforts are subject to adjustments and modifications according to the manager's discretion.

### **Software Development – Test Identification and Design**

Test cases are identified and written for each of the products (called 'test projects' in TestLink). Each test case can cover one or more functionalities and each piece of functionality may require one or more test cases to be executed for verification. Each release/build is tested according to test plans that are designed to verify different aspects of the product(s) tested and/or their integration points.

Test plans are comprised from a number of different test cases selected from one or more projects. Test plans are dynamic and evolve together with the products and, consequently, test cases. The design of test plans and higher level of testing efforts to be executed are the responsibility of the QA manager. Generally, a high level test design identifies the products to be tested, environments, conditions and pre-requirements, integration points, test plans and lastly test cases. After that, test scheduling, execution and reporting is performed.

#### **Test Structure**

Each test case, the following elements are defined/added by a tester:

- Name
- Summary
- Test Suite (assigns)
- Prerequisites
- Resources Required
- Steps
- Expected Results
- Notes
- Keywords
- Attached Files

The following elements are automatically assigned to the test case by the system (i.e. TestLink):

- Unique number (ID)
- Version
- Date Created (date)
- Created By (user name)
- Last Modified (date)

Additional actions a tester can perform on a test case:

- Edit Test Case
- Move/Copy Test Case
- Create a new Version
- Deactivate this Version
- Add to test plan

Each test case belongs to the Test Suite. A test suite can have one or more test cases and one or more test suites.

Test cases are never deleted. Old or outdated test cases are moved into specific test suites created for this purpose. As a result, the test execution records are kept for all test cases ever executed regardless of their current status/version.

#### **Test Sequence or Progression**

Test sequence and progression is defined by a combination of elements. Each project in TestLink has a set of defined test cases. Depending on the release tested (official or intermediate/development release) the test cases are assigned to a test plan. The selection of test cases and the order in which they are added to the test plan determines the sequence and progression in which they are executed.

The sequence and progression is subject to change according to the manager's discretion.

#### **Test Conditions**

Each defined condition may be verified by a single test case or a set of test cases which would, most often, comprise a test plan. Therefore, all conditions are defined by individual test cases, sets of test cases as well as any prerequisites and/or notes that may be included in the test case(s).

#### **Test Data**

All tests can be performed on any election event definition (contest, candidates, ballots, voting locations) and the test descriptions have been generalized to eliminate limitations. All tests are performed using end-to-end simulations without any use of simulated data. All test data is real in that the described tests either create the data during the test, or use existing data from preceding tests (listed as pre-conditions). The evaluation of test data resulting from testing can be performed using any audit trail (results tape, ballot image with results, consolidated results).

#### **Expected Test Results**

Expected test results are defined for each test case in a step-wise manner. Each test case consists of a number of steps that have to be executed. Each step has its associated expected result(s).

#### **Criteria for Evaluating Test Results**

Criteria for evaluating test results are defined in a hierarchical manner. First, each individual test case is marked as 'pass' or 'fail.' The outcome of the test case execution depends on whether the actual results of the test case match the predefined expected results for that test case. Test cases are executed as a part of the test plan(s) that the QA manager assigns to specific test analysts. Once all test cases are completed, the QA manager decides on the overall status of the testing effort. The decision on the overall status of the release/build is reached by analyzing the pass/fail ratio of all test cases executed as well as individual fail results and their resulting defect logs (bug number, impact and severity).

### Verifying System Logic Correctness

System logic correctness is verified in a step-wise manner where for each step in the test process, the description of the test step is compared to the system behavior/output and to the predefined expected results for each step.

### Verifying System Data Quality

Data quality is only assessed in the test environment via comparison of expected and actual voting results. This examination can be performed by using any audit trail (results tape, ballot image with results, consolidated results).

### Verifying System Security

System security is verified within various test procedures and pre-conditions. For example, by reviewing the Test Case “Open Project” in the RTR section of the appendix document, it is evident that the correct user name and password have to be provided in order to create a project. If correct credentials are provided, the user can successfully create a project. However, if the wrong credentials are provided the error message appears.

*Note: Security is verified throughout the testing efforts and covers all aspects of the system as specified in the VVSG 2005, vol I §7. In some cases, security verification will have a separate test suite for the particular project/product.*

### **Disaster Recovery**

The DVS Democracy Suite system supports several configurations and allows for a fully redundant, clustered server setup. DVS will work with the IT staff of each county and the state as required to guarantee the correct configuration for your DR needs.

### **Testing Tools**

The DVS development teams (including QA) employ the following tools at various stages of development and testing of the DVS Democracy Suite:

Product	Description	Link
TestLink	Test plans and test case suite creation and tracking	<a href="http://testlink.org/">http://testlink.org/</a>
Atlassian Jira	Defect and feature tracking, planning, and monitoring	<a href="https://www.atlassian.com/software/jira">https://www.atlassian.com/software/jira</a>
SmartBear TestComplete	Automated Acceptance Testing record/playback and scripting test tool used for high level smoke and regression tests.	<a href="http://smartbear.com/products/qa-tools/automated-testing-tools/">http://smartbear.com/products/qa-tools/automated-testing-tools/</a>
Selenium	Automated Acceptance Testing framework used for browser based testing of web applications.	<a href="http://www.seleniumhq.org/">http://www.seleniumhq.org/</a>
SpecFlow	Automated Acceptance Testing framework in the Cucumber family of tools; used for Specification by Example and Behavior Driven Development	<a href="http://www.specflow.org/">http://www.specflow.org/</a>
MSTest/NUnit	Unit testing frameworks	<a href="http://nunit.org/">http://nunit.org/</a>

## 6.7 Training

The expectation of CDOS is that Counties will require training for various categories of UVS users.

Describe the proposed content and delivery of your training. Include information about the typical class size and duration of training. Also, describe any self-paced training products you may provide.

Define the support and accommodations you need from CDOS or a County to support your training efforts.

### Training Plan Overview

At Dominion Voting Systems our training platforms focus on providing poll workers and election administration staff with the necessary knowledge to implement a voting system that will smoothly and efficiently process voters. We accomplish this through training customization, utilizing various training formats, implementing adult learning principles, and proper pacing within our courses.

Training customization begins with tailoring our courses to a specific jurisdiction's needs. Courses cover both hardware and software, and they detail all phases of the election. One aspect of the customization is utilizing different formats when delivering training and this includes instructor led classes in person, instructor led classes online, and self-paced online eLearning.

In all of the formats we base our training on the main principles of adult learning. Adults learn best when material is presented in a variety of ways. To this end, our trainers utilize auditory, visual, and hands-on training techniques. Our classes follow the "Explain, Demonstrate, Do" method. Students hear an explanation of their responsibilities, see it demonstrated, and then have a chance to practice it themselves. For example, our online eLearning presents case studies and step-by-step simulations to enable learners to experience the hardware or software virtually without having to unpack a voting unit.

In order to maximize retention, training classes must be properly divided and paced. In our case, poor retention means an unsuccessful Election, which is unacceptable. Our training materials are divided into small, manageable pieces that enable our instructors to cover information without exhausting a student's attention span. Each section of our training lasts no longer than ninety minutes, and then a student's knowledge is thoroughly checked through hands on exercises and progress checks.

We make every effort to utilize the most recent and prevalent adult learning theories in the design, execution, and review of our training. Through our rigorous development and research we are able to offer a superior training product that educates the students and ensures their success, which in turn lays the foundation for a successful Election.

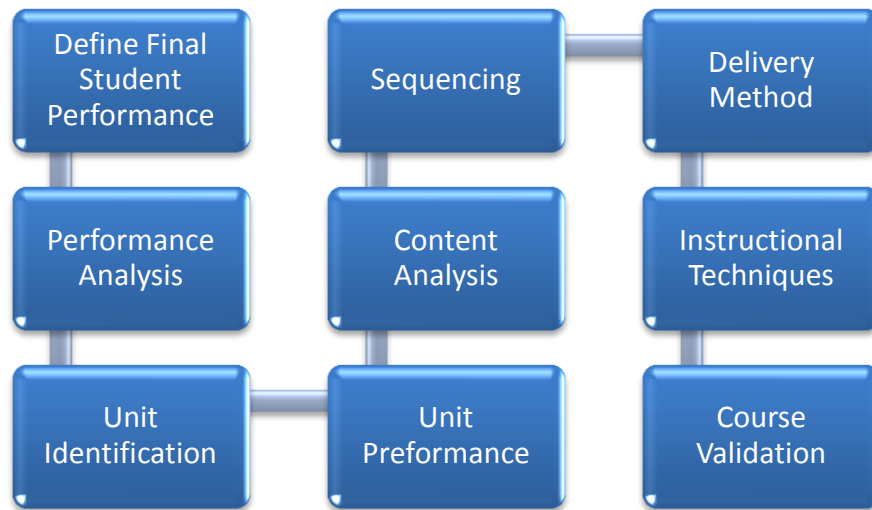
Dominion Voting understands that training must support the local county election process. We work in conjunction with county election staff to define custom training for each county so it will fit into the county's normal election process.

We will also work with the State of Colorado and the local county election offices to create any custom training materials that all parties deem necessary. Any source files or camera ready images will be available to be given to the state or counties as needed.

### Instructional Design

At Dominion Voting our instructional design follows a Nine Step Model. This model starts with defining what the final student performance is and what the goal of the course needs to be. Once that final performance is defined, we consider performance analysis and identify "What is the least they need to learn?" Next we would determine Unit Identification and Unit level exercises, perform a content analysis,

define sequencing and delivery methods, and finally validate the course.



This process ensures the course won't flood students with information irrelevant to the final student performance. It also helps with content retention because the information is presented in small, manageable chunks with plenty of progress checks and exercises.

This process has been used to create all of Dominion Voting's training courses and will be used in the event that custom training is needed for the state of Colorado.

### Delivery Methodology

At Dominion Voting we pride ourselves on the fact that our customer service is the best in the business and our flexibility to deliver training in multiple formats gives our customers a choice of many different delivery methods for training.

**Instructor Led** – Training conducted on-site with a certified election systems trainer. These in person classes are structured to provide the students the best opportunity to learn with a face to face trainer. All Dominion Voting Training courses are offered in this delivery method.

**Instructor Led Web Based** – These instructor led WebEx classes are ideal for customers who need training but onsite training is not possible. These classes are structured with online instructor led lectures and discussion along with offline homework and lab assignments. Web Based blended classes are offered for any of Dominion Voting's software training courses.

**Self-Paced e-learning** – Dominion Voting offers a complete library of optional self-paced e-learning courses which includes both hardware and software training. These courses are designed to deliver training in a unique format while still keeping the student engaged and active.

**Figure 1 - Interactive Demonstration**



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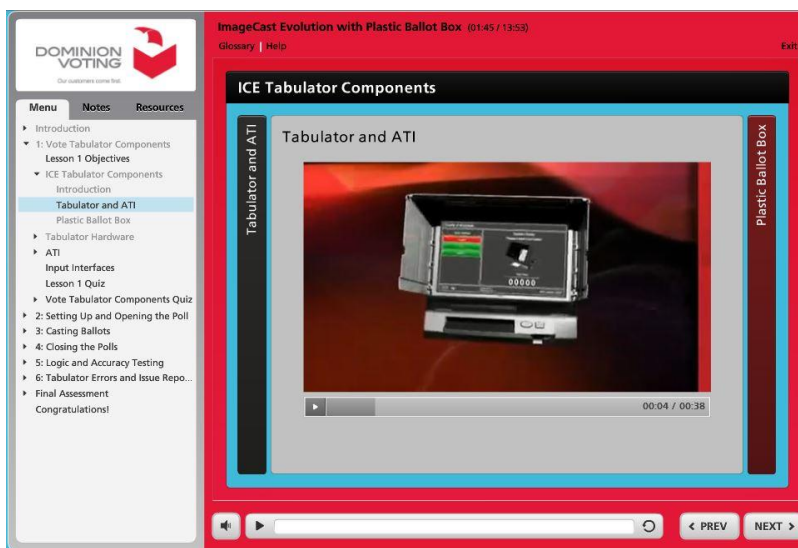
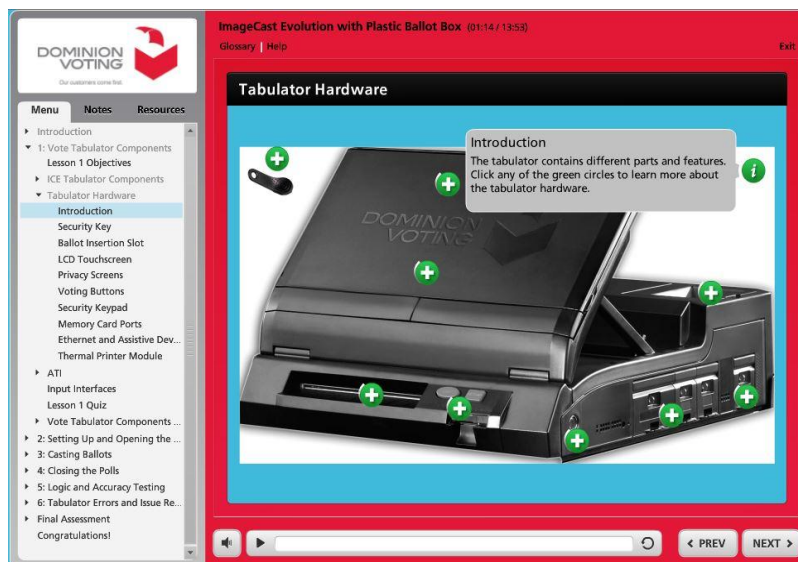


Figure 2 - Interactive Exercise



## Curriculum

Dominion Voting offers the classes listed below. All of these classes include quick reference guides, training manuals, and technical reference manuals when necessary. Dominion Voting will work to customize Election Day training materials to suit the state of Colorado's specific needs.

### ImageCast Evolution

Training Class Description	User Category	Number of Days/Hours	Max Number of Students
ImageCast Evolution Operations Training	County Election Staff	1 Day	20
Democracy Suite EMS Training	County Election Staff	5 Days	15
Results Tally and Reporting Training	County Election Staff	2 Days	15
ImageCast Evolution Poll Worker Training (Optional)	Election Day Poll Workers	3 Hours	25
ImageCast Evolution Election Day Tech Training	Elections Day Technicians	3 Hours	25
Train The Trainer Poll Worker Training	Poll Workers Trainers	2 days	15 per class

### ImageCast Central with Adjudication

Training Class Description	User Category	Number of Days/Hours	Max Number of Students
ImageCast Central with Adjudication Operations Training	County Election Staff	2 Days	15

## Course Descriptions - Outline

### Hardware Operations Training

This course provides an introduction to the Dominion Voting hardware. Topics include:

- **Setup of the Equipment**
- **Opening Polls**
- **Processing Ballots**
- **Accessible Voting**
- **Closing Polls**



- **Acceptance Testing**
- **Troubleshooting**
- **Performing L&A**

#### **Democracy Suite EMS Training**

This course introduces election programming concepts in EMS. Topics include:

- **Creating and Editing Geo-political Data**
- **Creating and Editing Offices and Contests**
- **Adding Choices**
- **Creating and Editing Ballot Layout**
- **Creating Audio Files**
- **Creating Memory Cards**
- **Tabulating Results**
- **Election Night Reporting**

#### **Poll Worker Training**

This course trains poll workers for Election Day responsibilities. Topics include:

- **Preparing for Election Day**
- **Opening and Closing the Polls**
- **Processing Voters**
- **Assisting Voters with Special Needs**
- **Managing the Polling Place**

#### **Election Day Technician Training**

This course provides familiarity with Dominion Voting hardware and teaches what is required to support the equipment on Election Day. The major emphasis in this course is on election equipment troubleshooting.

- **Preparing for Election Day**
- **Opening and Closing the polls**
- **Processing Voters**
- **Assisting Voters with Special Needs**
- **Troubleshooting Election Day Problems**

#### **Train the Trainer Poll Worker Training**

This course is a train the trainer course that covers how to train Election Day poll workers. This course focuses on teaching trainers how to become better at delivering training along with also covering everything to be included in a poll worker training class. Topics include:

- **Training Techniques**
- **Learning Styles**
- **Presentation Skills**
- **Preparing for Election Day**
- **Opening and Closing the Polls**
- **Processing Voters**

- **Assisting Voters with Special Needs**
- **Managing the Polling Place**

### Facilities

The table below lists each type of training to be provided and the facility requirements for each type of course.

Training Type	Facility Requirements	A/V Requirements
Hardware Operations Training	20 person seat capacity 6 tables 4 outlets	Projector and Screen
EMS Training	15 person seat capacity 4 tables 4 outlets	Projector and Screen
Poll Worker Training	25 person seat capacity 30' by 30' room minimum 8 tables 8 outlets	Projector, Screen, and Microphone (audio preferred but not required)
Election Day Technician Training	25 person seat capacity 8 tables 8 outlets	Projector and Screen
Train The Trainer Poll Worker Training	15 person seat capacity 4 tables 4 outlets	Projector and Screen

## 6.8 Implementation

The RFP Statement of Work includes change management, deployment and user training as deliverables within Implementation. Describe your approach and experience on prior implementations and your proposed approach to implementation on the Colorado UVS project.

Please see section 6.1 for a comprehensive description of Dominion's approach to project management and implementation. See section 10 for sample project artifacts specifically crafted for the "Colorado Target County" scenario. The Dominion Project Management Methodology has been developed through a number of years of experience in implementing both large and small scale jurisdictions. Dominion Voting understands that our responsibility begins –not ends– with successful acceptance of the systems. The Colorado Project Team is composed of some of Dominion's finest assets, with an unparalleled breadth of experience. The Team includes individuals who were responsible for the successful installation of Dominion Voting election systems in 52 of New York's 58 counties, the Country of Mongolia, Chicago and Cook County IL, and many others. Their skill sets range from implementation management, EMS coding, equipment technicians, and every type of skill set required to install, support, maintain, and train in the use of election systems.

The cornerstone to project management and implementation has been the key to the success of Dominion Voting system implementations. We plan to use the same successful approach on the Colorado UVS project as has been successfully demonstrated in Mongolia, The States of New York and Louisiana

## 6.9 Support

This RFP solicits post-implementation support from the Vendor in each of the following support areas:

1) Warranty Period Support

**This deliverable will include a warranty agreement from the Contractor, which specifies all the services included under the warranty agreement. Pricing will be in the contract Pricing Agreement.**

Under Dominion's standard limited hardware warranty, Dominion hardware is warranted against defects in materials and workmanship for a period of one year. If any hardware item covered under this warranty fails to operate in conformity with the specifications, Dominion shall fully repair or replace the hardware, so long as such hardware is operated with its designated software and with third-party products (if applicable) approved by Dominion for use with the hardware.

The customer should report hardware issues to the Customer Relationship Manager (CRM), who will determine the most efficient manner for resolving the hardware issue. Malfunctioning hardware may be replaced, replaced with a loaner unit, repaired on site, or repaired at a Dominion Service Center.

All repairs, whether made on site or at a Dominion Service Center, will be made by Qualified Service Technicians (QST). These Technicians have undergone a training program and have demonstrated the acquired knowledge and skills to receive the QST designation for the purpose of component installation and removal, repair and testing of Dominion hardware. In addition to repairing the hardware, the QST will also conduct a complete diagnostics test on the unit before returning it to the customer. Any issues found and the resulting resolution will be recorded in Dominion's tracking system by unit type and serial number.

The CRM will provide the customer an RMA number and shipping address for any hardware that is to be shipped to a Dominion Service Center for repair. Customer shall bear the shipping costs to return the malfunctioning item of hardware to Dominion, and Dominion shall bear the costs for ground-shipping the repaired or replaced item of hardware to Customer.

In the event Dominion discovers that the Hardware returned by the Customer is not malfunctioning and is working in compliance with its Specification, Customer shall be responsible for the cost of shipping the item back to the Customer and for repayment of the time and material required to examine the Hardware at Dominion's then current rates.

Services not covered under the limited hardware warranty, but may be available at Dominion's current time and material rates, include:

- a. Replacement of consumable items including but not limited to batteries, paper rolls, ribbons, seals, smart cards, and removable memory devices, disks, etc.;
- b. Repair or replacement of hardware damaged by of accident, disaster, theft, vandalism, neglect, abuse, or any improper usage;
- c. Repair or replacement of hardware modified by any person other than those expressly authorized in writing by Dominion;

- d. Repair or replacement of hardware products from which the serial numbers have been removed, defaced or changed.

A sample Hardware Maintenance Agreement is provided in Appendix 1.

2) Maintenance Support

This deliverable will include a maintenance agreement from the Contractor, which specifies all the services included under the maintenance agreement. Pricing will be in the contract Pricing Agreement.

Dominion's limited hardware warranty may be customized and renewed or extended as agreed by Customer and Dominion. Under Dominion's standard Hardware Maintenance Agreement, repairs are made at a Dominion Service Center. However, Dominion also offers different, optional extended warranty agreements, which allow the customer to select a plan which meets their specific needs. For example, an extended warranty agreement can include annual or bi-annual preventative maintenance and repair. Depending on the scope and duration of the contract, Dominion will work with each County to determine which level of maintenance is best suited for their particular situation.

A sample Hardware Maintenance Agreement is provided in Appendix 1.

3) Election Setup Support

This deliverable will include a matrix listing the areas within Election Setup that can be supported by Contractor and a description of the support available, along with successful execution of the support items. Pricing will be in the contract Pricing Agreement.

4) Election Processes Support

This deliverable will consist of a matrix listing the areas within Election Processes that can be supported by Contractor and a description of the support available, along with the successful execution of the support items. Pricing will be in the contract Pricing Agreement.

5) Post-Election Support

This deliverable will consist of a matrix listing the activities during Post-Election that can be supported by Contractor and a description of the support available, along with the successful execution of the support items. Pricing will be in the contract Pricing Agreement.

Below, please find a table which provides an overview of Dominion's approach to customer, and the types of support provided by Dominion.

Election Setup Support	Description	Success Metric
Election Configuration and Programming	Election project database setup and configuration in the election management system. Includes ballot definition and layout, media programming, and	Upon successful completion, customer will be provided with a database of their election as well as

	system and tabulator configurations.	programmed media ready for official election testing and use.
Pre-Election Logic and Accuracy Testing	Tabulator setup and election project testing for proper definition and operation. May include the testing of pre-configured test decks to test election configuration and tabulator accuracy.	Upon successful completion, tabulators will be fully operation and ready for official election use.
Poll Worker Training	Tabulator usage and operation training for election officials.	Poll workers will be fully versed in opening, operating, and closing the polls on election day.
Equipment Training	Tabulator and system training, troubleshooting, and operations.	Trainees will be versed in the successful operation of the system and provided basic troubleshooting techniques to ensure system integrity and availability.
Documentation Services	User manuals, user guides, quick reference guides and general system documentation.	Custom documentation tailored to customer jurisdictional needs including specific processes and language.

Election Processes Support	Description	Success Metric
Election Day Technician (Rover)	Onsite election day tabulator and system support. Includes travel to poll sites to troubleshoot equipment and facilitate resolution to typical election day issues.	Onsite technical expertise to support customer's equipment and system to ensure optimal availability of election system.
Three Day Election Support	Onsite election day support with pre-election visit and post-election follow-up. Includes travel to poll sites to	Onsite technical expertise to support customer's equipment and system to ensure

	troubleshoot equipment and facilitate resolution to typical election day issues.	optimal availability of election system.
Remote Helpdesk Phone Support	Offsite phone support available as required. Includes system and tabulator troubleshooting, resolution, and general inquiry. Phone support available to designated customer staff only.	Remote technical expertise to support customer's equipment and system to ensure optimal availability of election system.
On-site Election Office Phone Support	Onsite phone support from customer location to assist customer with trouble and service calls.	Onsite technical expertise to support customer's equipment and system to ensure optimal availability of election system.

Post-Election Support	Description	Success Metric
Remote Helpdesk Phone Support	Offsite phone support available as required. Includes system and tabulator troubleshooting, resolution, and general inquiry. Phone support available to designated customer staff only.	Remote technical expertise to support customer's equipment and system to ensure optimal availability of election system.
On-site Election Office Phone Support	Onsite phone support from customer location to assist customer with trouble and service calls.	Onsite technical expertise to support customer's equipment and system to ensure optimal availability of election system.
Onsite Results Tally and Reporting Support	Onsite results upload and tally support in the election management system following the close of polls.	Onsite technical expertise to support customer's results upload and tally is successful.

- Indicate your approach to the various areas of support and your recommendations as to how support should be structured, if different from how described above

Please see table above

- Describe the support activities included in each support area.

Please see table above

- Provide a table which includes the various categories included in your typical Service Level Agreements for each support area and the recommended levels of service



values (e.g. response time, staffing levels).

Below is a typical Dominion Voting support schedule, designed to provide the highest level of assurance during critical periods of the election cycle:

Phase	Initial Response	Estimation Response	Subsequent Responses
Election Day	Immediate	60 minutes	N/A
Pre-Election: 1 to 5 days	Immediate	1 hours	Every 30 min.
Pre-Election: 5 to 15 days	2 hours	4 hours	Every 2 hours
Pre-Election: 16 to 30 days	4 hours	4 hours	Every 2 hours
Pre-Election: 31 to 45 days	8 hours	8 hours	Daily
Pre-Election: >45 days	Next business day	2 business days	Weekly

During the period beginning on the day of the test election, Dominion Staff will be on call 24 hours per day to respond to support requests. During this time, it is our expectation that Dominion technicians will be on-site providing ongoing assistance. During the period beginning with the initiation of pre-logic and accuracy testing, our technicians will respond to service requests within two hours. Other response time are set out on the table provided above. All support requests will be made according to agreed procedures, and an automated response acknowledging requests will be employed. During the subsequent estimation response, our team will set out our understanding of the issue, and our proposed path to resolution. In most cases, support requests can be dealt with immediately at the estimation response.

- An assumption is that some Contractor support will be onsite and that some support can be provided by Contractor help desk personnel.

Yes.

- Describe the process associated with your support help desk in managing questions and issues from the UVS users.
- Describe the automation tools you utilize to track help desk metrics. Include a discussion of your help desk configuration, normal and peak election hours of operation, and expected response time.

Dominion's sample software license and hardware maintenance agreements are provided in Appendix 1 and 2. The services provided in a voting system service agreement are tailored for each customer to meet their unique needs. As a baseline, the agreements include provisions and pricing for the following services:

- Project management
- Acceptance testing planning and support
- Training (system, software, Pollworker train the trainer, acceptance testing)
- Election Management System Installation
- Ballot definition support or coding
- Ballot Printer Certification

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- Absentee Ballot production and tabulation support
  - Pre-LAT support
  - Early Voting support
  - Election Day support
- In the future, certain areas of UVS support may be transitioned from the Contractor to CDOS or a third-party (e.g. local university). Please state your willingness to participate in executing a transition plan should this occur and any experience you have in such a transition.

Dominion would be pleased to participate and assist with the execution of such a transition plan.

## 7.0 Sample Reports

You must provide a list of the various reports available from your proposed system, as well as examples of those reports. At a minimum, provide the first and last page of each report.

*Page Limit: 50 pages*

Included in the following pages are some sample reports (first and last page) generated by our proposed system for Colorado. The list below, while representative of typical reports, is not exhaustive – Dominion's system is able to generate custom reports based on any desired criteria.

### List of Sample Reports

- ✓ Audit Log – Reports all actions done in the system by user, date and time
- ✓ District Types – Reports all district types in the system
- ✓ Districts – Reports all the districts in the system
- ✓ Offices – Reports all the offices in the system
- ✓ Political Parties – Reports all the political parties in the system
- ✓ Precincts – Reports all the precincts in the system
- ✓ Ballot Content – Reports all the ballots in the system and the content found on each one
- ✓ Ballot Overview – Reports a general overview of all ballots in the system
- ✓ Choices – Reports all the choices in the system
- ✓ Consolidated Ballots – Reports all the consolidated ballots (ballots with same contents) in the system, if applicable
- ✓ Contests – Reports all the contests in the system
- ✓ Election Project – Reports general election project details
- ✓ Application Role List – Reports all application roles currently in the system
- ✓ Application User List – Reports all the application users currently in the system
- ✓ Database Security Report – Reports on the current status of database security and integrity
- ✓ Language Profiles – Reports all the language profiles currently in the system
- ✓ Polling Places – Reports all the polling places currently in the system
- ✓ Tabulators – Reports all the tabulators currently in the system
- ✓ Cards Cast Report – Reports the results in simple format based on ballot type
- ✓ Election Summary Report – Reports the results in detailed format for all ballots, contests and choices
- ✓ Results per Precinct – Reports all the results based on every precinct in the election event
- ✓ Statement of Votes Cast – Reports the results in detailed format based on contest and precincts for all ballots

State of Colorado  
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**Audit Log - Reports all actions done in the system by user, date and time**

**New Mexico Demo Primary A  
Audit Log  
2013-11-19 16:38:42**

User		All users
Report for Time Period		2013-06-30 16:38:23 - 2013-11-19 16:38:23
Time	User	Action
2013-07-26 10:20:53	Admin	Instance with name 'a96cf272-0580-4459-94f1-84d0f134165d' of type 'ElectionEvent' with id = 'a96cf272-0580-4459-94f1-84d0f134165d' is created.
2013-07-26 10:20:53	Admin	Instance with name '87c904f9-27e3-416a-b682-fb009b136390' of type 'ElectoralGroup' with id = '87c904f9-27e3-416a-b682-fb009b136390' is created.
2013-07-26 10:20:53	Admin	Instance with name '9cbbbe38-398c-405b-be54-f9e2748574fa' of type 'ElectionEventProfileable' with id = '9cbbbe38-398c-405b-be54-f9e2748574fa' is created.
2013-07-26 10:20:53	Admin	Instance with name '9f38433d-6aa0-44f5-9f5a-6f7f5bb4236f' of type 'Area' modified: name = 'Demo County, New Mexico'; isTop=True;
2013-07-26 10:20:53	Admin	Instance with name '9f38433d-6aa0-44f5-9f5a-6f7f5bb4236f' of type 'Area' with id = '9f38433d-6aa0-44f5-9f5a-6f7f5bb4236f' is created.
2013-07-26 10:20:53	Admin	Instance with name 'a04fafa0-a488-4eb2-9bb0-18b4c7b59225' of type 'AdministrativeDivision' modified: name changed from 'New Division' to 'State'; isTop=True;
2013-07-26 10:20:53	Admin	Instance with name 'a04fafa0-a488-4eb2-9bb0-18b4c7b59225' of type 'AdministrativeDivision' with id = 'a04fafa0-a488-4eb2-9bb0-18b4c7b59225' is created.
2013-07-26 10:20:53	Admin	Instance with name 'a96cf272-0580-4459-94f1-84d0f134165d' of type 'ElectionEvent' modified: electionEventType = 'Closed Primary'; name = 'New Mexico Demo Template Base'; electionDate=2013-07-20T00:00:00; jurisdiction = 'Demo County, New Mexico'; jurisdictionType = 'State'; description = 'New Mexico Demo Template Base'; audioBallotType = 'None';
2013-07-26 10:20:53	Admin	Election Project has been created with Election Event Designer version 4.14.23.0
2013-07-26 10:20:53	Admin	Instance with name '160d470c-662d-4c72-b30e-ca2f87855469' of type 'ElectoralGroupCombination' modified: name = 'Default';
2013-07-26 10:20:53	Admin	Instance with name '160d470c-662d-4c72-b30e-ca2f87855469' of type 'ElectoralGroupCombination' with id = '160d470c-662d-4c72-b30e-ca2f87855469' is created.
2013-07-26 10:20:53	Admin	Instance with name '4c09b0a2-3e37-449f-98aa-0feb0c80f2f9' of type 'LanguageProfile' modified: name = 'English'; isDefault=True; purpose = 'Ballot Content';
2013-07-26 10:20:53	Admin	Instance with name '4c09b0a2-3e37-449f-98aa-0feb0c80f2f9' of type 'LanguageProfile' with id = '4c09b0a2-3e37-449f-98aa-0feb0c80f2f9' is created.
2013-07-26 10:20:53	Admin	Instance with name '7ac70d62-bf0b-4db6-8e78-3f09b6b8ef63' of type 'AppUser' modified: password changed; firstName changed from 'John' to 'dvs'; lastName changed from 'Smith' to 'dvs'; position = ''; description = ''; contactAddress = ''; contactPhone1 = ''; contactPhone2 = ''; contactEmail = '';
2013-07-26 10:20:53	Admin	Instance with name '87c904f9-27e3-416a-b682-fb009b136390' of type 'ElectoralGroup' modified: name changed from 'New Election Group' to 'Default'; isTop=True; abbreviation = 'Def';
2013-07-26 10:20:53	Admin	Instance with name '9c7a92d0-9283-495c-984a-637c09edcb57' of type 'LanguageProfile' modified: name = 'English'; isDefault=True; purpose = 'Audio';
2013-07-26 10:20:53	Admin	Instance with name '9c7a92d0-9283-495c-984a-637c09edcb57' of type 'LanguageProfile' with id = '9c7a92d0-9283-495c-984a-637c09edcb57' is created.
2013-07-26 10:20:53	Admin	User initiates generation of password.
2013-07-26 10:20:54	Admin	Project security elements created.
2013-07-26 10:20:54	Admin	User initiates generation of password.
2013-07-26 10:20:54	Admin	User initiates generation of password.
2013-07-26 10:20:54	Admin	
2013-07-26 10:21:29	Admin	Project CA 2013 Milos test Closed
2013-07-26 10:21:29	Admin	User initiates generation of password.
2013-07-26 10:21:32	Admin	Project New Mexico Demo Template Base opened.
2013-07-26 10:21:36	Admin	User initiates the Election Event Properties activity.
2013-07-26 10:21:46	Admin	Ballot Style set to Universal Multi Column Ballot Style.
2013-07-26 10:22:59	Admin	User initiates the Project Parameters activity.
2013-07-26 10:24:36	Admin	Instance with name 'Project Settings' of type 'Project Parameters' modified: consolidationType changed from 'Medium' to 'None';
2013-07-26 10:24:42	Admin	Instance with name 'Project Settings' of type 'Project Parameters' modified: tabulatorSameHMACKey=True; consolidationType changed from 'Medium' to 'None';
2013-07-26 10:24:42	Admin	Instance with name 'Project Settings' of type 'Project Parameters' modified: defaultPasswordValue changed from '48199037' to '12345678'; tabulatorSameHMACKey=True; consolidationType changed from 'Medium' to 'None';
2013-07-26 10:24:42	Admin	Instance with name 'Project Settings' of type 'Project Parameters' modified: defaultPasswordValue changed from '48199037' to '12345678'; tabulatorSameHMACKey=True; consolidationType changed from 'Medium' to 'None'; resetSecurityForCopy=True;
2013-07-26 10:24:42	Admin	Instance with name 'Project Settings' of type 'Project Parameters' modified: defaultPasswordValue changed from '48199037' to '12345678'; tabulatorSameHMACKey=True; consolidationType changed from 'Medium' to 'None'; supportPCOSAUDIO=True; resetSecurityForCopy=True;
2013-07-26 10:24:42	Admin	Instance with name 'Project Settings' of type 'Project Parameters' modified: generateAudioBallots=True; generateAudioForWriteIns=True; defaultPasswordValue changed from '48199037' to '12345678'; tabulatorSameHMACKey=True; consolidationType changed from 'Medium' to 'None'; supportPCOSAUDIO=True; resetSecurityForCopy=True;
2013-07-26 10:24:42	Admin	User initiates the Ballot Style activity.
2013-07-26 10:25:45	Admin	Instance with name ' ' of type 'Ballot Style Parameters' modified: iccProfilePath = 'D:\NAS\Common\Color Profiles\Plain Black.icc';
2013-07-26 10:27:58	Admin	Instance with name ' ' of type 'Ballot Style Parameters' modified: ballGenMultiProcFactor=2; iccProfilePath = 'D:\NAS\Common\Color Profiles\Plain Black.icc';
2013-07-26 10:27:58	Admin	Instance with name ' ' of type 'Ballot Style Parameters' modified: ballGenMultiProcFactor=2; votingBoxType

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**New Mexico Demo Primary A**  
**Audit Log**  
**2013-11-19 16:38:42**

Time	User	Action
2013-11-19 16:30:38	Admin	User initiates the Create Report activity
2013-11-19 16:30:55	Admin	User initiates the Create Report activity
2013-11-19 16:31:12	Admin	User initiates the Create Report activity
2013-11-19 16:38:08	Admin	User initiates the Create Report activity

**District Types - Reports all district types in the system**

**New Mexico Demo Primary A  
District Types  
2013-11-19 16:20:14**

District Type Name	State
Number of District Instances	1
District Type Name	Federal
Number of District Instances	1
District Type Name	State
Number of District Instances	1
District Type Name	US Congressional
Number of District Instances	1
District Type Name	Representative
Number of District Instances	3
District Type Name	Senatorial
Number of District Instances	0
District Type Name	Public Regulation Commissioner
Number of District Instances	2
District Type Name	State Board of Education
Number of District Instances	1
District Type Name	County
Number of District Instances	1
District Type Name	County Commissioner
Number of District Instances	1
District Type Name	District Court
Number of District Instances	1

**Districts – Reports all the districts in the system**

**New Mexico Demo Primary A  
Districts  
2013-11-19 16:21:01**

District Name	Demo County, New Mexico
Type	State
Parent Name	
Abbreviation	
Description	

**Precincts**

1. Precinct 001
2. Precinct 002
3. Precinct 003
4. Precinct 004
5. Precinct 005



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**New Mexico Demo Primary A**  
**Districts**  
**2013-11-19 16:21:01**

District Name	District Court 3
Type	District Court
Parent Name	Demo County, New Mexico
Abbreviation	
Description	

**Precincts**

1. Precinct 001
2. Precinct 002
3. Precinct 003
4. Precinct 004
5. Precinct 005

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**Offices - Reports all the offices in the system**

**New Mexico Demo Primary A  
Offices  
2013-11-19 16:22:10**

Office Name	US Representative
Office Type	Candidacy
District Type	US Congressional
Number Of Positions (Vote for)	1
Description	
Number Of Write-Ins	0
Term Length	4
Ballot Markers Per Position	1
Paper Index	1

Office Name	Governor
Office Type	Candidacy
District Type	State
Number Of Positions (Vote for)	1
Description	
Number Of Write-Ins	1
Term Length	4
Ballot Markers Per Position	2
Paper Index	1

Office Name	Lt. Governor
Office Type	Candidacy
District Type	State
Number Of Positions (Vote for)	1
Description	
Number Of Write-Ins	0
Term Length	4
Ballot Markers Per Position	1
Paper Index	1

Office Name	Secretary Of State
Office Type	Candidacy
District Type	State
Number Of Positions (Vote for)	1
Description	
Number Of Write-Ins	0
Term Length	4
Ballot Markers Per Position	1
Paper Index	1

Office Name	State Auditor
Office Type	Candidacy
District Type	State
Number Of Positions (Vote for)	1
Description	
Number Of Write-Ins	0
Term Length	4
Ballot Markers Per Position	1
Paper Index	1

Office Name	State Treasurer
Office Type	Candidacy
District Type	State
Number Of Positions (Vote for)	1
Description	
Number Of Write-Ins	0
Term Length	4
Ballot Markers Per Position	1
Paper Index	1

Office Name	Attorney General
Office Type	Candidacy
District Type	State
Number Of Positions (Vote for)	1
Description	
Number Of Write-Ins	0
Term Length	4

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**New Mexico Demo Primary A  
Offices  
2013-11-19 16:22:10**

Number Of Positions (Vote for)	1
Description	
Number Of Write-Ins	0
Term Length	4
Ballot Markers Per Position	1
Paper Index	1

Office Name	County Commissioner
Office Type	Candidacy
District Type	County Commissioner
Number Of Positions (Vote for)	1
Description	
Number Of Write-Ins	0
Term Length	4
Ballot Markers Per Position	1
Paper Index	1

Office Name	County Assesor
Office Type	Candidacy
District Type	County
Number Of Positions (Vote for)	1
Description	
Number Of Write-Ins	0
Term Length	4
Ballot Markers Per Position	1
Paper Index	1

Office Name	County Sheriff
Office Type	Candidacy
District Type	County
Number Of Positions (Vote for)	1
Description	
Number Of Write-Ins	0
Term Length	4
Ballot Markers Per Position	1
Paper Index	1

Office Name	Probate Judge
Office Type	Candidacy
District Type	County
Number Of Positions (Vote for)	1
Description	
Number Of Write-Ins	0
Term Length	4
Ballot Markers Per Position	1
Paper Index	1

**Political Parties – Reports all the political parties in the system**

**New Mexico Demo Primary A  
Political Parties  
2013-11-19 16:21:37**

Political Parties Name:	Democratic
Description:	
Abbreviation:	DEM
Logo:	Not Present

Political Parties Name:	Republican
Description:	
Abbreviation:	REP
Logo:	Not Present

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**Precincts – Reports all the precincts in the system**

**New Mexico Demo Primary A  
Precincts  
2013-11-19 16:21:18**

Precinct Name	Precinct 001
Number Of Voters	0
Split Precinct	No

**Languages:**

1. Ballot Content: English / Spanish

**Districts:**

1. State Board of Education 7
2. District Court 3
3. New Mexico
4. County Commission 1
5. Demo County
6. Representative District 36
7. US Congressional District 2
8. Regulation Commissioner 5
9. Federal

Precinct Name	Precinct 002
Number Of Voters	0
Split Precinct	No

**Languages:**

1. Ballot Content: English / Spanish

**Districts:**

1. State Board of Education 7
2. District Court 3
3. New Mexico
4. County Commission 1
5. Demo County
6. Representative District 36
7. US Congressional District 2
8. Regulation Commissioner 5
9. Federal

Precinct Name	Precinct 003
Number Of Voters	0
Split Precinct	No

**Languages:**

1. Ballot Content: English / Spanish

**Districts:**

1. State Board of Education 7
2. District Court 3
3. New Mexico
4. County Commission 1
5. Demo County
6. Representative District 36
7. US Congressional District 2
8. Regulation Commissioner 5
9. Federal

Precinct Name	Precinct 004
Number Of Voters	0
Split Precinct	No

**Languages:**

1. Ballot Content: English / Spanish

**Districts:**

1. State Board of Education 7
2. District Court 3
3. New Mexico
4. County Commission 1
5. Demo County
6. US Congressional District 2
7. Representative District 37
8. Regulation Commissioner 5
9. Federal

Precinct Name	Precinct 005
Number Of Voters	0

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**New Mexico Demo Primary A**  
**Precincts**  
**2013-11-19 16:21:18**

Split Precinct	No
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**Languages:**

1. Ballot Content: English / Spanish

**Districts:**

1. State Board of Education 7
2. Representative District 53
3. District Court 3
4. New Mexico
5. Demo County
6. US Congressional District 2
7. Regulation Commissioner 2
8. Federal

**Ballot Content - Reports all the ballots in the system and the content found on each one**

**New Mexico Demo Primary A  
Ballot Content  
2013-11-19 16:25:51**

Initial Size	11
File Name	1
Key in Id	1
Description	Ballot 1 - Type 1 - English / Spanish - Democratic Regular - Precinct 001
Language Profile	English / Spanish
Size	14

**Choices**

Choice Name	Contest Name
HARRY TEAGUE	U.S. Rep District 2 - Dem
DIANE D. DENISH	Governor - Dem
Write-in	Governor - Dem
BRIAN S. COLÓN	LI Governor - Dem
LAWRENCE E. RAEI	LI Governor - Dem
JOSE A. CAMPOS II	LI Governor - Dem
GERALD P. ORTIZ Y PINO	LI Governor - Dem
LINDA M. LOPEZ	LI Governor - Dem
MARY HERRERA	Secretary Of State - Dem
HECTOR BALDERAS	State Auditor - Dem
JAMES B. LEWIS	State Treasurer - Dem
GARY K. KING	Attorney General - Dem
RAY BENNETT POWELL	Comm. Of Public Lands - Dem
HARRY B. MONTOYA	Comm. Of Public Lands - Dem
SANDY R. JONES	Comm. Of Public Lands - Dem
ROBERT E. ROBLES	Court Of Appeals Position 1 - Dem
LINDA M. VANZI	Court Of Appeals Position 2 - Dem
DENNIS W. MONTOYA	Court Of Appeals Position 2 - Dem
TIM L. GARCIA	Court Of Appeals Position 3 - Dem
ANDREW "ANDY" NUNEZ	State Rep. District 36 - Dem
GILBERT AFODACA	State Rep. District 36 - Dem
NICOLE R. PARRA-PEREZ	State Rep. District 36 - Dem
BILL MCCAMLEY	Public Reg. Comm. District 5 - Dem
MANUEL I. ARRETA	District Judge Dist. 3 Div. 1 - Dem
EUGENE E. GANT	Public Ed. Comm. District 7 - Dem
ALEXANDER COTOIA	Public Ed. Comm. District 7 - Dem
OSCAR C. FRIETZE	Magistrate Judge Div. 1 - Dem
JOSHEPH GUILLORY	Magistrate Judge Div. 2 - Dem
OLIVIA N. GARCIA	Magistrate Judge Div. 3 - Dem
RICHARD L. SILVA	Magistrate Judge Div. 4 - Dem
KENT E. YALKUT	Magistrate Judge Div. 4 - Dem
KENT L. WINGENROTH	Magistrate Judge Div. 5 - Dem
MARIA E. RODRIGUEZ	Magistrate Judge Div. 6 - Dem
JOSE L. CANO	Magistrate Judge Div. 6 - Dem
FRANCISCO M. ORTIZ	Magistrate Judge Div. 6 - Dem
CINDY C. PADILLA	County Comm. District 1 - Dem
GILBERT CHAVEZ	County Comm. District 1 - Dem
BILLY G. GARRETT	County Comm. District 1 - Dem
ANDY SEGOVIA	County Assessor - Dem
LARRY A. ROYBAL	County Sheriff - Dem
JUAN R. STEWART	County Sheriff - Dem
ALICE M. SALCIDO	Probate Judge - Dem

File Name	2
Key in Id	2
Description	Ballot 1 - Type 1 - English / Spanish - Democratic Regular - Precinct 002
Language Profile	English / Spanish
Size	14

**Choices**

Choice Name	Contest Name
HARRY TEAGUE	U.S. Rep District 2 - Dem
DIANE D. DENISH	Governor - Dem
Write-in	Governor - Dem
BRIAN S. COLÓN	LI Governor - Dem



**New Mexico Demo Primary A**  
**Ballot Content**  
**2013-11-19 16:25:51**

Choice Name	Contest Name
NATHAN P. COTE	State Rep. District 53 - Dem
STEPHANIE L. DUBOIS	Public Reg. Comm. District 2 - Dem
MANUEL I. ARRIETA	District Judge Dist. 3 Div. 1 - Dem
EUGENE E. GANT	Public Ed. Comm. District 7 - Dem
ALEXANDER COTOIA	Public Ed. Comm. District 7 - Dem
OSCAR C. FRIETZE	Magistrate Judge Div. 1 - Dem
JOSHEPH GULLORY	Magistrate Judge Div. 2 - Dem
OLIVIA N. GARCIA	Magistrate Judge Div. 3 - Dem
RICHARD L. SILVA	Magistrate Judge Div. 4 - Dem
KENT E. YALKUT	Magistrate Judge Div. 4 - Dem
KENT L. WINGENROTH	Magistrate Judge Div. 5 - Dem
MARIA E. RODRIGUEZ	Magistrate Judge Div. 6 - Dem
JOSE L. CANO	Magistrate Judge Div. 6 - Dem
FRANCISCO M. ORTIZ	Magistrate Judge Div. 6 - Dem
ANDY SEGGOVIA	County Assessor - Dem
LARRY A. ROYBAL	County Sheriff - Dem
JUAN R. STEWART	County Sheriff - Dem
ALICE M. SALCIDO	Probate Judge - Dem

File Name	10
Key in Id	10
Description	Ballot 6 - Type 6 - English / Spanish - Republican Regular - Precinct 005
Language Profile	English / Spanish
Size	14

**Choices**

Choice Name	Contest Name
STEVE PEARCE	U.S. Rep District 2 - Rep
CLIFF R. PIRTLE	U.S. Rep District 2 - Rep
SUSANA MARTINEZ	Governor - Rep
ALLEN E. WEH	Governor - Rep
DOUG W. TURNER	Governor - Rep
PETE V. DOMENICI JR.	Governor - Rep
JANICE E. ARNOLD-JONES	Governor - Rep
BRIAN K. MOORE	Lt. Governor - Rep
KENT L. CRAVENS	Lt. Governor - Rep
JOHN A. SANCHEZ	Lt. Governor - Rep
DIANNA J. DURAN	Secretary Of State - Rep
ERROL J. CHAVEZ	State Auditor - Rep
JIM D. SCHONOVER	State Treasurer - Rep
MATTHEW E. CHANDLER	Attorney General - Rep
MATTHEW D. RUSH	Comm. Of Public Lands - Rep
BOB CORNELIUS	Comm. Of Public Lands - Rep
NED S. FULLER	Court Of Appeals Position 1 - Rep
RICKY L. LITTLE	State Rep. District 53 - Rep
PATRICK H. LYONS	Public Reg. Comm. District 2 - Rep
ROBERT B. CORN	Public Reg. Comm. District 2 - Rep
RICHARD B. WELLBORN	District Judge Dist. 3 Div. 1 - Rep
GARY T. SPERLING	Magistrate Judge Div. 3 - Rep
RAY STORMENT	Magistrate Judge Div. 6 - Rep
TYSON W. MURPHY	County Assessor - Rep
TODD GARRISON	County Sheriff - Rep
PATRICK J. CURRAN	Probate Judge - Rep

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**Ballot Overview - Reports a general overview of all ballots in the system**

**New Mexico Demo Primary A  
Ballot Overview  
2013-11-19 16:26:10**

Key in Id	1
Ballot File Name	1
Description	Ballot 1 - Type 1 - English / Spanish - Democratic Regular - Precinct 001
Language Profile	English / Spanish

**Precincts**

Name	Number of Voters
Precinct 001	0

**Contests**

1. U.S. Rep District 2 - Dem
2. Governor - Dem
3. Lt. Governor - Dem
4. Secretary Of State - Dem
5. State Auditor - Dem
6. State Treasurer - Dem
7. Attorney General - Dem
8. Comm. Of Public Lands - Dem
9. Court Of Appeals Position 1 - Dem
10. Court Of Appeals Position 2 - Dem
11. Court Of Appeals Position 3 - Dem
12. State Rep. District 36 - Dem
13. Public Reg. Comm. District 5 - Dem
14. District Judge Dist. 3 Div. 1 - Dem
15. Public Ed. Comm. District 7 - Dem
16. Magistrate Judge Div. 1 - Dem
17. Magistrate Judge Div. 2 - Dem
18. Magistrate Judge Div. 3 - Dem
19. Magistrate Judge Div. 4 - Dem
20. Magistrate Judge Div. 5 - Dem
21. Magistrate Judge Div. 6 - Dem
22. County Comm. District 1 - Dem
23. County Assessor - Dem
24. County Sheriff - Dem
25. Probate Judge - Dem

Key in Id	2
Ballot File Name	2
Description	Ballot 1 - Type 1 - English / Spanish - Democratic Regular - Precinct 002
Language Profile	English / Spanish

**Precincts**

Name	Number of Voters
Precinct 002	0

**Contests**

1. U.S. Rep District 2 - Dem
2. Governor - Dem
3. Lt. Governor - Dem
4. Secretary Of State - Dem
5. State Auditor - Dem
6. State Treasurer - Dem
7. Attorney General - Dem
8. Comm. Of Public Lands - Dem
9. Court Of Appeals Position 1 - Dem
10. Court Of Appeals Position 2 - Dem
11. Court Of Appeals Position 3 - Dem
12. State Rep. District 36 - Dem
13. Public Reg. Comm. District 5 - Dem
14. District Judge Dist. 3 Div. 1 - Dem
15. Public Ed. Comm. District 7 - Dem
16. Magistrate Judge Div. 1 - Dem
17. Magistrate Judge Div. 2 - Dem
18. Magistrate Judge Div. 3 - Dem
19. Magistrate Judge Div. 4 - Dem
20. Magistrate Judge Div. 5 - Dem
21. Magistrate Judge Div. 6 - Dem
22. County Comm. District 1 - Dem
23. County Assessor - Dem
24. County Sheriff - Dem
25. Probate Judge - Dem

Key in Id	3
Ballot File Name	3

**New Mexico Demo Primary A  
Ballot Overview  
2013-11-19 16:26:10**

Key in id	10
Ballot File Name	10
Description	Ballot 6 - Type 6 - English / Spanish - Republican Regular - Precinct 005
Language Profile	English / Spanish

**Precincts**

Name	Number of Voters
Precinct 005	0

**Contests**

1. U.S. Rep District 2 - Rep
2. Governor - Rep
3. Lt. Governor - Rep
4. Secretary Of State - Rep
5. State Auditor - Rep
6. State Treasurer - Rep
7. Attorney General - Rep
8. Comm. Of Public Lands - Rep
9. Court Of Appeals Position 1 - Rep
10. State Rep. District 53 - Rep
11. Public Reg. Comm. District 2 - Rep
12. District Judge Dist. 3 Div. 1 - Rep
13. Magistrate Judge Div. 3 - Rep
14. Magistrate Judge Div. 6 - Rep
15. County Assessor - Rep
16. County Sheriff - Rep
17. Probate Judge - Rep

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Choices - Reports all the choices in the system

New Mexico Demo Primary A  
Choices  
2013-11-19 16:25:16

**Choice Name HARRY TEAGUE**

Contest Name: U.S. Rep District 2 - Dem  
Office Name: US Representative  
District Name: US Congressional District 2  
Incumbent: No

**Party Support**

**Languages**

1. Ballot Content: English / Spanish
2. Audio: English
3. Audio: Spanish

**Choice info**

First Name:  
Last Name:  
Gender: Unknown  
Address:  
Date Of Birth:  
Phone:  
Email:

**Choice Name DIANE D. DENISH**

Contest Name: Governor - Dem  
Office Name: Governor  
District Name: New Mexico  
Incumbent: No

**Party Support**

**Languages**

1. Ballot Content: English / Spanish
2. Audio: English
3. Audio: Spanish

**Choice info**

First Name:  
Last Name:  
Gender: Unknown  
Address:  
Date Of Birth:  
Phone:  
Email:

**Choice Name Write-in**

Contest Name: Governor - Dem  
Office Name: Governor  
District Name: New Mexico  
Incumbent: No

**Party Support**

**Languages**

1. Audio: English
2. Audio: Spanish

**Choice Name BRIAN S. COLÓN**

Contest Name: Lt. Governor - Dem  
Office Name: Lt. Governor  
District Name: New Mexico  
Incumbent: No

**Party Support**

**Languages**

1. Ballot Content: English / Spanish
2. Audio: English
3. Audio: Spanish

**Choice info**

First Name:  
Last Name:  
Gender: Unknown  
Address:  
Date Of Birth:  
Phone:  
Email:

**Choice Name LAWRENCE E. RAEL**

Contest Name: Lt. Governor - Dem  
Office Name: Lt. Governor  
District Name: New Mexico  
Incumbent: No

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**New Mexico Demo Primary A**  
**Choices**  
**2013-11-19 16:25:16**

Office Name: County Assessor  
District Name: Demo County  
Incumbent: No

**Party Support**

**Languages**

1. Ballot Content: English / Spanish
2. Audio: English
3. Audio: Spanish

**Choice Info**

First Name :  
Last Name :  
Gender : Unknown  
Address :  
Date Of Birth :  
Phone :  
Email :

**Choice Name: TODD GARRISON**

Contest Name: County Sheriff - Rep  
Office Name: County Sheriff  
District Name: Demo County  
Incumbent: No

**Party Support**

**Languages**

1. Ballot Content: English / Spanish
2. Audio: English
3. Audio: Spanish

**Choice Info**

First Name :  
Last Name :  
Gender : Unknown  
Address :  
Date Of Birth :  
Phone :  
Email :

**Choice Name: PATRICK J. CURRAN**

Contest Name: Probate Judge - Rep  
Office Name: Probate Judge  
District Name: Demo County  
Incumbent: No

**Party Support**

**Languages**

1. Ballot Content: English / Spanish
2. Audio: English
3. Audio: Spanish

**Choice Info**

First Name :  
Last Name :  
Gender : Unknown  
Address :  
Date Of Birth :  
Phone :  
Email :

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**Consolidated Ballots – Reports all the consolidated ballots (ballots with same contents) in the system, if applicable**

**New Mexico Demo Primary A  
Consolidated Ballots  
2013-11-19 16:26:27**

**Ballot Files : 1**

**Contests**

1. U.S. Rep District 2 - Dem
2. Governor - Dem
3. Lt. Governor - Dem
4. Secretary Of State - Dem
5. State Auditor - Dem
6. State Treasurer - Dem
7. Attorney General - Dem
8. Comm. Of Public Lands - Dem
9. Court Of Appeals Position 1 - Dem
10. Court Of Appeals Position 2 - Dem
11. Court Of Appeals Position 3 - Dem
12. State Rep. District 36 - Dem
13. Public Reg. Comm. District 5 - Dem
14. District Judge Dist. 3 Div. 1 - Dem
15. Public Ed. Comm. District 7 - Dem
16. Magistrate Judge Div. 1 - Dem
17. Magistrate Judge Div. 2 - Dem
18. Magistrate Judge Div. 3 - Dem
19. Magistrate Judge Div. 4 - Dem
20. Magistrate Judge Div. 5 - Dem
21. Magistrate Judge Div. 6 - Dem
22. County Comm. District 1 - Dem
23. County Assessor - Dem
24. County Sheriff - Dem
25. Probate Judge - Dem
26. U.S. Rep District 2 - Dem
27. Governor - Dem
28. Lt. Governor - Dem
29. Secretary Of State - Dem
30. State Auditor - Dem
31. State Treasurer - Dem
32. Attorney General - Dem
33. Comm. Of Public Lands - Dem
34. Court Of Appeals Position 1 - Dem
35. Court Of Appeals Position 2 - Dem
36. Court Of Appeals Position 3 - Dem
37. State Rep. District 36 - Dem
38. Public Reg. Comm. District 5 - Dem
39. District Judge Dist. 3 Div. 1 - Dem
40. Public Ed. Comm. District 7 - Dem
41. Magistrate Judge Div. 1 - Dem
42. Magistrate Judge Div. 2 - Dem
43. Magistrate Judge Div. 3 - Dem
44. Magistrate Judge Div. 4 - Dem
45. Magistrate Judge Div. 5 - Dem
46. Magistrate Judge Div. 6 - Dem
47. County Comm. District 1 - Dem
48. County Assessor - Dem
49. County Sheriff - Dem
50. Probate Judge - Dem
51. U.S. Rep District 2 - Dem
52. Governor - Dem
53. Lt. Governor - Dem
54. Secretary Of State - Dem
55. State Auditor - Dem
56. State Treasurer - Dem
57. Attorney General - Dem
58. Comm. Of Public Lands - Dem
59. Court Of Appeals Position 1 - Dem
60. Court Of Appeals Position 2 - Dem
61. Court Of Appeals Position 3 - Dem
62. State Rep. District 36 - Dem
63. Public Reg. Comm. District 5 - Dem
64. District Judge Dist. 3 Div. 1 - Dem
65. Public Ed. Comm. District 7 - Dem
66. Magistrate Judge Div. 1 - Dem
67. Magistrate Judge Div. 2 - Dem
68. Magistrate Judge Div. 3 - Dem
69. Magistrate Judge Div. 4 - Dem
70. Magistrate Judge Div. 5 - Dem
71. Magistrate Judge Div. 6 - Dem
72. County Comm. District 1 - Dem
73. County Assessor - Dem
74. County Sheriff - Dem
75. Probate Judge - Dem

**Ballot Files : 3**

**Contests**

1. U.S. Rep District 2 - Dem
2. Governor - Dem
3. Lt. Governor - Dem
4. Secretary Of State - Dem
5. State Auditor - Dem
6. State Treasurer - Dem
7. Attorney General - Dem
8. Comm. Of Public Lands - Dem
9. Court Of Appeals Position 1 - Dem

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New Mexico Demo Primary A  
Consolidated Ballots  
2013-11-19 16:26:27

- 23. State Auditor - Rep
- 24. State Treasurer - Rep
- 25. Attorney General - Rep
- 26. Comm. Of Public Lands - Rep
- 27. Court Of Appeals Position 1 - Rep
- 28. State Rep. District 35 - Rep
- 29. Public Reg. Comm. District 5 - Rep
- 30. District Judge Dist. 3 Div. 1 - Rep
- 31. Magistrate Judge Div. 3 - Rep
- 32. Magistrate Judge Div. 6 - Rep
- 33. County Comm. District 1 - Rep
- 34. County Assessor - Rep
- 35. County Sheriff - Rep
- 36. Probate Judge - Rep
- 37. U.S. Rep District 2 - Rep
- 38. Governor - Rep
- 39. Lt. Governor - Rep
- 40. Secretary Of State - Rep
- 41. State Auditor - Rep
- 42. State Treasurer - Rep
- 43. Attorney General - Rep
- 44. Comm. Of Public Lands - Rep
- 45. Court Of Appeals Position 1 - Rep
- 46. State Rep. District 35 - Rep
- 47. Public Reg. Comm. District 5 - Rep
- 48. District Judge Dist. 3 Div. 1 - Rep
- 49. Magistrate Judge Div. 3 - Rep
- 50. Magistrate Judge Div. 6 - Rep
- 51. County Comm. District 1 - Rep
- 52. County Assessor - Rep
- 53. County Sheriff - Rep
- 54. Probate Judge - Rep

**Ballot Files : 4**

**Contests**

- 1. U.S. Rep District 2 - Rep
- 2. Governor - Rep
- 3. Lt. Governor - Rep
- 4. Secretary Of State - Rep
- 5. State Auditor - Rep
- 6. State Treasurer - Rep
- 7. Attorney General - Rep
- 8. Comm. Of Public Lands - Rep
- 9. Court Of Appeals Position 1 - Rep
- 10. State Rep. District 37 - Rep
- 11. Public Reg. Comm. District 5 - Rep
- 12. District Judge Dist. 3 Div. 1 - Rep
- 13. Magistrate Judge Div. 3 - Rep
- 14. Magistrate Judge Div. 6 - Rep
- 15. County Comm. District 1 - Rep
- 16. County Assessor - Rep
- 17. County Sheriff - Rep
- 18. Probate Judge - Rep



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**Contests - Reports all the contests in the system**

**New Mexico Demo Primary A  
Contests  
2013-11-19 16:22:50**

Contest Name	U.S. Rep District 2 - Dem
Number of Positions	1
Office Name	US Representative
District Name	US Congressional District 2
Parent District Name	Demo County, New Mexico
Acclaimed or Disabled	Acclaimed
Default Column Index	Undefined
Column Index	

**Languages**

Audio	Spanish
Audio	English
Ballot Content	English / Spanish

**Choices**

1. HARRY TEAGUE

**Elector Groups**

1. Democratic Party

Contest Name	Governor - Dem
Number of Positions	1
Office Name	Governor
District Name	New Mexico
Parent District Name	Demo County, New Mexico
Acclaimed or Disabled	No
Default Column Index	Undefined
Column Index	

**Languages**

Ballot Content	English / Spanish
Audio	English
Audio	Spanish

**Choices**

1. DIANE D. DENISH
2. Write-in

**Elector Groups**

1. Democratic Party

Contest Name	Lt. Governor - Dem
Number of Positions	1
Office Name	Lt. Governor
District Name	New Mexico
Parent District Name	Demo County, New Mexico
Acclaimed or Disabled	No
Default Column Index	Undefined
Column Index	

**Languages**

Ballot Content	English / Spanish
Audio	English
Audio	Spanish

**Choices**

1. BRIAN S. COLÓN
2. LAWRENCE E. RIEL
3. JOSE A. CAMPOS II
4. GERALD P. ORTIZ Y PINO
5. LINDA M. LOPEZ

**Elector Groups**

1. Democratic Party

Contest Name	Secretary Of State - Dem
Number of Positions	1
Office Name	Secretary Of State
District Name	New Mexico
Parent District Name	Demo County, New Mexico
Acclaimed or Disabled	Acclaimed
Default Column Index	Undefined
Column Index	

**New Mexico Demo Primary A  
Contests  
2013-11-19 16:22:50**

District Name	Demo County
Parent District Name	Demo County, New Mexico
Acclaimed or Disabled	Acclaimed
Default Column Index	Undefined
Column Index	

**Languages**

Audio	English
Ballot Content	English / Spanish
Audio	Spanish

**Choices**

1. TYSON W. MURPHY

**Elector Groups**

1. Republican Party

Contest Name	County Sheriff - Rep
Number of Positions	1
Office Name	County Sheriff
District Name	Demo County
Parent District Name	Demo County, New Mexico
Acclaimed or Disabled	Acclaimed
Default Column Index	Undefined
Column Index	

**Languages**

Audio	English
Ballot Content	English / Spanish
Audio	Spanish

**Choices**

1. TODD GARRISON

**Elector Groups**

1. Republican Party

Contest Name	Probate Judge - Rep
Number of Positions	1
Office Name	Probate Judge
District Name	Demo County
Parent District Name	Demo County, New Mexico
Acclaimed or Disabled	Acclaimed
Default Column Index	Undefined
Column Index	

**Languages**

Ballot Content	English / Spanish
Audio	Spanish
Audio	English

**Choices**

1. PATRICK J. CURRAN

**Elector Groups**

1. Republican Party

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**Election Project – Reports general election project details**

**New Mexico Demo Primary A  
Election Project Properties  
2013-11-19 16:18:01**

Election Status	Ready for Elections
Description	Programming of tabulator memory cards. Results processing
Election Project Name	New Mexico Demo Primary A
Description	New Mexico Demo Primary
Jurisdiction Name	Demo County, New Mexico
Jurisdiction Type	State
Election Event Date	7/26/2013
Election Event Type	Closed Primary
Ballot Style	Universal Multi Column Ballot Style
Security Settings	Mode 1
Audio Ballot Type	Full Audio Ballot
Districts	13
Precincts	5
Political parties	2
Offices	18
Contests	49
Choices	80
Ballots	10
Tabulators	10
Tabulator users	10

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**Application Role List – Reports all application roles currently in the system**

**New Mexico Demo Primary A  
Application Role List  
2013-11-19 16:30:38**

Name:	EED Administrator
Password Type:	Strong
System Role:	Yes

**Permissions:**

1. Reorder choices
2. Link language ballot content to the Polling Subdivision
3. Delete language profile content
4. Reorder polling subdivisions
5. Create Line
6. Create voting location
7. Create elector group
8. Link Choice to Choice Group
9. Create User list report
10. Update EMS database
11. Create office
12. Unlink polling subdivisions and subdivision
13. Modify subdivision type
14. Import DCF in project
15. Reorder political parties
16. Delete party endorsement
17. Create Subdivision Types report
18. Create Choices report
19. Unlink language ballot content and Polling Subdivision
20. Create Choice Personal Info
21. Modify elector group combination
22. Create District Rotation
23. Delete Contest Heading
24. Create database security report
25. Delete tabulator
26. Create polling subdivision
27. Reorder contests
28. Modify Contest Heading
29. Program memory card
30. Modify text override
31. Program Security Key
32. Create tabulator user
33. Modify Ballot Type
34. Link device configuration to tabulator
35. Import District Rotations
36. Override political party logo
37. Create political party
38. Create choice prototype
39. Modify counting group
40. Link tabulator to voting location
41. Generate Ballot Pdf documents
42. Delete Choice Personal Info
43. Delete elector group
44. Modify party endorsement
45. Create language profile content
46. Create Batch of Polling Subdivisions
47. Create application user
48. Attach prototype to contest
49. Create Ballot Distribution Per Polling Subdivision Report
50. Reorder elector groups
51. Link language profile to suitable profile
52. Unlink tabulator and polling subdivision
53. Delete counting group
54. Unlink device configuration and tabulator
55. Create Ballot Ballot Distribution per Voting Locations Report
56. Reorder elector group combinations
57. Modify choice prototype
58. Modify elector group
59. Create Tabulator User list report
60. Modify roles
61. Delete polling subdivision
62. Create Voting Location report
63. Create Tabulators list report
64. Set project parameters
65. Modify language profile content
66. Disable choice
67. Delete voting location
68. Detach prototype from contest
69. Create contest
70. Link polling subdivisions to subdivision
71. Delete elector count
72. Delete Ballots
73. Modify office
74. Link political party and line
75. Create subdivision type
76. Create language profile
77. Create choices (candidates, options)
78. Create elector count
79. Initialize Backup Card
80. Modify subdivision
81. Delete Line
82. Delete template
83. Modify contest prototype

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**New Mexico Demo Primary A**  
**Application Role List**  
**2013-11-19 16:30:38**

22. Edit Result file  
23. Create write-ins

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**Application User List – Reports all the application users currently in the system**

**New Mexico Demo Primary A  
Application User List  
2013-11-19 16:30:20**

User Name:	Admin
First Name:	dvs
Last Name:	dvs
Role:	EED Administrator
Status:	Active
Position:	
Description:	
Address:	
Phone:	
Phone 2:	
E-mail:	

User Name:	RTRAdmin
First Name:	
Last Name:	
Role:	RTR Administrator
Status:	Active
Position:	
Description:	
Address:	
Phone:	
Phone 2:	
E-mail:	

User Name:	TechAdvisor
First Name:	John
Last Name:	Smith
Role:	EED Technical Advisor
Status:	Active
Position:	
Description:	
Address:	
Phone:	
Phone 2:	
E-mail:	

**Database Security Report – Reports on the current status of database security and integrity**

**New Mexico Demo Primary A  
Database Security Report  
2013-11-19 16:38:09**

Database Name	Creation	Modification
New Mexico Demo Primary A-2013-08-02-12-20-34	2013-08-16 14:44:26 PM	2013-11-19 16:38:09 PM

**Language Profiles – Reports all the language profiles currently in the system**

**New Mexico Demo Primary A  
Language Profiles  
2013-11-19 16:30:55**

Language Profile Name	Purpose	Default
English	Audio	Yes
English / Spanish	Ballot Content	Yes
Spanish	Audio	No



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Polling Places - Reports all the polling places currently in the system

New Mexico Demo Primary A  
Polling Places  
2013-11-19 16:30:03

Polling Place Name	Central Office Absentee
Polling Place Number	100
Description	Central Office Absentee
Number of Phone Lines	0
Internet Access Type	
Number of Toilets	0
Building Accessibility	
Address Information	
Latitude	
Longitude	

Polling Place Name	Early Vote Site
Polling Place Number	200
Description	Early Vote Site
Number of Phone Lines	0
Internet Access Type	
Number of Toilets	0
Building Accessibility	
Address Information	
Latitude	
Longitude	

Polling Place Name	Precinct 001
Polling Place Number	301
Description	Precinct 001
Number of Phone Lines	0
Internet Access Type	
Number of Toilets	0
Building Accessibility	
Address Information	
Latitude	
Longitude	

Polling Place Name	Precinct 002
Polling Place Number	302
Description	Precinct 002
Number of Phone Lines	0
Internet Access Type	
Number of Toilets	0
Building Accessibility	
Address Information	
Latitude	
Longitude	

Polling Place Name	Precinct 003
Polling Place Number	303
Description	Precinct 003
Number of Phone Lines	0
Internet Access Type	
Number of Toilets	0
Building Accessibility	
Address Information	
Latitude	
Longitude	

Polling Place Name	Precinct 004
Polling Place Number	304
Description	Precinct 004
Number of Phone Lines	0
Internet Access Type	
Number of Toilets	0
Building Accessibility	

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**New Mexico Demo Primary A  
Polling Places  
2013-11-19 16:30:03**

Address Information	
Latitude	
Longitude	

Polling Place Name	Precinct 005
Polling Place Number	305
Description	Precinct 005
Number of Phone Lines	0
Internet Access Type	
Number of Toilets	0
Building Accessibility	
Address Information	
Latitude	
Longitude	

Polling Place Name	Mail Ballot Precinct
Polling Place Number	401
Description	Mail Ballot Precinct
Number of Phone Lines	0
Internet Access Type	
Number of Toilets	0
Building Accessibility	
Address Information	
Latitude	
Longitude	

Polling Place Name	VCC 1
Polling Place Number	501
Description	Vote Center 1
Number of Phone Lines	0
Internet Access Type	
Number of Toilets	0
Building Accessibility	
Address Information	
Latitude	
Longitude	

## Tabulators - Reports all the tabulators currently in the system

### New Mexico Demo Primary A Tabulators 2013-11-19 16:29:44

Tabulator Name	ICC Absentee
Polling Place Name	Central Office Absentee
Tabulator Type	Imagecast Central
Counting Group	Absentee
Device Settings	DCF object for ICC

#### List of Associated Precincts

Precinct Name	Number of Voters
Precinct 005	0
Precinct 003	0
Precinct 004	0
Precinct 002	0
Precinct 001	0

#### Tabulator Users

User Name	First Name	Last Name
Admin	Admin	Admin

Tabulator Name	ICC 401
Polling Place Name	Mail Ballot Precinct
Tabulator Type	Imagecast Central
Counting Group	Election Day
Device Settings	DCF object for ICC

#### List of Associated Precincts

Precinct Name	Number of Voters
Precinct 005	0
Precinct 003	0
Precinct 004	0
Precinct 002	0
Precinct 001	0

#### Tabulator Users

User Name	First Name	Last Name
Admin	Admin	Admin

Tabulator Name	ICE Early Vote
Polling Place Name	Early Vote Site
Tabulator Type	Imagecast Evolution
Counting Group	Early Voting
Device Settings	MBS object for root

#### List of Associated Precincts

Precinct Name	Number of Voters
Precinct 005	0
Precinct 003	0
Precinct 004	0
Precinct 002	0
Precinct 001	0

#### Tabulator Users

User Name	First Name	Last Name
Admin	Admin	Admin

**New Mexico Demo Primary A**  
**Tabulators**  
**2013-11-19 16:29:44**

Tabulator Users

User Name	First Name	Last Name
Admin	Admin	Admin

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**Cards Cast Report – Reports the results in simple format based on ballot type**

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**Cards Cast Report**

Closed Primary

Demo County, New Mexico

July 26, 2013

Cards Cast for: All Districts, All Counting Groups

Precinct	Ballot Type	Paper Index	Elector Group Combination	Elector Group With Count	All Ballots Cast	All Voters Cast	Eligible	Turnout	Audio Ballots Cast	Audio Voters Cast	Audio Turnout
State											
Demo County, New Mexico											
Precinct 001											
	Ballot 1 - Type 1	1	Democratic Regular		13	13	0		0	0	
	Ballot 2 - Type 2	1	Republican Regular		4	4	0		0	0	
	Cumulative				0	0	0		0	0	
Precinct 001 - Total					17	17	0		0	0	
Precinct 002											
	Ballot 1 - Type 1	1	Democratic Regular		2	2	0		0	0	
	Ballot 2 - Type 2	1	Republican Regular		2	2	0		0	0	
	Cumulative				0	0	0		0	0	
Precinct 002 - Total					4	4	0		0	0	
Precinct 003											
	Ballot 1 - Type 1	1	Democratic Regular		8	8	0		0	0	
	Ballot 2 - Type 2	1	Republican Regular		22	22	0		0	0	
	Cumulative				0	0	0		0	0	
Precinct 003 - Total					30	30	0		0	0	
Precinct 004											
	Ballot 3 - Type 3	1	Democratic Regular		24	24	0		0	0	
	Ballot 4 - Type 4	1	Republican Regular		22	22	0		0	0	
	Cumulative				0	0	0		0	0	
Precinct 004 - Total					46	46	0		0	0	

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Precinct	Ballot Type	Paper Index	Elector Group Combination	Elector Group With Count	All Ballots Cast	All Voters Cast	Eligible	Turnout	Audio Ballots Cast	Audio Voters Cast	Audio Turnout
Precinct 005											
	Ballot 5 - Type 5	1	Democratic Regular		0	0	0		0	0	
	Ballot 6 - Type 6	1	Republican Regular		0	0	0		0	0	
	Cumulative				0	0	0		0	0	
Precinct 005 - Total					0	0	0		0	0	
Demo County, New Mexico - Total					97	97	0		0	0	
State - Total					97	97	0		0	0	

**Election Summary Report - Reports the results in detailed format for all ballots, contests and choices**

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## Election Summary Report

Closed Primary

Demo County, New Mexico

July 26, 2013

Summary for: All Contests, All Precincts, All Counting Groups

Sample Election Summary Report

Precincts Reported: 0 of 5 (0.00%)

Registered Voters: 97 of 0 (Infinity)

Ballots Cast: 97

**U.S. Rep District 2 - Dem (Vote for 1)**  
**DEM**

Precincts Reported: 0 of 5 (0.00%)

		Total	
Times Cast		47 / 0	Infinity
Undervotes		18	
Overvotes		0	
Candidate	Party	Total	
HARRY TEAGUE		29	
Total Votes		29	

**Governor - Dem (Vote for 1)**  
**DEM**

Precincts Reported: 0 of 5 (0.00%)

		Total	
Times Cast		47 / 0	Infinity
Undervotes		9	
Overvotes		0	
Candidate	Party	Total	
DIANE D. DENISH		27	
Total Votes		27	

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County Sheriff - Rep (Vote for 1)  
REP

Precincts Reported: 0 of 5 (0.00%)

Total		
Times Cast	50 / 0	Infinity
Undervotes	6	
Overvotes	0	

Candidate	Party	Total
TODD GARRISON		44
Total Votes		44

Probate Judge - Rep (Vote for 1)  
REP

Precincts Reported: 0 of 5 (0.00%)

Total		
Times Cast	50 / 0	Infinity
Undervotes	10	
Overvotes	0	

Candidate	Party	Total
PATRICK J. CURRAN		40
Total Votes		40



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**Statement of Votes Cast – Reports the results in detailed format based on contest  
and precincts for all ballots**

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**Statement of Votes Cast**

Closed Primary

Demo County, New Mexico

July 26, 2013

SOVC for: All Contests, All Districts, All Counting Groups

Precinct	Registered Voters	Cards Cast
State		
Demo County, New Mexico		
Precinct 001	0	17
Precinct 002	0	4
Precinct 003	0	30
Precinct 004	0	46
Precinct 005	0	0
Demo County, New Mexico - Total	0	97
State - Total	0	97

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Probate Judge - Rep (Vote for 1)  
REP

Precinct	Times Cast	Undervotes	Overvotes	Precinct	PATRICK J. CURRAN	Total Votes
State				State		
Demo County, New Mexico				Demo County, New Mexico		
Precinct 001	4	4	0	Precinct 001	0	0
Precinct 002	2	2	0	Precinct 002	0	0
Precinct 003	22	2	0	Precinct 003	20	20
Precinct 004	22	2	0	Precinct 004	20	20
Precinct 005	0	0	0	Precinct 005	0	0
Demo County, New Mexico - Total	50	10	0	Demo County, New Mexico - Total	40	40
Cumulative				Cumulative		
Cumulative	0	0	0	Cumulative	0	0
Cumulative - Total	0	0	0	Cumulative - Total	0	0
State - Total	50	10	0	State - Total	40	40

## 8.0 Sample Project Artifacts

Provide sample project artifacts, such as a project plan (schedule and planning documents), from a Voting System project in which you have participated and you consider to be representative of your work, the quality of your work, and the level of communication and detail that you provide. At your request, these materials will be treated as confidential. These sample artifacts may be used to assess the format and detail you may provide if selected in Colorado. Respondents are encouraged to organize, label, title or describe these materials to indicate their content and purpose if it is not clearly apparent in the materials. Where page limitations are a restriction, you may consider providing a table of contents and excerpts.

*Page Limit: 30 pages*

### Table of Contents – Sample Project Artifacts

- ✓ Puerto Rico: Project Plan (RFP)
- ✓ Philippines: Project Plan
- ✓ California: Sample County Project Plan
- ✓ Florida: Palm Beach Project Plan
- ✓ New York (State-wide): Excerpts from Implementation Plan

## 9.0 General Questions

The following is a list of questions regarding various aspects of the UVS functionality and the UVS project. Please provide detailed answers to these questions. Note: Do not include any cost information in this section of the RFP.

- 1) What staff support from CDOS and counties do you envision needing during the implementation of the UVS in a county? Identify each resource by location (CDOS or county), role or responsibility, technical skills needed, suggested expertise in years, and any clarifying comments.

Role / Responsibility	Technical Skills	Comments
General Comment		<p>As part of the planning phase of the implementation, an assessment must be made to determine the specific needs of the county based on county size, availability of existing staff, and experience levels of existing staff.</p> <p>Based on that assessment, Dominion will assist the county in determining specific needs. This assessment will be fluid and will be open to change, if needed, as we progress through all phases of the implementation project.</p> <p>The ultimate goal being that the county staff is appropriately assigned and trained.</p>
Primary EMS Technician	General Computer Operation Skills	We find that experience and a good working knowledge of the state's election preparation and execution concepts greatly enhances a person's success in this role.
Backup EMS Technician	General Computer Operation Skills	Same as above.
Voting Machine Technician	Basic Computer Operation Skills or Previous	<p>Same as above.</p> <p>Also, the number of FTEs</p>

Role / Responsibility	Technical Skills	Comments
	Experience with Voting Machines	<p>required will be scalable based on the size of the county.</p> <p>The Primary EMS Technician may also function as the Voting Machine Technician supplemented by temporary help during the election preparation phase.</p> <p>Additionally, an FTE Voting Technician would make a good choice to also serve as the Backup EMS Technician.</p>
Additional Staff As Needed to Perform Election Preparation and Execution Tasks	Skills of Existing Staff That Currently Engage in Election Preparation and Execution Tasks	<p>Depending on the needs of each Elections District, there may be a need to have additional staff responsible for Poll Worker training, in-office IT personnel, ballot proofing, logistics planning and execution, Central Count Scanner operator(s), etc.</p> <p>However, we have found that if the county has a need for additional staff to perform these tasks, they most likely already have appropriate staff assigned to these types of tasks and through training, will simply take on the same tasks with the new system.</p>

2) How many county implementations do you feel you could support simultaneously?

Dominion can ramp up production and mobilize its resources, in order to roll-out and implement the system and support a first election in all 64 counties in the State of Colorado, within an 8 month period. If as few as 6 to 10 counties will transition to the UVS in 2014, Dominion is fully prepared to manage this initial implementation.

3) What is your coverage, terms, and duration for warranties of the hardware, software, and other deliverables provided pursuant to this RFP?

Dominion offers a one-year parts warranty on all parts on the complete voting system (hardware

and software)

- 4) What is your coverage, terms, and duration for maintenance of the hardware, software, and other deliverables provided pursuant to this RFP?

Dominion offers, as an option, an extended hardware maintenance agreement. A sample Hardware Maintenance Agreement is provided in Appendix 1.

- 5) What is your coverage, terms, and duration for licensing of the software components of your UVS solution?

Dominion offers a software license agreement that is annually renewable. A sample software license agreement is provided in Appendix 2.

- 6) Are updates and modifications to the UVS because of legislative mandates a part of your support agreement or are they custom enhancements?

The Dominion software license makes general software upgrades available to the customer at no additional charge, only in the event that Dominion at its sole discretion chooses to recertify the upgrade pursuant to the election laws and regulations of the State of Colorado. If such general upgrade includes modifications based on legislative changes, then those modifications will be provided at no additional charge.

- 7) What is the certification status of each component within your proposed solution? Include a matrix showing the following:
- Component Identification
  - Federal certification date
  - The federal certification standard currently met (e.g. 2005 VVSG)
  - Any state certifications
  - Projected certification date and standard if not currently certified
  - Projected certification date and standard for a future planned upgraded certification

Please see table on next page

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<b>Component Identification</b>	<u>Election Management System</u>	<u>ImageCast Precinct</u>	<u>ImageCast Evolution</u>	<u>ImageCast Central</u>	<u>Adjudication</u>
Federal certification date	7/18/2013	7/18/2013	7/18/2013	7/18/2013	7/18/2013*
The federal certification standard currently met (e.g. 2005 VVSG)	2005 VVSG	2005 VVSG	2005 VVSG	2005 VVSG	2005 VVSG
Any state certifications**	Yes	Yes	Yes	Yes	No
Projected certification date and standard if not currently certified	N/A	N/A	N/A	N/A	N/A
Projected certification date and standard for a future planned upgraded certification	April 2014, VVSG 2005***	April 2014, VVSG 2005	April 2014, VVSG 2005	April 2014, VVSG 2005	April 2014, VVSG 2005

\* as a State-level component within the certified voting system. A copy of the EAC VVSG 2005 certificate for Democracy Suite 4.14 is provided in Appendix 4.

\*\* New Mexico, Louisiana, Missouri, Iowa, Illinois, Ohio, Tennessee, Florida, Virginia, New York. Copies of certification documents are provided in Appendix 5.

\*\*\* Dominion Voting has a number of planned upgrades. This information represents only the next EAC campaign not already in progress

8) What features of your proposed solution exist to ensure ballot secrecy? Please describe those features.

**Physical ballot secrecy:** Dominion Voting offers and recommends, as a consumable item, secrecy sleeves that serve as a protective transport between the voting booth and the tabulator. Ballot boxes have a number of locks and the capability to add tamper evident seals.

**Digital ballot secrecy:** Dominion Voting ensures ballot secrecy by:

- Images are stored on a RAW partition on the CF cards, since it's not a file system (such as FAT32) it does not hold any metadata, like date, time, size, etc.
- Images are digitally signed, which prevents them from being altered after they are saved. The Results Tally & Reporting module (RTR) verifies this when extracted.
- Images are encrypted, which prevents them from being seen until decrypted by RTR.
- Images are saved with a randomly sequenced number schema filename, for example the first ballot scanned might be 07837492 and the second 59528543. This prevents the encrypted and signed ballot image from being located on the CF card based on its scanned order.

9) What is your organizational chain-of-command for escalating problems needing resolution?

Dominion Voting is committed to escalating the occasional issue that may arise. This would include escalation from the Project Manager, to the Direction of Customer Services to the Vice President of Delivery and Customer Service.

10) What purchase options do your company offer (e.g. payment in full upon delivery, financing, leasing)?

Dominion offers competitive pricing for its products and services, and is committed to structuring a “win – win” agreement that acts as a foundation for a successful long-term relationship.

In addition to flexible payment terms, based on milestones, Dominion is the first vendor in the industry to offer a unique program that offers a high level of cost-effectiveness for the customer, the Managed Services Program.

The Dominion Managed Service Program (MSP) packages all equipment, licensing, warranty, supplies, services and support into an annual budgetary number paid over a multiple year term. It is the first of its kind in the industry and has several benefits:

- It spreads the investment and payments by the county over a long term contract by making it an annual operational cost instead of an upfront capital investment,
- It allows the customer to take advantage of modern electoral technology that incorporates all recent legislative requirements, and
- Includes all software licenses, hardware maintenance agreements, and election support costs as part of the annual contract payment.

After the completion of the initial term, Dominion can often provide a “refresh” of new equipment to the County, with minimal impact on the County’s annual cost.

11) What is the maximum number for each of the following items that your Election Management System allows:

- Precincts



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- Contests
- Candidates
- Political Parties
- Ballot Styles
- Precincts per Ballot Style
- Ballot Styles per Precinct
- Other limitations?

Limit (Maximum Number of)	Value (by configuration)			Limiting Component
	Express	Standard	Enterprise	
Ballot Positions	292	292	292	22 Inch Landscape Ballot (240 candidates + 24 write-ins + 28 Yes/No choices)
Precincts in Election	250	1000	10000	Memory
Contests in Election	250	1000	4000	Memory
Candidates/Counters in Election	2500	10000	40000	Memory
Candidates/Counters in Precinct	240	240	240	22 Inch Landscape Ballot
Candidates/Counters in Tabulator	2500	10000	10000	Memory
Ballot Styles in Election	750	3000	30000	Memory
Contests in a Ballot Style	38	38	38	22 Inch Landscape Ballot (24 candidacy contests + 14 propositions)
Candidates in a Contests	240	240	240	22 Inch Landscape Ballot
Ballot Styles in a Precinct	5	5	5	Memory
Number of Parties	30	30	30	Memory
Vote For in Contest	24	24	24	22 Inch Landscape Ballot
Supported Languages per Election	5	5	5	Memory
Number of Write-ins	24	24	24	22 Inch Landscape Ballot

Democracy Suite System Limits (Landscape Ballot Orientation)

Limit (Maximum Number of)	Value (by configuration)			Limiting Component
	Express	Standard	Enterprise	
Ballot Positions	462	462	462	22 Inch Portrait Ballot
Precincts in Election	250	1000	10000	Memory
Contests in Election	250	1000	4000	Memory
Candidates/Counters in Election	2500	10000	40000	Memory
Candidates/Counters in Precinct	462	462	462	22 Inch Portrait Ballot
Candidates/Counters in Tabulator	2500	10000	10000	Memory
Ballot Styles in Election	750	3000	30000	Memory
Contests in a Ballot Style	156	156	156	22 Inch Portrait Ballot
Candidates in a Contests	231	231	231	22 Inch Portrait Ballot (Column Span 3)
Ballot Styles in a Precinct	5	5	5	Memory
Number of Parties	30	30	30	No Limitation
Vote For in Contest	30	30	30	No Limitation
Supported Languages per Election	5	5	5	Memory
Number of Write-ins	462	462	462	22 Inch Portrait Ballot

Democracy Suite System Limits (Portrait Ballot Orientation)

12) What interface capabilities, with the CDOS voter registration system (SCORE), can your Election Management Software provide? Is there a defined extract format for precinct and district definitions, registration statistics, and candidate or contest

information that is or may be made compatible with SCORE? What interface data formats are available (e.g. EML, XML, CSV, and ASCII)?

Dominion can import SCORE information such as precinct, district, candidate and contest information. In addition, Dominion can export in a SCORE-importable format, along with other standard formats, including all the ones listed above, for results information.

13) What are the security features and capabilities of your proposed system and processes? Include the following areas in your response to this question:

- How do you protect the audit logs (e.g., encryption, hashing)?

Please see answer below.

- Does your system documentation contain suggested security auditing procedures? If so, please provide.

Yes. Dominion is providing sample security auditing procedures in Appendix 3.

- Do you provide an executable application whitelist with digitally signed programs?

All of Dominion's software applications are digitally signed and verified during execution.

- How does your system prevent unauthorized, non-whitelisted applications from running?

Unauthorized applications attempting to communicate with the Democracy Suite system are ignored.

- What specific hardening procedures and standards are your voting devices held to?

Please see answer below.

- What database encryption mechanisms are used by your system for data at rest and in transit? Please describe, in detail, all uses of data encryption/decryption in your proposed solution.

Please see answer below.

- What password features are included in your proposed solution (e.g., complexity, reuse)?

Please see answer below.

- Is there any remote communication technology associated with your proposed solution? If so, explain.

No remote communication technology is being proposed as part of this RFP.

- What processes are you using for source code review and compiler security verification?

Dominion follows EAC and VSTL guidelines with regards to source code review and compiler security verification. All applications are built under the EAC Trusted Build program.

- What independent security audits has your proposed system received?
- EAC
- NYSTEC as part of NY state certification

### **System Security Overview**

Dominion implements security protocols that meet or exceed EAC VVSG 2005 requirements. All of Dominion's security protocols are designed and implemented to stay current with the rapidly evolving EAC security requirements set forth by various iterations of the VVSG.

Dominion's security technology is unprecedented insofar as it takes into account every aspect and every component of the Democracy Suite platform. This includes – but is not limited to – the full encryption of election projects, iButton security keys, Compact flash cards, election data, software applications, elections results files, and data transmission.

### **Maintaining Data Integrity**

Data generated by the Democracy Suite platform is protected by the deployment of FIPS-approved symmetric AES and asymmetric RSA encryption. The Democracy Suite Election Management System uses these techniques to encrypt election files prior to their use on ImageCast tabulators. Once the polls have been closed, the ImageCast tabulators encrypt all of the results files prior to transmitting them back to EMS.

SHA-256 hashes are used for all data integrity and verification. Should an intrusive process or altering of any file occur, hash values will be, in turn, altered as well. With that said, any presence of an intrusive process will be detected, as the hashes of any altered data will not match the value initially determined expected values.

### **EMS Security**

To protect from modification of software by malicious users, the Democracy Suite Election Management System integrates the Microsoft .NET Framework code signing process, within which, Dominion Voting digitally signs every executable and library (DLL) during the software build procedure. After the installation of Election Management software, only successfully verified EMS software components will be available for use. Digital signature verification is performed by the .NET Framework runtime binaries. If a malicious user tries to replace or modify any EMS executables or library files, the digital signature verification will fail and the user will not be able to start the EMS application.

### **Role-based access controls**

The Dominion Democracy Suite system integrates a role-based access control system for all software and hardware components. Users can belong to only one role, where each role has a set of clearly defined permissions within the system. This access control approach provides authentication and authorization services and can be granular according to jurisdiction's needs and organization. Complete user and role membership management is integrated within the Democracy Suite EMS Election Event Designer client application.

The Democracy Suite EMS platform implements role-based user management for provisioning access control mechanisms on each election project. Each user accessing the system is the

member of one of the predefined or custom-made roles. Each role has its own set of permissions, or actions that users of that role are allowed to perform. Managing access control policies is integrated within the User Management activity of the EMS EED client application. This activity is permitted only for users with administrative privileges.

### Hardware Access Controls

Democracy Suite utilizes hardware-based security tokens (iButton security keys) in the process of access control for ImageCast Precinct and ImageCast Evolution tabulators. These password paired hardware tokens contain data encryption information used in the voting process (encryption and signing keys). Without a valid security token, and paired access password, the administrative functions of election tabulators are effectively locked.



The poll worker applies his/her iButton security key to the tabulator to access various

### Communications

For communication channels (as well as data storage) a combination of security techniques for data integrity, authenticity and confidentiality is implemented. By utilizing FIPS-140 level 2 approved algorithms, these requirements are met. The Dominion Democracy Suite integrates AES or RSA encryption algorithms for data confidentiality, along with SHA-256 and HMAC digital signatures for data signing (data authenticity and integrity). The system does not require external Internet connections.

### Effective Password Management

Proper password management requires multiple activities and controls, namely:

- Input data validation
- Data quality
- Utilization of one-way (hash) cryptography
- Computer generated passwords for greater entropy and protection from dictionary attacks
- Different password strength profiles for different user levels
- Utilization of hardware tokens for storing user credentials (two-level authentication security: something you know and something you have)
- User state machine (initial, active, inactive)

All of these activities and controls are integrated within the Democracy Suite platform. Dominion utilizes authentication and authorization protocols that meet EAC VVSG 2005 standards. In addition, Dominion's solution relies on industry-standard security features to ensure that the correct users based on a user role or group are granted the correct privileges. Finally, each jurisdiction is responsible for ensuring that only authorized personnel have access to both the system and tools used for installation and configuration purposes. All back end system, and tabulator operations are continuously and completely logged at all times to maintain a complete record of all election-related processes.

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		Mode 1- Symmetric Crypto	
File Type	Storage Place	Confidentiality	Integrity
Election files (ICP) and election database (ICE), DCF (ICP) and MBS (ICE), result files (ICP/ICE)	NAS and Compact Flash	AES-128/256	HMAC (SHA-256)
Reports and Logs	NAS and Compact Flash	AES-128/256	HMAC (SHA-256)
Ballot Images	NAS and Compact Flash	-	HMAC (SHA-256)
Ballot Layout Definition (XML)	NAS and Compact Flash	-	HMAC (SHA-256)
Official Ballots	NAS	X.509 Digital Certificate	
User Credentials	iButton	HMAC (SHA-256)	HMAC (SHA-256)

**File Type to Security Algorithmic Mappings**

14) What post-election audit capabilities are provided by your system and what processes or procedures do you offer to support a post-election audit, including a risk limiting audit?

Dominion offers four independent auditable records:

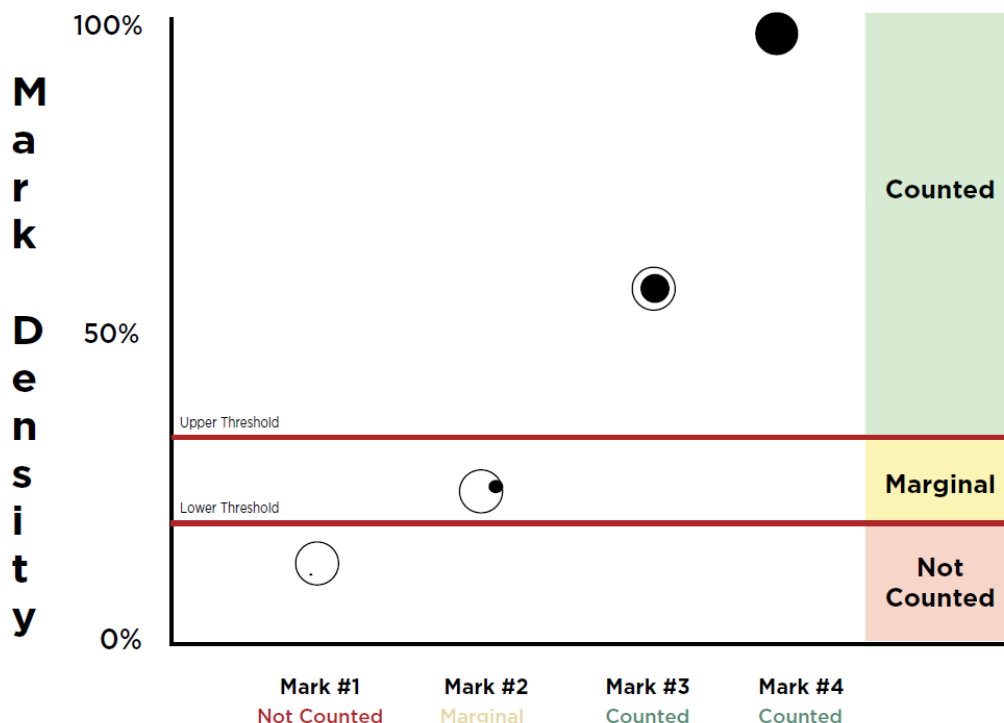
- The paper ballot, as marked by the voter
- The digital image with AuditMark, as interpreted by the tabulator
- The thermal tape showing the total results for every tabulator
- The encrypted results files for every tabulator

In addition, Dominion Voting Systems has invested in the development of proprietary technology that truly sets its products apart from the competition. Focusing on two key aspects of the electoral process – risk-limiting auditing and voter intent – Dominion’s technology improves the transparency and integrity of the election process.

### Dual Threshold Technology (Marginal Marks)

From its early beginnings, Dominion Voting has emphasized the use of digital scanning, and continues to set the standard in digital image acquisition and analysis in the tabulation of digitally scanned ballots. When a ballot is fed into an ImageCast tabulator – at the precinct level or centrally - a complete duplex image is created and then analyzed for tabulation by evaluating the pixel count of a voter mark. The pixel count of each mark is compared with two thresholds (which are defined through the Election Management System by the Election Official) to determine what constitutes a vote. If a mark falls above the upper threshold, it’s a valid vote. If a mark falls below the lower threshold, it will not be counted as a vote. However, if a mark falls between the two thresholds (known as the “ambiguous zone”), it will be deemed as a marginal mark and the ballot will be returned to the voter for corrective action (please see diagram below). With this feature, the voter is given the ability to determine his or her intent, not an inspection or recount board after the fact, when it is too late.

The chart below illustrates the Marginal Mark threshold interpretation.





## Dominion's Exclusive Digital Ballot AuditMark®

Dominion's AuditMark technology will allow Colorado counties to provide greater transparency in the electoral process. The AuditMark can be used for visual inspection or in Risk-Limiting Audits. Once the election is complete, all of the ballot images are in one location for the purpose of searching, reviewing and performing Risk Limiting Audits. Dominion can provide tools to be able to efficiently perform these types of tasks.

Dominion Voting has created a patented process that not only images and stores a copy of the ballot, but also records on that image how that ballot was counted by the scanner on Election Day (see Figure below). Using this process, the comparison can easily be made by any Election Official.

### Ballot image with audit trail:

This is a sample ballot image for a ballot processed by the system. All ballots are imaged and stored for auditing purposes. The image contains:

1. Image of front side of ballot (if the reverse side of the ballot is used, the image is also captured)
2. Clear image of all text, ballot identifiers, candidates and voter markings.
3. **AuditMark:** Ballot-level audit trail feature showing the results interpreted by the system for this ballot.

```
00001_00002_000001.tif scanned at 13:27:48 on 05/10/13.
Office of UNITED STATES SENATOR
Vote for EVERETT DIRKSEN
Office of UNITED STATES REPRESENTATIVE
Vote for WILLIAM B. WILSON
Office of STATE SENATOR, 37TH DISTRICT
Vote for FLORENCE NIGHTINGALE
Office of BOARD OF EDUCATION
Vote for BOOKER T. WASHINGTON
Office of PROPOSITION 1
Vote for YES
```

## FAMOUS NAMES

### Demonstration Ballot

To VOTE: Completely fill in the oval ☒, next to your choice like this . Mark with a blue or black ink pen, or with a pencil.

FEDERAL OFFICES	STATE OFFICES	PROPOSITIONS
<p><b>UNITED STATES SENATOR</b> (Vote for ONE)</p> <p><input checked="" type="radio"/> EVERETT DIRKSEN VIRGINIA PARTY</p> <p><input type="radio"/> CHARLES CURTIS OHIO PARTY</p> <p><input type="radio"/> JOHN HANCOCK CALIFORNIA PARTY</p> <p><input type="radio"/> Write-in</p>	<p><b>STATE SENATOR 37th DISTRICT</b> (Vote for ONE)</p> <p><input checked="" type="radio"/> FLORENCE NIGHTINGALE VIRGINIA PARTY</p> <p><input type="radio"/> ANDREW CARNEGIE OHIO PARTY</p> <p><input type="radio"/> FRANCIS SCOTT KEY CALIFORNIA PARTY</p> <p><input type="radio"/> Write-in</p>	<p><b>PROPOSITION 1</b></p> <p>Shall the President of the United States be elected for no more than three terms?</p> <p style="text-align: right;"><input checked="" type="radio"/> YES <input type="radio"/> NO</p>
<p><b>UNITED STATES REPRESENTATIVE</b> (Vote for ONE)</p> <p><input checked="" type="radio"/> WILLIAM B. WILSON VIRGINIA PARTY</p> <p><input type="radio"/> ROBERT LA FOLLETTE OHIO PARTY</p> <p><input type="radio"/> W.C. REDFIELD CALIFORNIA PARTY</p> <p><input type="radio"/> Write-in</p>	<p><b>NONPARTISAN OFFICES</b></p> <p><b>BOARD OF EDUCATION</b> (Vote for ONE)</p> <p><input checked="" type="radio"/> BOOKER T. WASHINGTON</p> <p><input type="radio"/> ALBERT EINSTEIN</p> <p><input type="radio"/> THOMAS ALVA EDISON</p> <p><input type="radio"/> HELEN KELLER</p> <p><input type="radio"/> Write-in</p>	

```
00001_00002_000001.tif scanned at 13:27:48 on 05/10/13.
Office of UNITED STATES SENATOR
Vote for EVERETT DIRKSEN
Office of UNITED STATES REPRESENTATIVE
Vote for WILLIAM B. WILSON
Office of STATE SENATOR, 37TH DISTRICT
Vote for FLORENCE NIGHTINGALE
Office of BOARD OF EDUCATION
Vote for BOOKER T. WASHINGTON
Office of PROPOSITION 1
Vote for YES
```

- 15) To what extent, if any, do the hardware and software products you are proposing to Colorado meet the requirements of Section 508 of the Rehabilitation Act of 1973 and subsequent amendments to that Act?

The Dominion products offered in this proposal are EAC 2005 certified and meet or exceed the voting requirements for disabled voters promulgated by the 2005 VVSG and HAVA.

- 16) What products or services do you provide in the areas of Voter Education and Voter Outreach? This is an informational question only.

A Voter Outreach plan, customized to meet the needs of Colorado counties, will be developed in concert with Colorado election officials. Typical outreach programs consist of wide-reaching direct and indirect Voter Education methods as well as personnel to carry out these responsibilities. Dominion understands the individuals most affected by a new voting solution are the voters. An essential element of introducing new election solutions is acquainting voters and potential voters with the new voting solution, while at the same time educating them on what to expect at the polls on Election Day. Possible Voter Education methods include:

#### **Direct Education Methods**

Direct Voter Education methods include opportunities for the public to interact with the new voting equipment. This interaction can be in the form of a hands-on community demonstration or the web-based interactive simulation. In the instance of a community demonstration, voters touch and use the equipment just as they would on Election Day. A facilitator is present to coach the public on proper use of the equipment as well as respond to questions or concerns. As part of the Voter Outreach plan, training will be provided for Event Facilitators as well as a Train the Trainer course for those instructing these classes.

The web-based interactive solution will be helpful to those unable to attend a community demonstration. Voters will be able to “walk-through” a simulation of how to vote on the new equipment by simply visiting a website and following along during a brief tutorial before getting a chance to try it themselves. Users of the web-based interactive solutions will have access to a “Frequently Asked Questions” section allowing them to read answers to commonly asked questions about the new voting solution.

#### **Indirect Education Methods**

Indirect Voter Education includes tools for both education and raising awareness to support the Direct Education Methods. These tools include television and radio commercials, instructional videos, printed “Voting Instruction” brochures, and indoor/outdoor advertising.

Additionally, we have experience in delivering the following events which have proven successful in reaching and educating voters in other large scale voting system implementations across the nation:

- Radio Commercials
- Television Commercials
- Public Service Announcements



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- Outdoor Advertising
- Website
- Voter Instruction
- Display Posters
- Demonstration Ballots
- Voter Education Demonstrations
- How to Vote Video
- Voter Outreach Interactive Demo

## 10.0 Preliminary Project Schedule and Staffing Plan

The Vendor selected to fulfill this RFP may need to begin the effort shortly after contract execution, as there may be one or more counties interested in implementing or piloting a new system for the November 2014 election. The exact number of initial UVS counties has not been determined as of the issuance of this RFP.

You must propose a Preliminary Project Schedule and Staffing Plan, as described in *RFP Appendix D – Statement of Work, Track 1: Project Management*. For the purposes of responding to this section of the RFP, you shall develop your schedule and staffing plan for implementing the UVS in a large **Colorado Target County** within a 50-mile radius of the Denver metro area. For sizing purposes, the target county statistics are:

- 350,000 Registered Voters
- 12 Early Voting Locations
- 24 Election Day Voting Locations

All Registered Voters will be issued ballots by mail; however the voters may choose to vote in person.

This section must provide a project organization chart of proposed project personnel, listed by name and position on the project. It must also describe relationships between your organization and any subcontractors. The qualifications of proposed staff are addressed in *RFP Section 5.3.13 Proposed Staffing*.

The Preliminary Project Schedule shall provide a roadmap of tasks, resources, and timing necessary to complete the work in the target county. The Preliminary Project Schedule shall include but not be limited to the following:

- 1) Tasks with scheduled start and completion dates
- 2) Milestones
- 3) Personnel assignments and estimated duration for each task. Time must be listed for:
  - a) Your personnel
  - b) Required CDOS or County election program personnel (please define needed skill types or business area)
  - c) Required technical personnel.

*Page Limit: 15 pages*

Based on the Target County specifics of 350,000 registered voters, 12 early voting locations, 24 voting service centers and all voters being issued a ballot by mail, Dominion proposes the following solution: The target county will receive the full version of Democracy Suite and will be trained to handle their own Ballot Programming. Eight (8) ImageCast Central systems with ImageCast Adjudication will be sufficient for the Target County to scan, review and tabulate all mailed ballots in a five day period. Thirty six (36) ImageCast Evolution units will manage the early voting and Election Day Voting Service Centers. There will be 4 additional units used as backups.

Below, Dominion is providing a project schedule, with a narrative description of which tasks will need to take place, and who is responsible for the task. The staff involved in the project schedule/implementation detailed below is the same personnel whose qualifications and references are in Section 11. All of Dominion's personnel assigned to Colorado will work on county implementations, as required.

## Target County - Project Schedule

### **Procurement and Logistics**

Initiation of the procurement and logistics phase begins immediately on receipt of a signed Purchase / Lease Agreement.

**Hardware Manufacturing** – tabulators provided to Colorado will be newly manufactured by Flextronics in their Plano, Texas manufacturing facility. Approximately ninety (90) days is required to procure all necessary components and complete manufacturing of the first tabulator, with the final system ready for delivery to the client approximately 14 days later. At this time purchase orders for ancillary equipment (i-buttons, additional compact flash cards...) and any election consumables are generated.

Responsibility: Dominion Voting Systems – Regional Sales Manager

### **Establish Election Environment**

**Create election database structure** – Dominion EMS technicians receives export from SCORE and imports into Democracy Suite, Election Event Designer, where the election database process begins. Once created, this can serve as the basis for subsequent elections. Internal quality assurance technicians verify the integrity and functionality of the database.

Responsibility – Dominion Voting Systems – Project Director

**Finalize ballot style template** – In parallel with the creation of the data structure, the final Colorado ballot template is established in EMS. Internal quality assurance technicians verify the integrity and functionality of the ballot style.

Responsibility – Dominion Voting Systems – Election Programming Manager

**Finalize reporting templates** – Dominion Voting engineers create the report templates required to conform to Colorado practice. Once created, these templates can be re-used in subsequent elections.

Responsibility – Dominion Voting Systems – Election Programming Manager

**End-to-End test** – All Dominion Voting systems are certified and tested to the highest standards. As a part of our internal quality assurance process, all systems undergo a rigorous operational test prior to release to the customer. This end-to-end test simulates real-election conditions and utilizes Election Day configurations. An election database is created, ballots produced, cast on the appropriate voting systems, polls are closed, results are loaded into the Election Management System, and County reports are generated.

Responsibility – Dominion Voting Systems – Election Programming Manager

### **Documentation**

**Finalize user documentation** – All Dominion products are supplied with comprehensive technical documentation used by regulatory agencies in the process of certifying voting systems. In addition to these, user documentation, forms and quick reference guides are developed to reflect the specific needs of Colorado users.

Responsibility – Dominion Voting Systems – Training Lead

**Acceptance Testing of Election Hardware**

The balance of the voting systems provided to Colorado will be delivered following the completion of certification. These tabulators must be formally accepted by county officials. To ensure complete functionality at the time of delivery, Dominion Voting follows a rigorous acceptance testing process.

**Tabulator Acceptance Test Training** – On the first day of acceptance training, Dominion Staff will provide training on the acceptance procedure to temporary local staff. Colorado state and county officials may choose to participate in this training.

Responsibility – Dominion Voting Systems – Technical Services Specialist

**Tabulator Acceptance Testing** – Warehouse staff will conduct detailed acceptance testing of the voting equipment. This acceptance testing utilizes internal diagnostics and provides assurance of full product functionality. Results of these tests are generated and are left with each tabulator, providing assurance to the purchaser. This allows acceptance to be conducted on the basis of functional testing by each customer, easing the customer acceptance process. utilizing a team led by 1 Dominion hardware technician and ten local staff. This number can be adjusted up or down depending on progress against milestones.

Responsibility – Dominion Voting Systems – Technical Services Specialist

**Configure EMS Servers** – EMS servers will be procured and shipped to our central Colorado acceptance facility where the EMS system will be installed prior to distribution to the individual counties.

Responsibility – Dominion Voting Systems – Technical Services Specialist

**Distribution to Counties** – Once tested locally in our local facility, tabulators and EMS systems are shipped to individual counties according to an agreed schedule.

Responsibility – Dominion Voting Systems – Service Operations Manager

**County Acceptance** – A representative of Dominion Voting Systems travels to each county to participate in acceptance testing. Acceptance testing involves:

**Tabulator Acceptance**

1. Physical inspection of tabulator
2. Functional testing using provided test materials

**EMS Acceptance**

1. Utilization of the EMS system to create a simple election project
2. Creation of election files and ballots for the tabulator
3. Record ballot audio
4. Directly load results from tabulator memory cards
5. Create Election Results Reports

Dominion provides a brief overview, County representatives will verify that the acceptance test has been completed, and formally receive the equipment.

Responsibility – County Officials supported by Dominion Voting Systems – Product Specialist

*Note – the county will be responsible for providing an appropriate number of acceptance testing staff to complete the task within available the available deployment timeline.*

**Address deficiencies** – Acceptance testing is an essential part of the Dominion Voting quality assurance process. While it is our goal that all election equipment arrives at the client warehouse in perfect condition, it is normal to see a small number of tabulators that fail initial acceptance. Where the equipment in question can easily be repaired, the on-site Dominion hardware technician will address these deficiencies immediately. When this is not possible, the equipment in question will be returned to our central depot and replaced.

Responsibility – Dominion Voting Systems - Technical Services Specialist

### **Election Programming and Ballot Production**

As stated above, a model where counties choose between completing their own election programming locally or having Dominion complete programming centrally is preferred.

**Final election data provided to programming team** – Final election data is provided to the programming team. This should be provided at the earliest possible date.

Responsibility – County Officials

### **The Following Steps Apply to Programming Provided by Dominion**

**Election Programming** – The programming team inputs the final election data into the EMS. This process can be simplified by importing the election data from SCORE.

Responsibility – Dominion Voting Systems - Election Programming Specialist

**Election Programming Quality Assurance** – On completion of election programming, a back-up of the final data structure is transferred to the Dominion QA department for verification and testing. The purpose of this test is to ensure that no unintended errors have impacted the data structure.

Responsibility – Dominion Voting Systems – Quality Assurance Manager

**Test Deck Images Generated** – On completion of programming quality assurance, the test decks are created for use in Logic and Accuracy testing. Please refer to the testing section below for further information about this process.

Responsibility – Dominion Voting Systems - Election Programming Specialist

**Ballots Generated and Approved** - On completion of programming quality assurance, ballots are generated. Ballot proofs and electronic ballot image files are generated and

provided to the County Officials. The County Officials carefully review each ballot. When County officials are satisfied that the ballots are correct, they initial each ballot, and when they are satisfied that all ballots are correct, they sign-off on their accuracy, and the image files are provided to the printer.

Responsibility – Dominion Voting Systems Election Programming Specialist and County Officials

**Ballot Printing and Distribution** – Ballot printing and distribution are the responsibility of the printer and the County Officials. Dominion will provide a recommended ballot inspection process that should be followed to ensure that all ballots produced are of sufficient quality.

Responsibility – County Officials / Print Partner

**Memory card programming** – Memory cards are created for each tabulator.

Responsibility – County Officials

**Receive Test ballots from printer** – The receipt of test ballots is the milestone that triggers the beginning of L&A testing.

Responsibility – Printer/Dominion Voting Systems – Project Director

**Logic and Accuracy Testing** - County officials and their staff will conduct logic and accuracy testing of voting equipment, using processes, procedures, and support provided by Dominion. Training for County officials on the L&A process will take place immediately prior to Logic and Accuracy testing.

Responsibility – County Officials

### **Election Day Support**

*Dominion's Election Day support strategy can be customized to meet the customers' specific needs. The specifics of this area should be dependent upon a variety of factors including, but not limited to the number of jurisdictions implementing, the geographical logistics of the jurisdictions and the size of the jurisdictions.*

**Call Center Support** – at all times, Dominion staff is available to provide assistance during normal working hours. During election periods, this coverage increases to 12 hours per day, 7 days per week, beginning immediately following the release of final ballot data. Finally, round the clock call center support is provided beginning 24 hours before an election event until 24 hours following the election event. Recognizing the importance of early voting to the State of Colorado, Dominion call centers will be available from 1 hour prior to poll opening to 1 hour following the close of polls during early voting.

Responsibility – Dominion Voting Systems – Project Director

**Regional support centers** – We propose that the Dominion Project Director be on-site with State level election officials during the election and start of early voting. Our locally based Project Coordinator will remain throughout the project. In addition, an agreed upon number of

trained Dominion staff technicians will be deployed to regional centers around the state for Election Day. They will provide direct on-site support to county officials, direct the actions of local Election Day technicians (see below), and can undertake higher-level maintenance as required. During early voting, trained local technicians will be available to provide support from regional centers.

Responsibility – Dominion Voting Systems – Project Manager

**Trained Local Technicians** – During the first election, Dominion will deploy one trained local Election Day technician to each county. These technicians will have the necessary skills to assist the counties to ensure polling locations open in a timely fashion and that the equipment functions properly. In addition, a key role for this position is to assist the county with tabulation and results reporting.

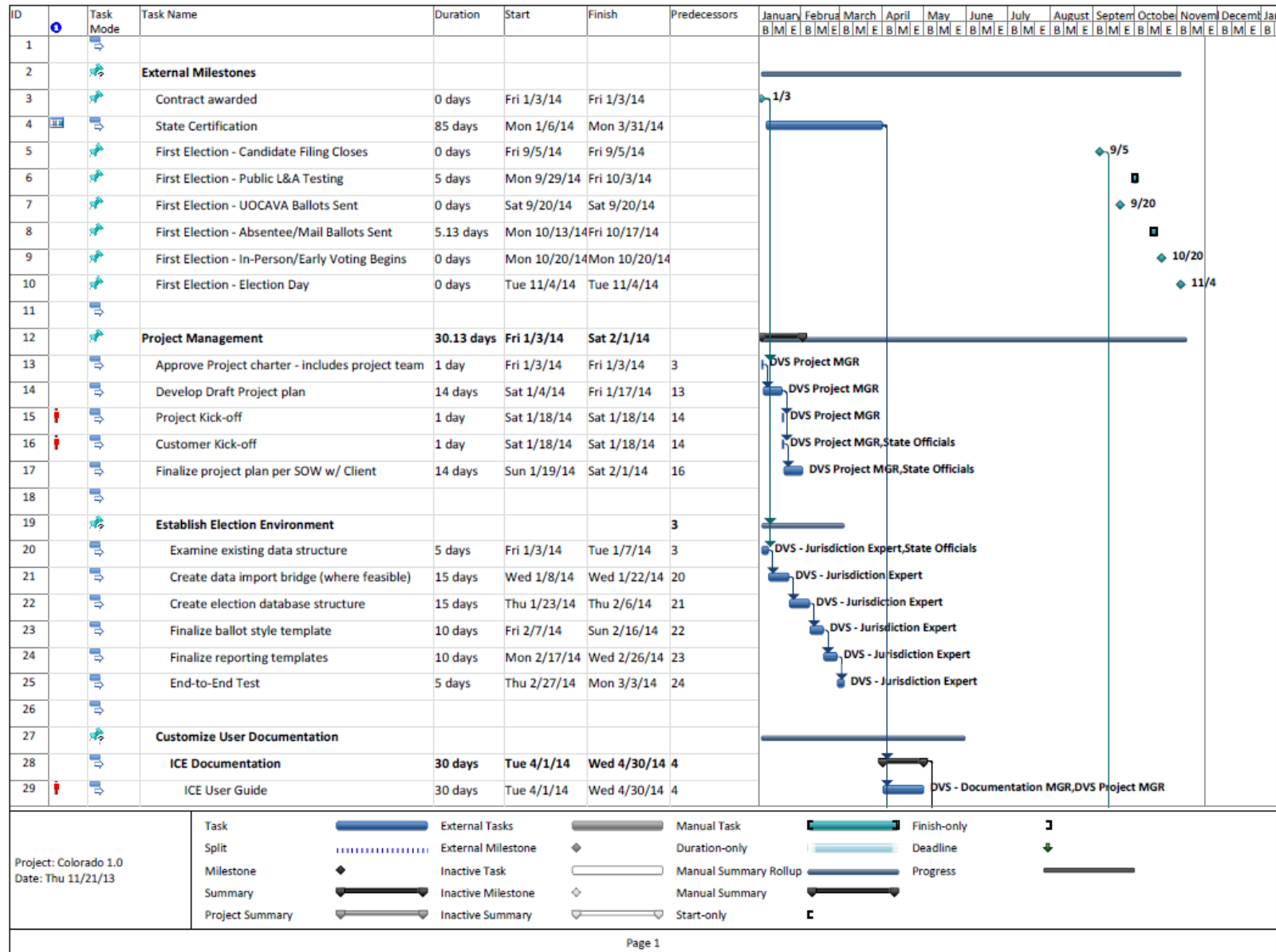
Responsibility – Dominion Voting Systems – Project Manager

## Project Plan – Tasks, Milestones and Responsibilities

Please see next page

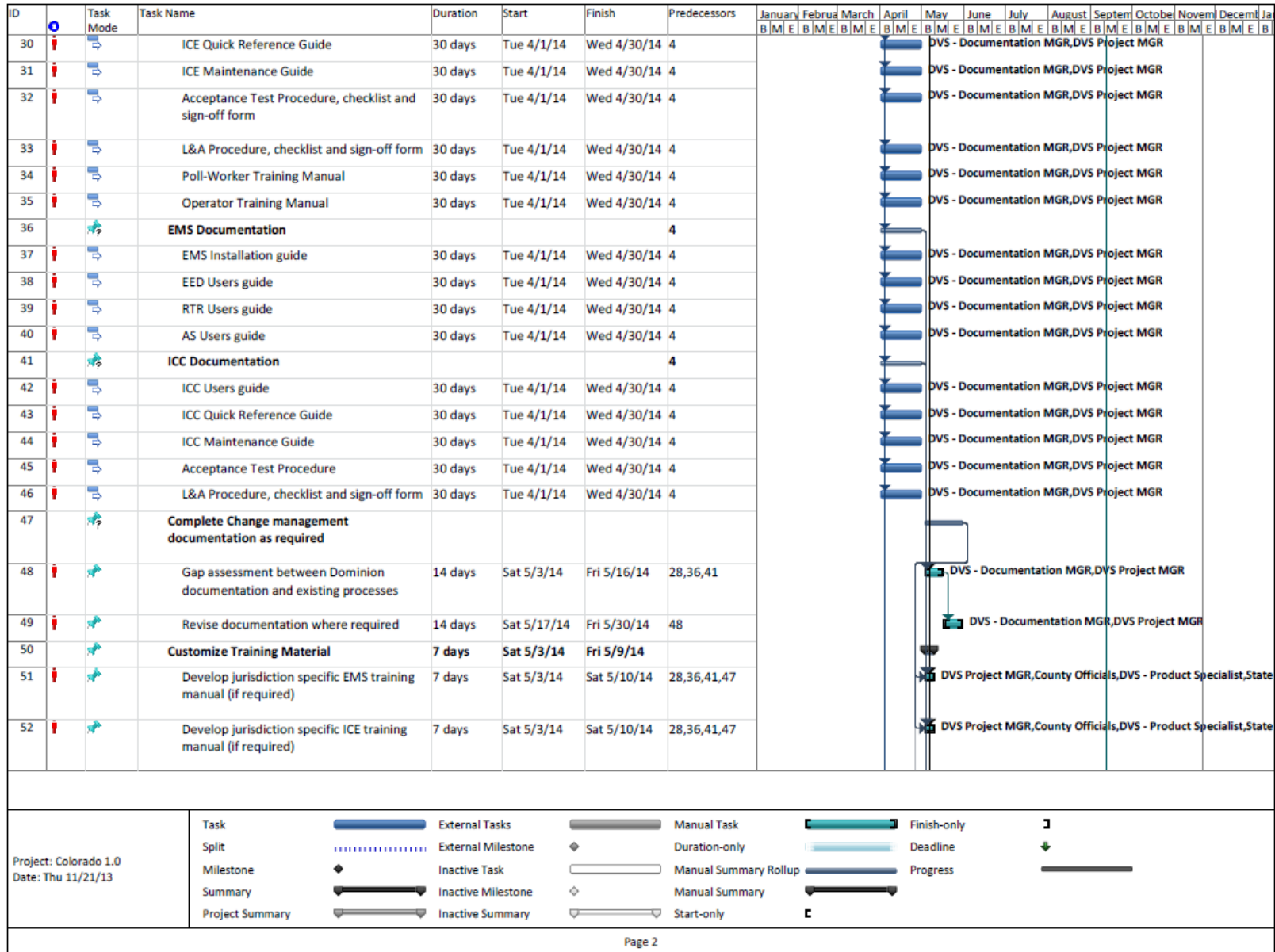


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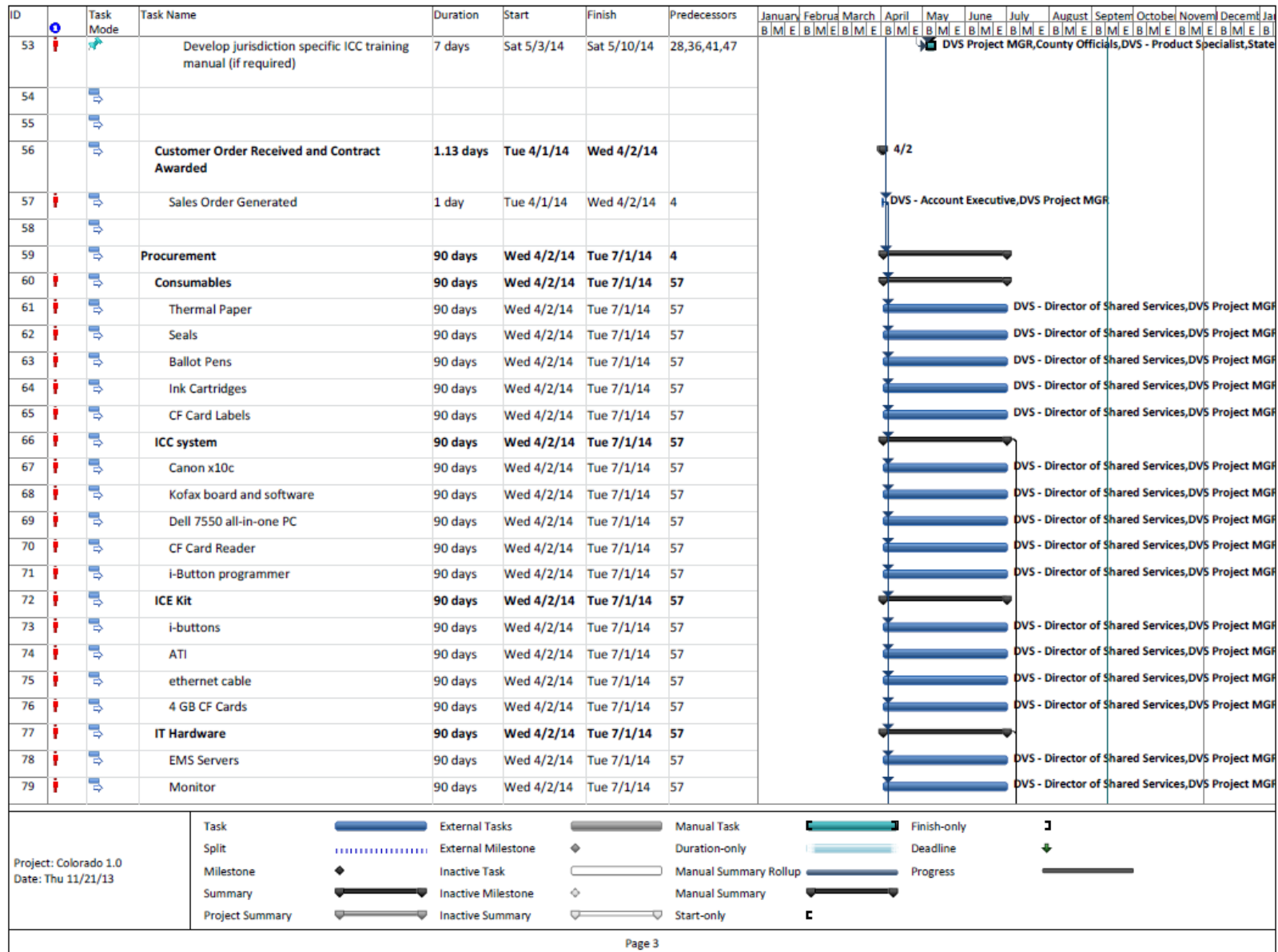




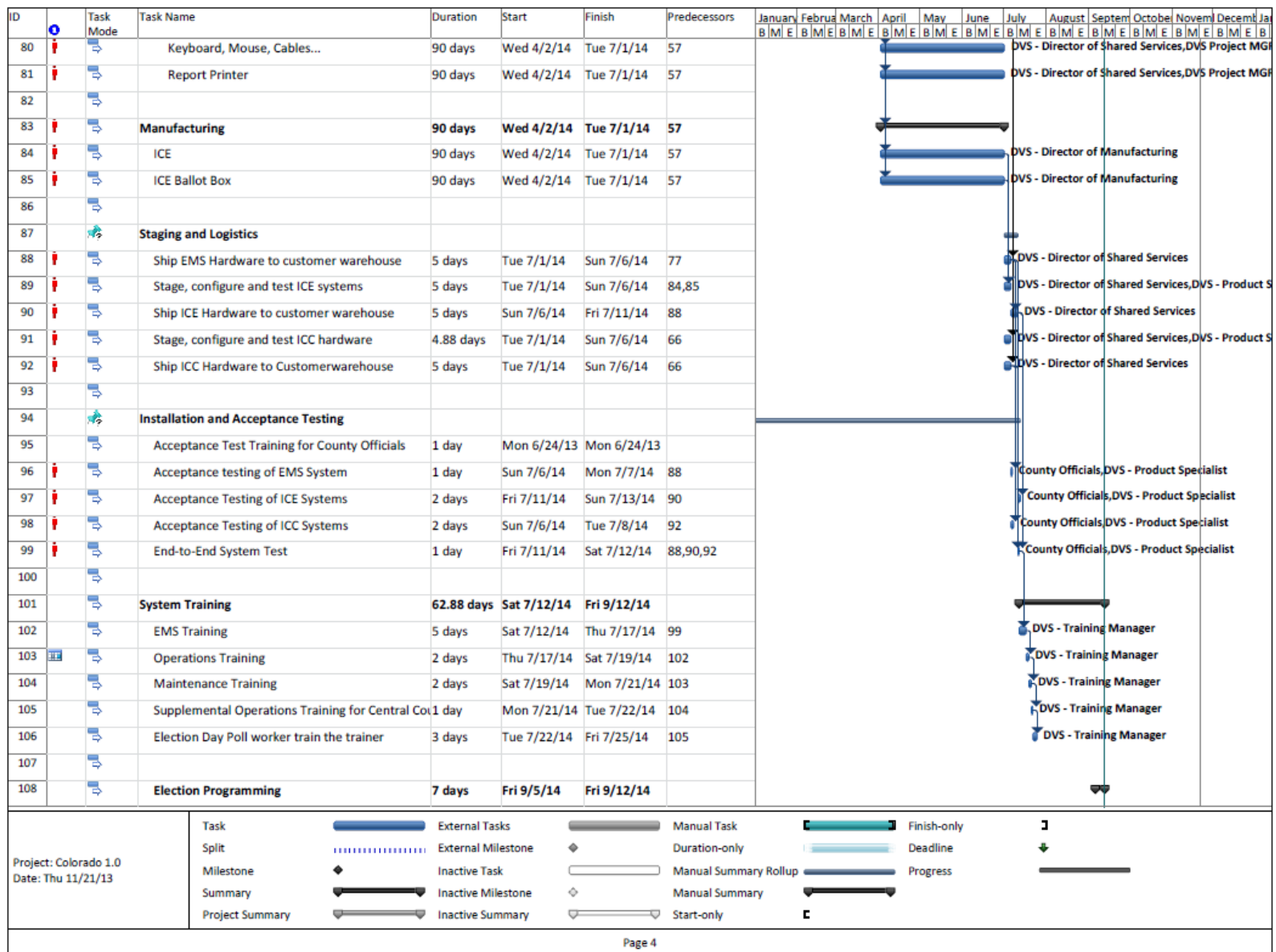
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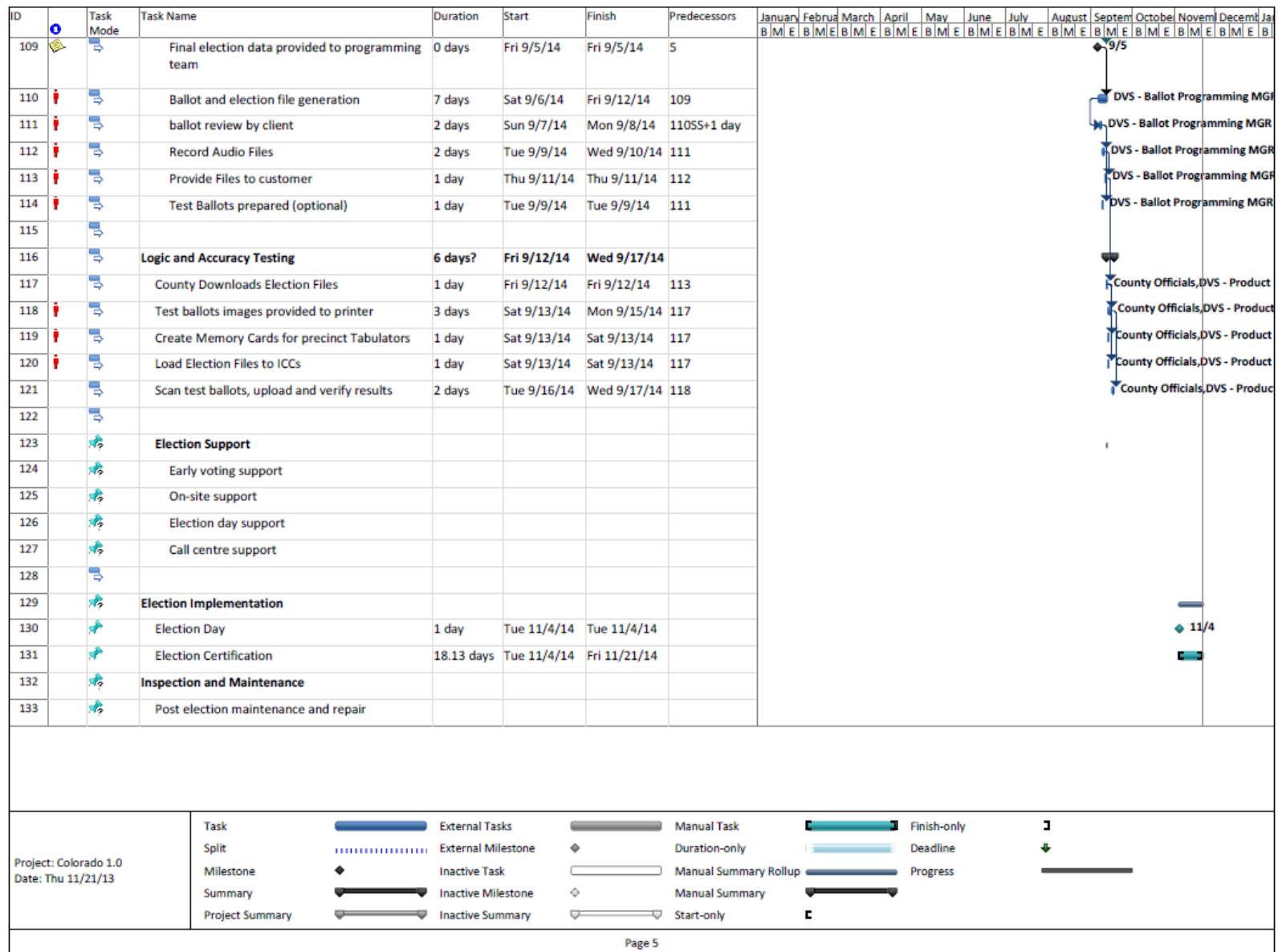
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## 11.0 Proposed Staffing

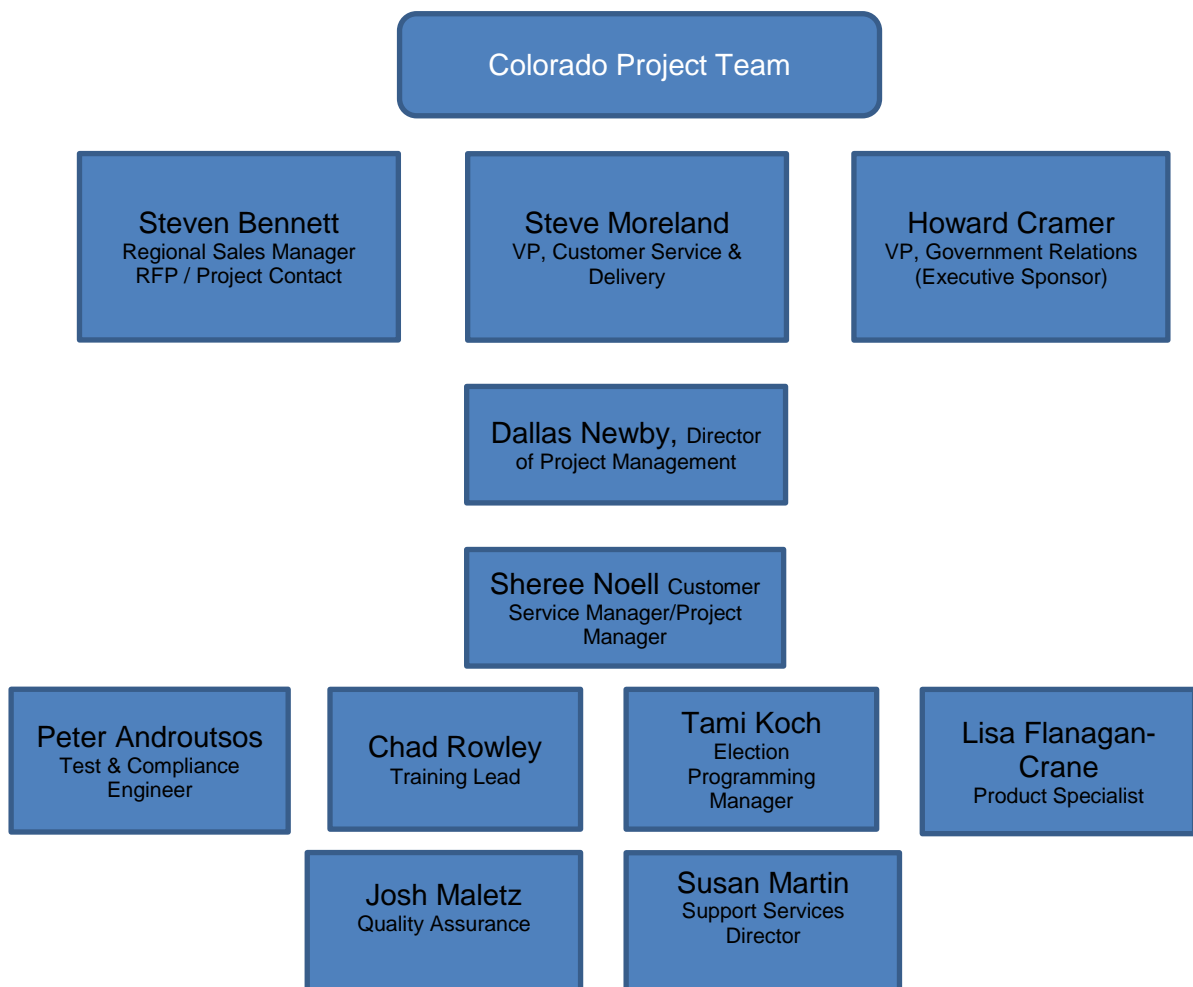
The Vendor selected in response to this RFP must provide experienced, qualified professionals to ensure the success of the UVS project. All key personnel anticipated to be assigned to the project must have been involved in at least one large jurisdiction implementation or have commensurate experience conducting elections. Vendors must provide resumes and references for the personnel being proposed. Since this is a multi-year phased approach project, CDOS recommends you identify potential staff for 2014 implementation involvement.

Provide adequate documentation, references, and certifications to substantiate the expertise of your personnel. Resumes must describe each individual's educational background, experience, other pertinent professional data, and should be sufficiently detailed to demonstrate an individual's qualifications and experience.

CDOS or County retains the right of approval over all proposed personnel, including potential substitutions to those proposed in response to this RFP. You must commit to replace project personnel whose performance is unsatisfactory to CDOS or County, with other personnel whose experience and skills are acceptable to CDOS or County.

The terms of this section apply to any and all vendors, including subcontractors, assignees, and successors involved in this project.

*Page Limit: none*



### **Executive Sponsor – Howard Cramer**

Howard Cramer has been involved with the sale and installation of more voting devices than most voting system companies. Starting in our industry in 1987 he has invested over a quarter of a century studying those things that make voting systems, and their use, most successful. Howard remains committed to the pursuit of the best possible election solutions for each user, and claims that he continues to learn every day from both customers and voters. He believes that each day is best measured by the success of our partners.

Howard holds a Master of Business Administration (MBA) from the University of Denver, and a Bachelor of Arts (BA) from Lyndon State College in Vermont. A skier and mountaineer from before the days extreme skiing was a media event, he has climbed and skied his way across much of Colorado. He and his family live in Parker, Colorado with his office downtown Denver.

#### **Professional Reference 1:**

Lance Gough  
Executive Director  
Board of Elections City of Chicago,  
69 W. Washington Blvd.  
Suite 800  
Chicago, Illinois 60602  
312-269-7970

#### **Professional Reference 2:**

Dianna Duran  
Secretary of State  
State of New Mexico  
State Capitol Building  
325 Don Gaspar Ave, Suite #300,  
Santa Fe, NM 87501  
(505) 827-3600

### **Regional Sales Manager (Primary Business Contact) - Steven Bennett**

Steven Bennett is the Regional Sales Manager for the State of Colorado, and responsible for all activities in the State. He has been involved in the sale and installation of election solutions for the past 10 years, in California, Colorado and New Mexico. Steven has studied the process by which jurisdictions deploy voting systems, understands how counties procure the equipment they need, and the role of the State in elections and voting system implementation. He has expertise in developing election solutions for state and county needs, cultivating partnerships to ensure successful collaboration between the customer and the company. Additionally, Steven has been instrumental in translating customer needs into R&D priorities for the companies, ensuring that customers have the products they truly need. Steven received a Bachelor of Science in Business Administration, with a focus on Finance, from Indiana University of Pennsylvania in 1988.

Steven will be your contact for the duration of the contract.

#### **Professional Reference 1:**



State of Colorado  
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John Arntz  
Director of Elections  
City and County of San Francisco  
1 Dr. Carleton B Goodlett Pl, Room 481  
San Francisco, CA 94102  
[John.arntz@sfgov.org](mailto:John.arntz@sfgov.org)  
(415) 554-4348

Professional Reference 2:  
Matt Crane  
Arapahoe County  
Arapahoe County Clerk & Recorder  
5334 South Prince St.  
Littleton, CO 80166  
[mcrane@co.arapahoe.co.us](mailto:mcrane@co.arapahoe.co.us)  
303 795 4239

#### **Vice President, Customer Service & Delivery - Steve Moreland**

Steve Moreland joined Dominion Voting following Dominion's asset acquisition of Premier Election Solutions, where Steve was Vice President of Customer Service and a member of the senior management team since January 2002. Today, Steve is responsible for the company's customer service functions as well as hardware production, and takes pride in supporting and overseeing election implementations of voting systems and delivery of election support to customers of any size. While at Premier, Steve provided executive oversight to various statewide election implementations including Maryland, Georgia, Mississippi and Utah. Steve is a driving force behind Dominion's customer-first philosophy, and plays a critical role in delivering the level and quality of support that ensures customer success.

Prior to working with Dominion and Premier, Steve was employed by Texas Instruments, Inc. (TI) for 20 years. Steve holds a Bachelor of Business Administration degree from Midwestern State University as well as a Masters of Business Administration (Corporate Finance concentration) from The University of Dallas.

Professional Reference 1:  
Sharon Rowe  
Election Administrator, Colin County, TX  
2010 Redbud Blvd., Suite 102  
McKinney, TX, 75069  
[srowe@co.colin.texas.us](mailto:srowe@co.colin.texas.us)  
(972) 547-1910

Professional Reference 2:  
Madalan Lennep  
Office of the Mississippi Secretary of State  
401 Mississippi Street, Jackson, MS, 39201  
(601) 359-1350  
[Madalan.Lennep@sos.ms.gov](mailto:Madalan.Lennep@sos.ms.gov)

### **Project Director – Dallas Newby**

Dallas has had a long association with Dominion Voting, working with the company in a variety of roles since its founding. Dallas has provided customer support to our Western Canadian clients, designed and implemented training programs, and managed the final assembly of Dominion Ballot marking devices for New York State. Most recently Dallas served as the Project Manager for the automation of the Mongolian National elections.

When not working with Dominion, Dallas has had a successful Management Consultant practice, providing services in the fields of training and development, strategic planning, and organizational effectiveness. Dallas has worked with more than 40 public, private and not for profit sectors both domestically and internationally.

Dallas holds a MBA in Finance from the University of Calgary, and B.Sc. in Genetics from the University of Alberta and is a Project Management Institute certified Project Management Professional.

#### **Professional Reference:**

Chairman, General Election Commission of Mongolia  
CH.SODNOMTSEREN  
General Election Commission of Mongolia  
Government Building 11  
Sambuu Street – 11  
Ulaanbaatar – 38  
Mongolia  
+976-51-262125, +976-51-260975  
[gecm@gec.gov.mn](mailto:gecm@gec.gov.mn)

### **Regional Manager West – Customer Service – Sheree Noell**

A seasoned professional, Sheree has more than twenty years of experience in the elections industry. She has extensive experience in ballot printing, optical scan and direct record electronic tabulation, audio voting, precinct and central count environments. Sheree has served as Sales manager and Project/Implementation Manager on various installs in California, Washington, Oregon and Nevada. Most recently, Sheree manages the day to day activities of the Western Region, which includes approximately 50 separate jurisdictions and 10 personnel resources. Sheree is a direct liaison to customers and is stationed in California. From this strategic location she can ensure the provision of day to day services and actively participate with customers in planning for future election cycles and needed services. Sheree received her under-grad degree from College of the Sequoias. Sheree is currently enrolled in the Election Center's CERA/CERV Professional Education Program.

Joe Gloria, ROV  
Clark County, NV  
965 Trade Drive #1  
North Las Vegas, NV 89030-7801  
[jpg@co.clark.nv.us](mailto:jpg@co.clark.nv.us)  
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Ann Turner, Election Division Manager  
Tulare County, CA  
5951 So. Mooney Blvd.  
Visalia, CA 93277  
[ATurner@co.tulare.ca.us](mailto:ATurner@co.tulare.ca.us)  
(559) 624-7305

#### **Network Architect – Ronald Morales**

Ronald Morales is a Systems Engineer with more than 15 years of experience, providing technological expertise and solutions to ensure quality implementation and integration of Dominion Voting System products.

Ronald began his career in elections when he joined Smartmatic in 2004 where he managed the EMS Quality Assurance process for elections in Venezuela. After the acquisition of Sequoia by Smartmatic, Ronald was responsible for the integration of Smartmatic's newly-developed equipment with Sequoia's EMS and for the EAC certification of the integrated solution.

When Dominion Voting Systems acquired Sequoia and assets of Premier Election Solutions in 2010, Ronald began working with modifications and new solutions in software and hardware for the Premier product line, along with the EAC certification process of the updated products.

In his current role, Ronald is engaged in the research and implementation of new technologies with a focus on reliability, performance and efficiency, for both existing legacy systems (Sequoia and Premier) and systems currently in development by Dominion. His most noticeable achievement is the design and implementation of fully redundant Dominion Democracy Suite EMS server infrastructure for the elections in Mongolia during 2012 and 2013.

#### **Election Programming Manager – Tami Koch**

Tami is the Service Bureau Manager for Dominion Voting Systems. Tami oversees the team that provides ballot production and election programming for Dominion's customers. In addition to her management duties, she is also the company's primary election production specialist for the states of Alaska, Florida, Missouri, Pennsylvania, Texas, Utah, Virginia, Wisconsin, and Wyoming.

Tami has over 21 years of experience in the elections industry starting with AIS in 1991. In addition to leading ballot programming efforts Tami has provided election support, new system implementation and training services to customers. Tami has played key roles in the election production services provided during the statewide voting system implementations in Maryland, Georgia, Mississippi and Utah.

Tami is currently enrolled in the Election Center's CERA/CERV Professional Education Program and expects to graduate by 2015.

Professional Reference 1:  
Karen Gibson

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Dodge County, Wisconsin  
127 E Oak St Admin Bldg  
Juneau, WI 53039  
920.386.3605  
920.386.3928 fax  
[kgibson@co.dodge.wi.us](mailto:kgibson@co.dodge.wi.us)

Professional Reference 2:  
Brandi Brookhouse  
Loudoun County, Virginia  
750 Miller Dr. S. E. Ste C  
Leesburg, VA 20175  
703.737.8247  
[brandi.brookhouse@loudoun.gov](mailto:brandi.brookhouse@loudoun.gov)

### Test and Compliance Engineer – Peter Androutsos

Dr. Panagiotis (Peter) Androutsos works as a senior systems engineer in Dominion's Operational Readiness Group. He received his PhD in Electrical Engineering from the University of Toronto in 2004. An expert in digital signal processing with numerous journal and conference publications, Dr. Androutsos has spent nearly a decade researching video and image analysis. His specific interests lie in the domains of image analysis and image retrieval including high-speed feature detection, extraction, and recognition as well as automated and semi-automated content description, indexing, and retrieval. Over the past eight years with Dominion Voting, he has been instrumental in both the creation of the networked auditing system used to find and interrogate specific types of ballots (overvotes, spoiled, etc) as well as in the development of the low-level image analysis algorithms which enable Dominion's high speed central scanning technology.

Union County Board of Elections

Professional Reference 1:

271 North Broad Street

Elizabeth, New Jersey 07208

Contact: Dennis S. Kobitz, Administrator ([dkobitz@ucnj.org](mailto:dkobitz@ucnj.org))

Phone: (908) 527-4121

Contact: Donna Garry, ICC Operations ([dgarry@ucnj.org](mailto:dgarry@ucnj.org))

Phone: (908) 527-4121

Professional Reference 2:

Kari Fresquez

Chief Information Officer

New Mexico Secretary of State's Office

505.827.2920

Professional Reference 3:

Elaine Henley

City of St. John's, New Brunswick

Manager – Office Services

709 576-8202

(mobile) 709 691-0451  
[Ehenley@stjohns.ca](mailto:Ehenley@stjohns.ca)

### Product Specialist – Lisa Flanagan-Crane

Lisa is based out of Colorado and has worked in Elections Administration for 15 years. During that time, Lisa has been Project Manager of Voting System installations for multiple Colorado counties, provided software/hardware training and election judge training for customers, produced and printed Op-Tech ballots, provided support for Logic and Accuracy Testing, Public Tests, hardware preventative maintenance and supported customers in voter registration.

Previous to Dominion/Sequoia, Lisa worked for the Colorado Department of State and Arapahoe County. While working in the Colorado Secretary of State Office, Lisa helped with upgrading 19 counties to a Windows based Voter Registration System, trained staff from each county, and ran the help desk. Lisa has visited over 25 election offices around the state, understands Colorado Election Law, and has worked hard to build an outstanding reputation for customer service.

Lisa has provided election support to jurisdictions in Arizona, California, Colorado, Illinois, Nevada, New Jersey, New Mexico, and Pennsylvania.

Professional Reference 1:  
Gilbert “Bo” Ortiz  
Pueblo County Clerk and Recorder  
215 W. 10th Street  
Pueblo, CO 81003  
[ortiz@co.pueblo.co.us](mailto:ortiz@co.pueblo.co.us)  
(719)583-6507

Professional Reference 2:  
Josh Liss  
(Former Deputy of Elections in Jefferson County, CO)  
Director of Public & Regulatory Affairs, Intermountain Rural Electric Association  
[jbless@irea.coop](mailto:jbless@irea.coop)  
(720)733-5621

### Training Lead – Chad Rowley

Chad Rowley is the Training Manager for Dominion Voting Systems. In this role, he develops curriculum and manages all aspects of training for the company. His area of specialty is being able to understand a customer’s needs and use his expert knowledge of the voting systems and the target audience to develop a training program that exceeds expectations.

In addition to his role as Training Manager, Chad is also a technical specialist and as such, provides election support services (e.g., system set up, site surveys, diagnostic and logic & accuracy tests, election programming, Election Day support and post-election support.)

Prior to joining Dominion, Chad was a Trainer for Premier Election Solutions for 4 years and has conducted hundreds of training classes for both customers as well as internal associates.

Chad holds two IT certifications CompTIA Network+ and A+ Career Member ID Number:  
COMP0010047755151

Professional Reference 1:  
Lynn Edward Kinkaid, Director  
Butler County Board of Elections  
Princeton Road Campus  
1802 Princeton Road, Suite 600  
Hamilton, Ohio 45011  
Phone: 513-887-3700  
[kinkaidl@butlercountyohio.org](mailto:kinkaidl@butlercountyohio.org)

Professional Reference 2:  
Sandra K. Miller, Director  
Guernsey County Board of Elections  
627 Wheeling Ave. Suite 101  
Cambridge, Ohio 43725  
Phone: 1-740-432-2680  
[smiller@guernseycounty.org](mailto:smiller@guernseycounty.org)

#### **Support Services Director - Susan Martin**

Susan joined Dominion Voting Systems in 2010 as Service Operation Manager, managing the activities of order fulfillment, inventory, logistics and contract staffing. She is currently serving in the role of Director of Support Services managing several teams which provide services to both internal and external customers including order entry and fulfillment, purchasing, inventory control, DVS service center repairs, specialized hardware/software/technology testing and implementation projects, ballot coding and related customer service, and product training and curriculum development.

Susan has 20 years' experience in the elections industry, which she began as a clerk in a county elections office registering voters and testing punch card voting equipment. She later worked in municipal government, where as City Secretary one of her responsibilities included conducting the city's elections.

Susan joined Global Election Systems in 1997. She held several positions at Global (later Diebold and Premier) including Sales Proposals Manager, Sales Support Manager, and Manager of Dealer Accounts. In 2006, she oversaw the deployment of thousands of voting machines to customers across the US ensuring equipment was delivered in accordance with states' certification and customers' contractual requirements.

Professional Reference 1:  
Jeff Silvestro, President, LHS Associates  
10 Manor Parkway Unit B  
Salem, NH 03079  
1-888-547-8683

Professional Reference 2:

Robert Pickett, Electoral Systems Expert and Consultant  
1-336-465-7007

### **Quality Assurance Team – Team lead: Josh Maletz**

Josh Maletz is the Director of Software Development for Dominion Voting. In this role, Josh's primary focus is coaching the software development teams to deliver best of class voting system software. Key functions of this role include working with our Product Management, Customer Focus, and Technical Services teams to ensure we are creating high value voting systems that meet our customers' needs.

Josh entered the elections industry in 2007, joining the Sequoia Voting Systems R & D department as a Software Engineer. His primary focus was creating a secure, extensible Election Management System to enable enhanced testability and which could more quickly meet EAC certification requirements, thereby rapidly delivering value to our customers. In late 2009 he left Sequoia to gain further technical expertise working on large scale near real-time data acquisition and systems integration in the GIS and digital publishing domains. He joined Dominion Voting Systems in 2012 as the Engineering Manager of the Denver software development team. He brought new skills in systems integration and advanced software architecture, as well as proficiency in Agile processes and practices.

Josh has a Computer Engineering degree from Marquette University and is currently a graduate student in the Computer Science and Engineering program at the University of Colorado Denver.

#### **Professional Reference 1:**

Amit Nayar

Current: Director, Platform Services & Cloud Architecture @ American Apparel

Relationship: Supervisor - Manager, Software Engineering @ Quark Software Inc.

Phone: 303-358-4037

#### **Professional Reference 2:**

Klavs Miller

Current: CIO @ onTargetJobs

Relationship: Supervisor - Sr. Director, Engineering Operations/Director of Software Development @ Quark Software Inc.

Phone: 720-383-8664

#### **Professional Reference 3:**

Ian Jakalow

Current: Sr. Software Engineer @ BankRate Insurance

Relationship: Coworker – Sr. Software Engineer/Scrum Master @ Quark Software Inc.

Phone: 303-710-9591

## 12.0 UVS System Requirements

Information provided in this final section of your Business Proposal will be used by the evaluation committee to determine how well your proposed system meets the requirements of Colorado.

The RFP Team has drafted a list of requirements that address the voting system needs of the State. These requirements are listed in *RFP Appendix B – System Requirements Table*. You must copy the requirements tables into this section of your proposal response and complete the table by following the instructions provided at the beginning of Appendix B. The Appendix instructions address the situation where you may only be interested in satisfying State requirements for a specific portion of the UVS.

CDOS understands that you may not meet all system requirements. That is not necessarily a reason to not be selected as the awarded vendor.

*Page Limit: None*

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM A – ELECTION MANAGEMENT SYSTEM (EMS)				
Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Election Creation	A-1	Allow county and state election officials the ability to generate and maintain an administrative database containing the definitions and descriptions of political subdivisions and offices within their jurisdiction.	1	EED
Election Creation	A-2	Provide definition for separate ballot styles that reflect different combinations of contests that are included depending on place of residence of the voter or similar administrative criteria.	1	The Dominion Voting Democracy Suite's Election Event Designer (EED) has full functionality to meet this requirement.
Election Creation	A-3	Provide software capability for the creation of newly defined elections.	1	The Dominion Voting Democracy Suite's Election Event Designer (EED) has full functionality to meet this requirement.
Election Creation	A-4	Provide software capability for the retention of previously defined election setups.	1	The Dominion Voting Democracy Suite's Election Event Designer (EED) has full functionality to meet this requirement.
Election Creation	A-5	Provide software capability to copy, edit, and delete previously defined elections.	1	The Dominion Voting Democracy Suite's Election Event Designer (EED) has full functionality to meet this requirement.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM A – ELECTION MANAGEMENT SYSTEM (EMS)				
Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Election Creation	A-6	Generate all required master and distributed copies of the voting program in conformance with the definition of the ballot for each voting location and voting device, including devices required to facilitate mail-in voting and voters with disabilities.	1	The Dominion Voting Democracy Suite's Election Event Designer (EED) has full functionality to meet this requirement.
Election Creation	A-7	Provide for all distributed copies of the voting program, resident or installed, in each voting device to include all software modules required to monitor system status and generate machine-level audit reports, to accommodate device control functions performed by voting location officials and maintenance personnel, and to accept and accumulate votes.	1	This functionality is accomplished on both the voting device level using the ImageCast Precinct and centrally using the Results Tally & Reporting (RTR) module.
Election Creation	A-8	Provide for a unified, integrated centralized database that allows global edits by authorized users. <b>Note:</b> Please describe how the system minimizes the need to update a particular data element in multiple locations for a change made to that data element anywhere within the database. For instance, removing a candidate that appears in multiple ballot styles or changing a voting location designation that appears in multiple places in the database.	1	The Dominion Voting Democracy Suite's Election Event Designer (EED) has full functionality to meet this requirement. The system uses a single database back-end which interconnects between data elements. So, your example, removing one candidate that appears on multiple ballots would be accomplished in a single step as required.
Election Creation	A-9	Provide a test mode which supports testing to validate the correctness of election programming for each voting device and ballot style and ensure that the ballot display corresponds with the installed election program.	1	Dominion Voting has a standardized set of policies and procedures also known as Logic & Accuracy Testing that enables proper validation of correctness of election devices.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM A – ELECTION MANAGEMENT SYSTEM (EMS)				
Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Election Creation	A-10	<p>Be able to import electronically from the Secretary of State and counties in an agreed-upon format that contains, at a minimum, the following data:</p> <ul style="list-style-type: none"> <li>a. Full candidate name</li> <li>b. Candidate sequence, title and text of ballot questions, and voting language options</li> <li>c. Office name</li> <li>d. Contest name, including candidate name in case of retention contest</li> <li>e. Maximum number to vote for each office</li> <li>f. Party affiliation</li> <li>g. Number of eligible registered voters at the precinct</li> <li>h. Number of active registered voters at the precinct.</li> </ul>	1	The Dominion Voting Democracy Suite's Election Event Designer (EED) has full functionality to meet this requirement.



SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM A – ELECTION MANAGEMENT SYSTEM (EMS)				
Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Election Creation	A-11	Be able to export electronically to the Secretary of State and counties in an agreed-upon format that contains, at a minimum, the following information: <ul style="list-style-type: none"> <li>a. Full candidate name</li> <li>b. Office name</li> <li>c. Contest name</li> <li>d. Number of votes for each candidate and ballot question</li> <li>e. Number of votes against each ballot question</li> <li>f. Number of undervotes in each contest</li> <li>g. Number of overvotes in each contest</li> <li>h. Number of people voting by precinct and by party affiliation (if applicable)</li> <li>i. Number of registered voters at the precinct level (by party affiliation, if applicable)</li> </ul>	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.
Election Creation	A-12	Allow EMS authorized users the ability to create custom voter instructions that may include images.	1	The Dominion Voting Democracy Suite's Election Event Designer (EED) has full functionality to meet this requirement.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM A – ELECTION MANAGEMENT SYSTEM (EMS)				
Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Election Creation	A-13	Provide the flexibility to have an election created by an authorized user (vendor, county, state or other third party) and import or export as necessary.	1	The Dominion Voting Democracy Suite's Election Event Designer (EED) has full functionality to meet this requirement.
Election Creation	A-14	Accommodate multiple languages (English and Spanish required). <b>Note:</b> Please explain the capabilities of your system to handle multiple languages.	1	The Dominion Voting Democracy Suite's Election Event Designer (EED) has full functionality to meet this requirement. Our system has the capability to handle any language based off of the UTF-8 standardized character set.
Election Creation	A-15	Allow for a mock election setup and support for public use prior to the initiation of a live election.	1	Dominion fully supports this type of event/functionality.
Election Creation	A-16	Allow for precinct numbers containing at least 10 digits/characters.	1	The Dominion Voting Democracy Suite's Election Event Designer (EED) has full functionality to meet this requirement.
Ballot Creation	A-17	Provide for standard ballot layout prototypes to be edited for ease of election specification.	1	The Dominion Voting Democracy Suite's Election Event Designer (EED) has full functionality to meet this requirement.
Ballot Creation	A-18	Provide an authorized user the ability to customize the standard ballot layouts.	1	The Dominion Voting Democracy Suite's Election Event Designer (EED) has full functionality to meet this requirement.
Ballot Creation	A-19	Provide software capability for authorized users to create newly defined ballot layouts. The system will be designed so as to facilitate error-free definition of ballot layouts for electronic voting equipment and paper ballot optical scanning equipment. For example, the system should have the capability to report discrepancies between ballot layouts.	1	The Dominion Voting Democracy Suite's Election Event Designer (EED) has full functionality to meet this requirement.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM A – ELECTION MANAGEMENT SYSTEM (EMS)				
Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Ballot Creation	A-20	Allow for creation of two-sided and multi-page ballots. <b>Note 1:</b> Please explain how your system handles the creation of multi-page ballots. <b>Note 2:</b> Please explain any built-in control your system has for preventing bleed-through ink from erroneously marking votes on both sides of a two-sided ballot.	1	The Dominion Voting Democracy Suite's Election Event Designer (EED) has full functionality to meet this requirement. The system specifically allows placement of contests on specified ballots and when placing voting marks on those ballots, will have knowledge of all locations so that there is no overlap between the two sides.
Ballot Creation	A-21	Have the capability to reprogram, download, and reinstall a ballot for an electronic voting device or paper ballot optical scanner. <b>Note:</b> Please explain the process and procedure, with time frames, required to reprogram, download, and reinstall a ballot on the voting device in the event that there is a change to a name or contest on the ballot in the final few weeks before an election.	1	The Dominion Voting Democracy Suite's Election Event Designer (EED) has full functionality to meet this requirement. EED allows CF cards - which hold the election programming - to be reprogrammed within minutes after changes have been applied to the election project. This allows very last minute changes to the ballot.
Ballot Creation	A-22	For each election, generate and maintain a contest title and candidate name database and provide for the production or definition of properly formatted ballot layouts for use on paper ballots and electronic voting devices. This database will assist the operator to design and edit ballot layouts for paper ballots and electronic voting devices with a minimum amount of repetitive tasks.	1	The Dominion Voting Democracy Suite's Election Event Designer (EED) has full functionality to meet this requirement. Specifically, import files can be mixed and re-used to eliminate repetitive data entry and deletion tasks.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM A – ELECTION MANAGEMENT SYSTEM (EMS)				
Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Ballot Creation	A-23	Provide a mechanism for the definition of the ballot, including the definition of the number of allowable choices for each office, contest, measure, and for special voting options such as write-in candidates. <b>Note:</b> Please state your solution's maximum number of potentially active voting positions (arranged to identify party affiliations if a primary election), offices and their associated labels and instructions, candidate names and their associated labels and polling instructions, and issues or measures and their associated text and instructions.	1	The Dominion Voting Democracy Suite's Election Event Designer (EED) has full functionality to meet this requirement. Our solution's maximum number of active voting positions is only limited by the length of the ballot paper which you, as the election official, are willing to support in your specific election.
Ballot Creation	A-24	Provide for the retention of previously defined ballot layouts.	1	The Dominion Voting Democracy Suite's Election Event Designer (EED) has full functionality to meet this requirement.
Ballot Creation	A-25	Provide for the modification of previously defined ballot layouts, subject to additional security requirements, after an election has been defined.	1	The Dominion Voting Democracy Suite's Election Event Designer (EED) has full functionality to meet this requirement.
Ballot Creation	A-26	Provide for all voting options and specifications as provided for in the Colorado Revised Statutes, including the requirements for a recall election and instant runoff voting (IRV) (section 1-7-1003, C.R.S.). <b>Note:</b> Ranked Voting Methods, including IRV, are currently features used in local jurisdiction elections and not at the State or County level. However; since counties often conduct elections for local jurisdictions, please explain the capabilities of your system to create and process a ballot that contains one or more contests requiring a ranked voting and tabulation process.	1	The Dominion Voting Democracy Suite's Election Event Designer (EED) has full functionality to meet this requirement.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM A – ELECTION MANAGEMENT SYSTEM (EMS)				
Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Ballot Creation	A-27	Generate sample ballots for each ballot style that will not be accepted or counted by a scanner.	1	The Dominion Voting Democracy Suite's Election Event Designer (EED) has full functionality to meet this requirement.
Ballot Creation	A-28	Generate a consolidated sample ballot containing all races, issues and questions.	1	The Dominion Voting Democracy Suite's Election Event Designer (EED) has full functionality to meet this requirement.
Ballot Creation	A-29	<p>Produce ballot content output for paper ballot printing, with the following capabilities:</p> <ul style="list-style-type: none"> <li>a. Accommodate non-proprietary print-ready format (e.g. PDF).</li> <li>b. Accommodate multiple stub sizes within same election.</li> <li>c. Accommodate multiple stubs on a ballot.</li> <li>d. Accommodate variable paper ballot stub sizes up to three inches.</li> <li>e. Customize paper ballots with sequential numbering and static fields on ballot stubs.</li> <li>f. Handle multiple font features.</li> <li>g. Handle special character sets associated only with non-English languages.</li> </ul> <p><b>Note 1:</b> Please provide your ballot size capabilities and layout options.</p> <p><b>Note 2:</b> Please provide information about your system's font capabilities (e.g. typefaces, sizes, kerning and leading, color, bolding, underscoring, and italics).</p>	1	<p>The Dominion Voting Democracy Suite's Election Event Designer (EED) has full functionality to meet this requirement.</p> <p>Dominion supports ballot lengths up to 22 inches, and all layout options specified by Colorado State Election Laws.</p> <p>The font selection and styling capabilities of our system are only limited by those in Microsoft Windows operating system itself.</p>
Ballot Processing	A-30	Output ballot content to an election media device for use in equipment (electronic voting devices, scanners, tabulators, etc.).	1	The Dominion Voting Democracy Suite's Election Event Designer (EED) has full functionality to meet this requirement.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM A – ELECTION MANAGEMENT SYSTEM (EMS)				
Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Ballot Processing	A-31	Output ballot content to accommodate accessible voting, including adjustable audio and visual output. <b>Note:</b> Please detail capacity limits of data fields for accessible voting (e.g. font sizes, display options).	1	The Dominion Voting Democracy Suite's Election Event Designer (EED) has full functionality to meet this requirement. There are no limits of data fields for accessible voting (e.g. increasing the font size merely increases the selection area displayed on the screen)
Ballot Processing	A-32	Allow authorized users to electronically adjudicate ballots to reflect voter intent, while retaining the originally marked ballot image. <b>Note:</b> Please explain the process of ballot adjudication using your system.	1	Dominion Voting provides this functionality through the Democracy Suite Adjudication module.  The primary function of the Adjudication module is to create an automated process that allows ballots with exceptions or "out-stack" conditions – such as over-votes, under-votes, blank ballots, marginal marks, major contests and certified write-ins, – to be resolved on-screen and sent to tally. This eliminates the need for additional costs, time and resources spent on duplicating and re-scanning ballots. The Adjudication module can be utilized real time as the Jurisdiction sees fit. The Adjudication module adds to the efficiency of the system by making it scalable to as many reviewing teams as needed for the jurisdiction. The out-stacked ballots will appear on the screen for the team to review as they come available. This process is completely auditable. The system logs each adjudication team's activities for review and to assure that activities are to specification. Additionally, when a ballot is adjudicated, the ballot image with the existing AuditMark audit trail receives an additional Adjudication AuditMark, so all can see how the voter marked intent, how the system interrupted the intent, and how the ballot was adjudicated. These adjudicated ballots are then sent to Democracy Suite RTR for tally and reporting.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM A – ELECTION MANAGEMENT SYSTEM (EMS)				
Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Vote Results Reporting	A-33	Report vote tally results by individual voting device. <b>Note:</b> For the purposes of this RFP, the Vote Results Reporting requirements are shown as part of the EMS. Some vendors may have a reporting module that is considered separate from their EMS and, if so, can explain that in their response to this requirement.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement. RTR is a part of the EMS – not a separate application in the database.
Vote Results Reporting	A-34	Report vote tally results by contest jurisdiction-wide.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.
Vote Results Reporting	A-35	Report vote tally results by contest by precinct.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.
Vote Results Reporting	A-36	Report the total votes for each candidate for each contest, as well as by candidate by precinct.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.
Vote Results Reporting	A-37	Report vote tally results by voting location.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.
Vote Results Reporting	A-38	Report vote tally results by ballot source (e.g. Early Vote, Election Day, Mail, and Provisional).	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.
Vote Results Reporting	A-39	Report votes by ballot style.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.
Vote Results Reporting	A-40	Report votes by ballot batch.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.
Vote Results Reporting	A-41	Report votes by ballot style within precinct.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.
Vote Results Reporting	A-42	Report undervotes and overvotes in each contest, with the option to exclude from reports.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.



SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM A – ELECTION MANAGEMENT SYSTEM (EMS)				
Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Vote Results Reporting	A-43	Provide the capability to report ranked-choice voting results.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.
Vote Results Reporting	A-44	Report a summary of results in addition to the detailed Statement of Votes Cast reports.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.
Vote Results Reporting	A-45	Report certified write-in candidate results in each contest with the ability to exclude from reports.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.
Vote Results Reporting	A-46	Import election night voter registration counts for Active and Total voters and report percent turnout relevant to vote tally for both Active and Total registrations.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.
Vote Results Reporting	A-47	Report and export each report in either PDF, XLS, TXT, EML, or CSV formats. <b>Note:</b> Please identify the formats available in your system.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement. Dominion supports all formats listed in the requirement.
Vote Results Reporting	A-48	Provide for Zero reports to be printed prior to first upload of voting results.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.
Vote Results Reporting	A-49	Allow the capability to select any combination of reports to be run and logged at any time permissible.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.
Vote Results Reporting	A-50	Provide customization of report headers (e.g. "Unofficial" or "Final Unofficial"), contest labels and print layout. <b>Note:</b> Please explain any character limitations imposed by your system on labeling, reporting or exporting.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.  Dominion does not have character limitations. However, the space on the report itself maybe a limitation itself, depending on how much data you wish to place in that header.
Vote Results Reporting	A-51	Include creation date, time, and page numbers on all reports.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.



SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM A – ELECTION MANAGEMENT SYSTEM (EMS)				
Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Vote Results Reporting	A-52	When the total number of votes cast by voters on a specific ballot style/precinct or with a particular voting method or at a particular voting location is less than the currently allowed threshold of ten, the vote tallies for all such subgroups are to be reported in aggregations such that each category always contains at least ten, per section 1-8-308(b), C.R.S. This is also applicable to property owner ballots. <b>Note:</b> Please explain how your system will accommodate this requirement for all reports to maintain voter privacy.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.  RTR and its specific reports for Colorado contain the knowledge of this requirement and when generated, if any ballot style/precinct is met with less than 10 votes, the aggregations will automatically take place.
Vote Results Reporting	A-53	Allow the minimum threshold number of votes to be changed if the legal requirement changes. This requirement refers to section 1-8-308(b), C.R.S.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.  RTR has the ability to have this threshold changed at any time.
Vote Results Reporting	A-54	Be able to include or exclude property owner ballot results from reports.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.
Vote Results Reporting	A-55	Provide an option to suppress a race or candidate from all reports, when either is withdrawn from the ballot.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.
Vote Results Reporting	A-56	Provide an easily readable method to identify the candidate(s)/measure with the most votes in each contest. If more than one winner is possible, identify all winners. <b>Note:</b> Your system should have this feature as an option, so not used on partial results reports.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.
Vote Results Reporting	A-57	Have the capability to report political party designation for each candidate for partisan elections.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM A – ELECTION MANAGEMENT SYSTEM (EMS)				
Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Import/Export	A-58	Import/export ballot information and voter registration information files to be exchanged from/to Colorado's centralized statewide voter registration database (SCORE).	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.
Import/Export	A-59	Display detailed upload status for each portable vote storage media unit (e.g. memory card) by polling location and counting center.  <b>Note:</b> For example, users should be able to visually confirm an exact match between the physical portable vote storage media unit being uploaded and the unit identified by the EMS. (e.g. If an authorized user is uploading "Polling Location A, Memory Card 01", onscreen the user should be able to visually confirm that the system is uploading "Polling Location A, Memory Card 01." Please explain how your solution handles this scenario.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.  RTR tracks each individual memory card and tabulator combination for auditing and security purposes. So, with regards to end user notification, all requirements are met.
Import/Export	A-60	Prevent the upload of wrong or duplicate portable vote storage media units.  <b>Note:</b> Please explain your system's safeguards against errant or multiple uploads from portable vote storage media units and how to correct the problem if it should happen.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.  The RTR system will never accept duplicate uploads, and, if attempted, will notify the election administrator immediately.
Import/Export	A-61	Produce and print a list, at any time in the process, showing which portable vote storage media units have and which have not been uploaded.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.
Import/Export	A-62	Save a report to a local or portable drive for transfer to a networked computer in a non-proprietary format.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.
Import/Export	A-63	Display error messages and instructions to recover during importing and exporting operations.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM A – ELECTION MANAGEMENT SYSTEM (EMS)				
Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Data Storage and Processing	A-64	Maintain election data in a secure environment. <b>Note:</b> Please describe how EMS data is stored and secured from unauthorized access and/or manipulation.	1	All of Dominion Voting Democracy Suite's EMS modules have full functionality to meet this requirement.  All data is secured in EMS by digital signatures. Furthermore, highly sensitive data – such as results – are additionally encrypted.
Data Storage and Processing	A-65	Provide the capability for counties to upload, from election media, externally created election setup data.	1	The Dominion Voting Democracy Suite's EMS has full functionality to meet this requirement.
Data Storage and Processing	A-66	Provide a means to upload vote count results to the EMS from vote collection/tabulation equipment.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.
Data Storage and Processing	A-67	Provide statistics of batches (e.g. number of ballots in each batch, number of batches pending, number of batches deleted, and number of batches saved). <b>Note:</b> Does your system have a batch size and/or number of batches limitation and, if so, what is it?	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.  Dominion's system does not have any batch size or number of batches limitations. However, you may be limited by the physical size of the batch when placed in our hardware.
Data Storage and Processing	A-68	Have the ability to delete saved ballot batches from the system. <b>Note:</b> Please explain how your system manages batch accountability identification.	1	The Dominion Voting Democracy Suite's Results Tally & Reporting (RTR) has full functionality to meet this requirement.  Dominion's system identifies each batch at each check point in the system, making it easy for the deletion of a saved batch should that be required.
Data Storage and Processing	A-69	Have data backup capabilities. <b>Note:</b> Please explain any system data backup capabilities and protocols within your system.	1	The Dominion Voting Democracy Suite's EMS has full functionality to meet this requirement.  The EED module can generate a full back up package that can be securely stored and if required restored on a completely separate EMS system for disaster recovery purposes.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM A – ELECTION MANAGEMENT SYSTEM (EMS)				
Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Data Storage and Processing	A-70	Have redundancy capabilities. <b>Note:</b> Please explain any general and real time redundancy features.	1	<p>The Dominion Voting Democracy Suite's EMS has full functionality to meet this requirement.</p> <p>The EMS system works in a client-server fashion, allowing standardized redundancy technologies and procedures to be used, such as additional application and database servers.</p>

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM B – POLLING LOCATION BALLOT SCANNING AND TABULATION EQUIPMENT				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Scanning	B-1	<p>Accurately capture votes from paper ballots.</p> <p><b>Note 1:</b> Please indicate the speed of your polling location ballot scanner.</p> <p><b>Note 2:</b> Please describe how acceptance/rejection criteria for ballot marks are established for your polling location scanner.</p> <p><b>Note 3:</b> Please explain how your polling location scanner is impacted by ballots containing fold creases or other irregularities.</p>	1	<p>The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.</p> <p>The speed is variable depending on ballot length. However, the standard scan time of a 14 inch double sided ballot is approximately 4 seconds.</p> <p>The acceptance/rejection criteria for ballot marks are flexible and selected and programmed during election creation. This includes standard criteria such as under-votes and over-votes.</p> <p>Dominion's scanners are not adversely affected by fold creases. However, irregularities that impact the timing marks or physical integrity of the ballot paper may cause the tabulator to reject the ballot.</p>
Scanning	B-2	Notify the voter or an authorized user of errors before accepting the ballot.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.
Scanning	B-3	Accept overvoted ballots, upon review, in a manner that allows the voter to review each case of an overvote, one case at a time, and to provide clearly understandable options to further review the ballot, or cast the ballot without further review if the voter chooses not to ask for a replacement ballot.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.
Scanning	B-4	Accept undervoted ballots, upon review, in a manner that allows the voter to review each case of an undervote, one case at a time, and to provide clearly understandable options to further review the ballot, or cast the ballot without further review.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM B – POLLING LOCATION BALLOT SCANNING AND TABULATION EQUIPMENT				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Scanning	B-5	Handle, and reliably account for, multi-page ballots, including when the pages become separated from each other. Count votes regardless of the sequence that pages are scanned or if some pages are not scanned. <b>Note:</b> Please explain how your system reliably accounts for multi-page ballots, including when the pages become separated from each other.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.  The system will count all the votes on multi-page ballots, even if the pages become separated from each other. Each ballot card has a distinct ID, which is how the system authenticates the ballot. There is no possibility of tying the voter to a cast ballot (or ballots), therefore the system does not keep track or know if one or more pages from a multi card ballot is missing. The tabulator will read all valid ballot cards, regardless of the order in which they are cast.
Scanning	B-6	Display a Public Counter, which shows the number of ballot pages processed.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.
Scanning	B-7	Display a Protective Counter showing the count of all ballot pages processed on the equipment, which is not reset after an election.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.
Scanning	B-8	Accept ballots in any of the four possible orientations.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.
Hardware	B-9	Display the unit serial number(s) of tabulation devices both physically and within any applicable software, logs, or reports.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM B – POLLING LOCATION BALLOT SCANNING AND TABULATION EQUIPMENT				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Tabulation	B-10	Have the ability to write cast vote records to an election media device during operation that the EMS can only read if the election media device has been appropriately closed on the voting device on which it was used. <del>disallow from being tabulated prior to the close of polls on Election Day.</del> <b>Note:</b> Please describe the security your equipment provides for ensuring media is not removed until procedurally authorized.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.  If the machine is shut down or tampered with, this is recorded in the secure audit log.  Please see Security information provided in this document (page 49)
Tabulation	B-11	Provide a secure means to upload vote count results to the EMS.	1	The Democracy Suite ImageCast Evolution (ICE) and EMS software have full functionality to meet this requirement.
Error Handling	B-12	Identify and reject ballots that are not valid. <b>Note:</b> Please explain how your system identifies ballots that have been printed on nonstandard paper or on a home printer.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.  Dominion Voting's approved security paper utilizes IR technology that would prohibit any fraudulent ballot such as one printed at home from being scanned and accepted.
Transportability	B-13	Be easily transported by one person. <b>Note:</b> Describe the transportability characteristics of your equipment (e.g. weight, width, height, wheels).	1	The weight of the ImageCast Evolution tabulator unit with battery is 45 pounds. The overall size of the ballot box is 27" (W) by 58" (D) by 48" (H) and the weight is 85 pounds. The overall weight of the tabulator and ballot box together is 130 pounds. The ImageCast Evolution tabulator is designed to be delivered to and from the polling site mounted to the ballot box. The ballot box has 2 lockable swivel wheels and 2 fixed wheels for easy handling and also has convenient handles on all four sides of the box to enable lifting or positioning as required. Ballot box is designed to fit through standard doorframes.



SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM B – POLLING LOCATION BALLOT SCANNING AND TABULATION EQUIPMENT				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Supplies	B-14	Provide dust-and-moisture-proof covers for transportation and storage purposes. <b>Note:</b> Please describe your equipment covers.	1	<p>Each tabulator unit is provided with packaging for storage and transportation. Each unit is wrapped in a plastic film to prevent static charge accumulation, and protect against dust and moisture. Foam inserts position the machine while also providing vibration and impact protection. Finally, the outer cardboard box is coated to provide limited protection from water. These boxes are suitable for stacking and also have a printed label that allows for easy identification.</p> <p>The ImageCast Evolution unit seated on the Ballot Box is protected by 4” thick hard plastic foam padding at the front end and the sides. The foam padding is then tightly strapped onto the Ballot Box using three (3) 1” wide 18ft long strapping belts. This set-up is then covered by a Black waterproof canvas made of polyvinyl. The cover also has strapping belts to completely protect the unit and hold it firmly in place over the Ballot Box.</p> <p>In humid areas, or areas prone to heavy rains that may be exposed on the unit’s storage and/or transport, Dominion Voting offers an optional box/sealable bag combination in which to store and/or transport ImageCast products.</p> <p>After acceptance test, during warehouse storage, the ImageCast tabulator is protected by a fitted hard plastic lid that completely covers the unit, protecting it from water leakage.</p>



SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM C – CENTRAL BALLOT SCANNING AND TABULATION EQUIPMENT				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Scanning	C-1	<p>Accurately scan paper ballots into identifiable and locatable batches.</p> <p><b>Note 1:</b> Please indicate the speed of your central location ballot scanner.</p> <p><b>Note 2:</b> Please explain how your central location scanner is impacted by ballots containing fold creases or other irregularities.</p>	1	<p>The Democracy Suite ImageCast Central (ICC) has full functionality to meet this requirement.</p> <p>The throughput of this system is based on the length of the ballot. Our example is based on 15 inches per second. The Dominion system can run ballots from 11 inches to 22 inches. Therefore with this system, if you run a 15 inch ballot (does not matter if single sided or double sided) and you ran continuously, one unit can run 3600 ballots per hour.</p> <p>Dominion's scanners are not adversely affected by fold creases. However, irregularities that impact the timing marks or physical integrity of the ballot paper may cause the tabulator to reject the ballot.</p>
Scanning	C-2	Be capable of establishing single ballot batches.	1	The Democracy Suite ImageCast Central (ICC) has full functionality to meet this requirement.
Scanning	C-3	<p>Retain an electronic image of each voted paper ballot in a non-proprietary format.</p> <p><b>Note 1:</b> Please describe the format(s) you offer for ballot images. Also describe how your system handles adequate resolution of saved images relative to the paper original.</p> <p><b>Note 2:</b> Please describe how each electronic image will retain its relationship to the voted paper ballot and any reduction in resolution or compression used before retention of the image.</p>	1	<p>The Democracy Suite ImageCast Central (ICC) has full functionality to meet this requirement.</p> <p>Images are saved in 200 dpi TIFF format.</p> <p>The image, even after compression, is easily identifiable and is not affected by resolution reduction.</p>
Scanning	C-4	Allow the authorized user to verify ballot quantities counted to ballots provided by batch prior to saving to the system.	1	The Democracy Suite ImageCast Central (ICC) has full functionality to meet this requirement.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM C – CENTRAL BALLOT SCANNING AND TABULATION EQUIPMENT				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Scanning	C-5	Allow the authorized user to verify ballot quantities counted to ballots provided by batch after saving to the system.	1	The Democracy Suite ImageCast Central (ICC) has full functionality to meet this requirement.
Scanning	C-6	Allow the authorized user to rerun a batch of ballots, if necessary, without impacting results to date.	1	The Democracy Suite ImageCast Central (ICC) has full functionality to meet this requirement.
Scanning	C-7	<del>Have the ability to logically delete (not physically) saved ballot batches from the system.</del> <b>Appropriate entries shall be made in the audit logs whenever a batch is entered, modified, replaced or deleted.</b> <b>Note:</b> Please explain how your system manages batch accountability identification.	1	The Democracy Suite ImageCast Central (ICC) has full functionality to meet this requirement.  Dominion's system identifies each batch at each check point in the system.
Scanning	C-8	Identify and segregate ballots or ballot images with overvotes for adjudication. <b>Note:</b> Please explain how your central count solution allows for physically locating a specific ballot in a batch of ballots.	1	The Democracy Suite ImageCast Central (ICC) and the EMS Adjudication module have full functionality to meet this requirement.  With regards to physical location, Dominion's standard procedure is to keep separate every batch after scanning so that it may be referred to any time during or after scanning.
Scanning	C-9	Identify and segregate ballots or ballot images with write-ins for adjudication.	1	The Democracy Suite ImageCast Central (ICC) and the EMS Adjudication module have full functionality to meet this requirement.
Scanning	C-10	Identify and segregate, for adjudication, ballots or ballot images that cannot be read.	1	The Democracy Suite ImageCast Central (ICC) and the EMS Adjudication module have full functionality to meet this requirement.
Scanning	C-11	Identify and segregate, for adjudication, ballots or ballot images that are read as blank.	1	The Democracy Suite ImageCast Central (ICC) and the EMS Adjudication module have full functionality to meet this requirement.
Scanning	C-12	Provide information to an authorized user as to why a ballot was segregated.	1	The Democracy Suite ImageCast Central (ICC) and the EMS Adjudication module have full functionality to meet this requirement.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM C – CENTRAL BALLOT SCANNING AND TABULATION EQUIPMENT				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Scanning	C-13	Assign a unique number to the batch of ballots and verify that the count is zero upon beginning a scan and giving a total number of ballot pages processed at the close of the batch scan.	1	The Democracy Suite ImageCast Central (ICC) has full functionality to meet this requirement.
Scanning	C-14	Handle scanning of both front and back page of a ballot when data is contained on back of ballot page.	1	The Democracy Suite ImageCast Central (ICC) has full functionality to meet this requirement.
Scanning	C-15	Handle and reliably account for multi-page ballots, including when the pages become separated from each other. Count votes regardless of the sequence that pages are scanned or if some pages are not scanned. <b>Note:</b> Please explain how your system reliably accounts for multi-page ballots when pages are out of order or when all ballot pages are not returned, including when the pages become separated from each other.	1	The Democracy Suite ImageCast Central (ICC) has full functionality to meet this requirement.  The system will count all the votes on multi-page ballots, even if the pages become separated from each other. Each ballot card has a distinct ID, which is how the system authenticates the ballot. There is no possibility of tying the voter to a cast ballot (or ballots), therefore the system does not keep track or know if one or more pages from a multi card ballot is missing. The tabulator will read all valid ballot cards, regardless of the order in which they are cast.
Scanning	C-16	Accept ballots in any of the four possible orientations.	1	The Democracy Suite ImageCast Central (ICC) has full functionality to meet this requirement.
Scanning	C-17	Display publicly the number of ballot pages processed.	1	The Democracy Suite ImageCast Central (ICC) has full functionality to meet this requirement.
Scanning	C-18	Display a Protective counter showing the count of all ballot pages processed on the equipment, which is not reset after an election.	1	The Democracy Suite ImageCast Central (ICC) has full functionality to meet this requirement.
Scanning	C-19	Allow the option to disable or enable the review of undervoted ballots.	1	The Democracy Suite ImageCast Central (ICC) has full functionality to meet this requirement.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM C – CENTRAL BALLOT SCANNING AND TABULATION EQUIPMENT				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Hardware	C-20	Display the unit serial number(s) of tabulation devices both physically and within any applicable software, logs, or reports.	1	The Democracy Suite ImageCast Central (ICC) has full functionality to meet this requirement.
Tabulation	C-21	<p>Accurately capture votes marked by a voter or a ballot marking device on a paper ballot without adjusting machine thresholds.</p> <p><b>Note 1:</b> Please characterize the accuracy of your central ballot scanner in capturing voter intent.</p> <p><b>Note 2:</b> Please describe how acceptance/rejection criteria for ballot marks are established for your central location scanner.</p>	1	<p>The Democracy Suite ImageCast Central (ICC) has full functionality to meet this requirement.</p> <p>Dominion Voting's scanners have been tested, and have accurately captured 100% of voter intent. Anything flagged as ambiguous is sent for adjudication to establish voter intent manually.</p> <p>The acceptance/rejection criteria for ballot marks are flexible and selected and programmed during election creation. This includes standard criteria such as under-votes and over-votes.</p>
Tabulation	C-22	<p>Account for overvotes in every contest where overvotes occur.</p> <p><b>Note:</b> Please explain how overvotes are handled by your system.</p>	1	<p>The Democracy Suite ImageCast Central (ICC) has full functionality to meet this requirement.</p> <p>Overvotes are captured and tallied based on EAC and Colorado State Election Law requirements.</p>
Tabulation	C-23	<p>Account for undervotes in every contest where undervotes occur.</p> <p><b>Note:</b> Please explain how undervotes are handled by your system.</p>	1	<p>The Democracy Suite ImageCast Central (ICC) has full functionality to meet this requirement.</p> <p>Undervotes are captured and tallied based on EAC and Colorado State Election Law requirements.</p>
Tabulation	C-24	<p>Have the ability to write cast vote records to an election media device during operation that the EMS can disallow from being tabulated prior to the close of polls on Election Day.</p> <p><b>Note:</b> Please describe the security your equipment provides for ensuring media is not removed until procedurally authorized.</p>	1	<p>The Democracy Suite ImageCast Central (ICC) has full functionality to meet this requirement.</p> <p>If the system is shut down or tampered with, this is recorded in the secure audit log.</p>

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM C – CENTRAL BALLOT SCANNING AND TABULATION EQUIPMENT				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Tabulation	C-25	Provide a secure means to upload vote count results to the EMS.	1	The Democracy Suite ImageCast Central (ICC) and EMS software have full functionality to meet this requirement.
Error Handling	C-26	Identify and reject ballots that are not valid. <b>Note:</b> Please explain how your system identifies ballots that have been printed on nonstandard paper or on a home printer.	1	Dominion Voting's approved security paper utilizes IR technology that would prohibit any fraudulent ballot such as one printed at home from being scanned and accepted.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM C – CENTRAL BALLOT SCANNING AND TABULATION EQUIPMENT				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Error Handling	C-27	<p>Continue ballot scanning while electronically or physically segregating and sorting ballots to user-identified categories that need additional attention.</p> <p><b>Note 1:</b> Please describe how your system handles these situations:</p> <ol style="list-style-type: none"> <li>Ballots are unreadable by the scanner.</li> <li>Notifying an authorized user whether a ballot has been scanned successfully or not.</li> <li>Notifying an authorized user that a ballot has been previously scanned.</li> <li>Identifies where a voter marked the box for a write-in but did not write in a name, and where the voter did not mark the box but did enter a write-in candidate on the line.</li> </ol> <p><b>Note 2:</b> Please describe how the relationship of paper ballot to ballot scan to cast vote record will be maintained when this physical or electronic sorting or segregation is taking place.</p>	1	<p>The Democracy Suite ImageCast Central (ICC) and the EMS Adjudication module have full functionality to meet this requirement.</p> <p>The primary function of the Adjudication module is to create an automated process that allows ballots with exceptions or “out-stack” conditions – such as over-votes, under-votes, blank ballots, marginal marks, major contests and certified write-ins, – to be resolved on-screen and sent to tally. This eliminates the need for additional costs, time and resources spent on duplicating and re-scanning ballots.</p> <p>The Adjudication module can be utilized real time as the Jurisdiction sees fit. The Adjudication module adds to the efficiency of the system by making it scalable to as many reviewing teams as needed for the jurisdiction. The out-stacked ballots will appear on the screen for the team to review as they come available. This process is completely auditable. The system logs each adjudication team’s activities for review and to assure that activities are to specification.</p> <p>Additionally, when a ballot is adjudicated, the ballot image with the existing AuditMark audit trail receives an additional Adjudication AuditMark, so all can see how the voter marked intent, how the system interrupted the intent, and how the ballot was adjudicated. These adjudicated ballots are then sent to Democracy Suite RTR for tally and reporting.</p> <p>Each ballot scanned is associated with one generated ballot image, which contains the AuditMark representing voter intent and how the tabulator –at least, initially – interpreted that intent. This image is what’s used to maintain auditability throughout the process.</p>

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM D – ELECTRONIC VOTING EQUIPMENT				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Ballot	D-1	Display choices for the contests, (candidates and measures) of the election for each ballot style.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.
Ballot	D-2	When activated for the voter, display prominent ballot identifiers, including precinct, party, and similar identifiers, in order to give the voter the opportunity to verify that they will be voting on the correct ballot.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.
Ballot	D-3	Record each voter's candidate and measure selections as the ballot is cast. <b>Note:</b> This requirement is not applicable to certain ballot marking devices that depend on a produced paper ballot being processed and tabulated elsewhere.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.
Ballot	D-4	Have a public counter that displays the number of ballots cast or marked, depending on the functionality of the electronic voting equipment.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.
Ballot	D-5	Make clear to the voter how to cast a ballot or print a marked ballot, such that the voter has minimal risk of doing so accidentally, but when the voter intends to cast the ballot or complete the ballot marking session, the action can be easily performed.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.
Ballot	D-6	Assure that the ballot marking device automatically returns to a state such the next voter cannot learn how the previous voter voted, once the paper ballot is printed.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.



SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM D – ELECTRONIC VOTING EQUIPMENT				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Ballot	D-7	<p>Allow voters, including voters with disabilities, to be able to review their write-in input to the ballot interface, edit that input, and confirm that the edits meet their intent.</p> <p><b>Note:</b> Please describe how voters, including voters with disabilities, will be able to review their write-in input to the ballot interface, edit that input, and confirm that the edits meet their intent.</p>	1	<p>The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.</p> <p>The general procedure for voting using an audio and visual interface is as follows:</p> <ol style="list-style-type: none"> <li>1. An audio ballot is initiated for the voter through the Administration menu.</li> <li>2. The voter, or the appropriate election official, places a blank ballot into the unit.</li> <li>3. The voter uses an ATI to mark their votes.</li> <li>4. The voter can verify the correctness of choices using audio playback or/and visual review.</li> <li>5. If the record is correct, the voter confirms its validity and the unit marks the paper ballot, which is then scanned and converted into an electronic format.</li> <li>6. The voter is allowed to verify the electronic record of the paper record using audio playback and/or visual review.</li> <li>7. If the electronic record is correct, the voter confirms the validity of it before the ballot is placed into the secure receptacle. If the ballot is incorrect, the ballot is marked as void and handled in the same manner as any other voided paper ballot. The voter may start a new accessible voting session.</li> </ol>
Ballot	D-8	<p>Provide a method by which voters with disabilities can choose the language of the ballot visually and through the audio interface.</p> <p><b>Note:</b> Please describe how your electronic voting units provide a method by which voters with disabilities can choose the language of the ballot visually and through the audio interface.</p>	1	<p>The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.</p> <p>At the beginning of the accessible voting session, the voter is presented with a choice of which language to proceed in.</p>



SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM D – ELECTRONIC VOTING EQUIPMENT				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Hardware	D-9	Display a Protective counter showing the count of all ballots processed on the equipment, which is not reset after an election.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.
Hardware	D-10	Display the unit serial number(s) of tabulation devices both physically and within any applicable software, logs, or reports.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.
Accessibility	D-11	Provide electronic voting equipment designed to allow for installation in a voting location accommodating access by voters with disabilities in compliance with the Americans with Disabilities Act (ADA), HAVA and all applicable federal and state laws that address accessibility to voting for persons with disabilities.  <b>Note:</b> Please describe how your system's features comply with HAVA, ADA and other Federal and State laws that require accessibility for voters with a variety of disabilities, including visual or cognitive impairments. Identify the EAC standards your system meets.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.  The ICE is certified is EAV VVSG 2005 standards, including all those applicable to HAVA and ADA requirements.
Accessibility	D-12	Meet the standards for accessible voting systems listed in section 1-5-704, C.R.S. The size of a ballot position and the font size of candidate information must be in accordance with Colorado Election Rules.  <b>Note:</b> Please stipulate the maximum available positions on the voting device, based on such size of a ballot position and the font size of candidate information, to be used for an election.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.  Please see Section 9 (General Questions), question 11 for tables showing the maximum capacity of Democracy Suite ballots.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM D – ELECTRONIC VOTING EQUIPMENT				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Accessibility	D-13	<p>Include a privacy enclosure or voting booth that contains the electronic voting device(s) designated for voters with disabilities and complies with the Americans with Disabilities Act Accessibility Guidelines (ADAAG) providing sufficient dimensions to allow access to voters who use wheelchairs.</p> <p><b>Note:</b> Please explain how your voting device complies with all forward and side reach requirements of the ADA and ADAAG.</p>	1	<p>The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.</p> <p>The ICE has an integrated privacy shield and screen cover that comply with ADA requirements, along with sufficient dimensions to comply with ADAAG.</p>

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM D – ELECTRONIC VOTING EQUIPMENT				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Accessibility	D-14	<p>Include electronic voting units adaptable for voters with disabilities either through adjustability of the device or the voting booth or inclusion of an auxiliary device. The auxiliary device should also be lightweight and removable making it portable for use on a voter's lap or provide an alternative solution.</p> <p><b>Note 1:</b> Please describe your accessible alternative input devices. List such devices and explain the operation of each device and how it accommodates voters with disabilities.</p> <p><b>Note 2:</b> Please explain how your proposed system accommodates voters with visual disabilities. Include with the description how portions of the displayed ballot may be intensified and/or enhanced, in contrast and font size and then restored to the initial size.</p> <p><b>Note 3:</b> Please explain how your electronic voting device can be repositioned to accommodate a variety of voters with disabilities. Include any information about the ability of the voter to independently adjust the device.</p> <p><b>Note 4:</b> Is the voting screen glare-free regardless of positioning?</p> <p><b>Note 5:</b> Please explain any magnifying capacity of the electronic voting device.</p> <p><b>Note 6:</b> If your electronic voting unit uses an activation card, please explain how it may be used easily by voters, including voters with disabilities.</p> <p><b>Note 7:</b> Please explain how your electronic voting unit adequately provides privacy for a voter who uses a wheelchair.</p> <p><b>Note 8:</b> Please explain how a voter can verify the accuracy of the cast votes.</p> <p><b>Note 9:</b> Please describe additional features of your system that are designed to accommodate voters with disabilities.</p>	1	Please see answer below

The ImageCast Evolution is equipped with an integrated voting feature for voters needing additional assistance. It is the only optical scan tabulator using a single ballot path which does not require the voter to have to go to an additional unit to cast the vote.

The ICE unit features a 19" display that allows voters to review and cast their marked paper ballot through a customizable visual interface. In addition, the ImageCast Evolution features **several accessible voting interfaces** that allow voters with various disabilities to effectively vote, review and cast a paper ballot in a private and independent manner. The ImageCast Evolution offers the following user interfaces:

- Touch screen interface for visual ballot review and ballot casting.
- Accessible ballot marking interface (both audio and visual)
- Assistive input devices for accessible ballot navigation and voting, including an ATI (Audio-Tactile Interface), sip & puff, and paddles.

The accessible voting session uses a hand-held controller called an ATI (Audio Tactile Interface) that connects to the ImageCast Evolution via the port located on the right side of the unit. A set of headphones connects directly to the ATI controller. Following the audio voting process using the ATI controller, the integrated inkjet printer produces a marked paper ballot which serves as the official ballot record.

Dominion uses a library of human hand marks and writing to mark a ballot via the accessible voting session, which **makes machine-marked ballots indistinguishable from hand-marked ballots.**

The ATI is the handheld device that is used by a voter during an Accessible Voting Session to navigate through and make selections to their ballot. The ATI:

- Has raised keys that are identifiable tactilely without activation (i.e. raised buttons of different shapes and colors, large or Braille numbers and letters)
- Can be operated with one hand
- Includes a 3.5 mm headphone jack
- Includes a T-Coil coupling
- Has a T4 rating for interference
- Uses light pressure switches
- Can be equipped with a pneumatic switch, also known as a Sip and Puff device, or a set of paddles.



The ATI is tethered to the ImageCast Evolution via a CAT5 RJ45 cable, which can extend up to 10ft away from the unit. No key or control has a repetitive effect as the result of being held in its active position.

The general procedure for voting using an audio and visual interface is as follows:

8. An audio ballot is initiated for the voter through the Administration menu.

9. The voter, or the appropriate election official,

places a blank ballot into the unit.

10. The voter uses an ATI to mark their votes.

11. The voter can verify the correctness of choices using audio playback or/and visual review.
12. If the record is correct, the voter confirms its validity and the unit marks the paper ballot, which is then scanned and converted into an electronic format.
13. The voter is allowed to verify the electronic record of the paper record using audio playback and/or visual review.
14. If the electronic record is correct, the voter confirms the validity of it before the ballot is placed into the secure receptacle. If the ballot is incorrect, the ballot is marked as void and handled in the same manner as any other voided paper ballot. The voter may start a new accessible voting session.

The display can be adjusted using the zoom and contrast buttons. The contrast button allows the voter to display the screen image in high contrast (high contrast is a figure-to-ground ambient contrast ratio for text and informational graphics of at least 6:1). There are three different zoom levels in order to provide an enlarged ballot for voters with visual impairments. Every voter configurable option is automatically reset to its default value with the initiation of each new voting session.

Accessibility	D-15	<p>Allow for importing of audio ballot content from an outside source (e.g. candidates or pre-recorded audio.).</p> <p><b>Note:</b> Please explain the process and procedure, with time frames, required to re-program the audio read-back on the voting device in the event that there is a change to a name or contest on the ballot in the final few weeks before an election.</p>	1	<p>There are several options for creating and maintaining audio files for use with the Dominion system. These options include:</p> <ul style="list-style-type: none"> <li>• Using the built-in synthesized speech protocols.</li> <li>• The Audio Studio client application may also be used to record audio files for a given election project. Its operation is based on the audio definition library file, which is exported from the EMS Election Event Designer in XML format. Audio Studio allows human voice audio files to be recorded in any language, attached to an election project, and includes playback functionality for revision purposes. Recorded files are then exported from the application in .spx or .wav format, and imported into Election Event Designer for implementation into the election project.</li> <li>• Audio files created from an external source can be imported into the EMS system.</li> </ul>
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Accessibility	D-16	Allow for a voter to change volume and/or speed of an audio ballot. <b>Note:</b> Explain how the voter can fast-forward through instructions and measure text.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.  The voter can fast-forward through instructions and measures as instructed at the beginning of the session.
Accessibility	D-17	Provide for audio instructions for the ballot and a mechanism for voters with visual impairments to cast a ballot or print a marked ballot, either on the voting unit itself or on a separate device designed for this purpose. The process shall imitate the process used by sighted voters with the exception of the audio interface.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.  The ImageCast Evolution is a single device that imitates the exact same voting scenario for all voters.
Accessibility	D-18	Support an enlarged-print ballot screen image for voters with visual impairments. Following the casting of a vote or the printing of a marked ballot, the machine must reset to its initial state to accommodate the next voter.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.
Accessibility	D-19	Accommodate voters regardless of their ability to read.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.
Accessibility	D-20	Allow for connection of personal auxiliary devices, such as sip/puff or jelly switch devices. <b>Note:</b> Please describe such capabilities provided by your system.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.  Dominion's system supports all personal auxiliary devices which connect via 3.5 mm male connector.
Ease of Use	D-21	Be designed so that actions performed by the voter, such as making a vote selection or changing a vote, are easily understood so that errors are prevented to the maximum extent possible, and so that recovery from an erroneous action is facilitated by the features of the system prior to casting the ballot or printing a marked ballot. <b>Note:</b> Please explain how your proposed system facilitates voter actions prior to casting a ballot or printing a marked ballot.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.  The system specifically is designed so that the voter is aware of any error condition or erroneous action, and is given steps to correct it before casting their ballot.

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Ease of Use	D-22	Accommodate font sizes that are adjustable for ease of sight.	1	<p>The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.</p> <p>The display can be adjusted using the zoom and contrast buttons. The contrast button allows the voter to display the screen image in high contrast (high contrast is a figure-to-ground ambient contrast ratio for text and informational graphics of at least 6:1). There are three different zoom levels in order to provide an enlarged ballot for voters with visual impairments.</p>
Ease of Use	D-23	During the voting process or prior to casting the vote, display (visually or using audio, as applicable) a summary indicating the choices made or skipped.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.
Ease of Use	D-24	<p>Allow the voter the ability to change a selection until the voter is satisfied with the choice at any time prior to the final casting of a ballot or printing a marked ballot.</p> <p><b>Note:</b> Please explain here how your proposed voting system allows the voter to review and/or modify his/her selections before final casting of the vote or printing of the marked ballot.</p>	1	<p>The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.</p> <p>The system provides an optional scan time feature that reviews the ballot either displays or replays the choices as interpreted by the scanner to the voter.</p>
Ease of Use	D-25	Provide a method for the voter to confirm the choices before casting the ballot or printing a marked ballot, signifying to the voter that casting or printing the ballot is irrevocable and directing the voter to confirm his/her intention to cast or print the ballot, and shall further signify to the voter that the ballot has been cast or printed after the voting session is complete..	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.
Ease of Use	D-26	Provide a means to demonstrate the operation of the electronic voting device to the voters.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.



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Ease of Use	D-27	Disallow a voter to overvote a contest and will enable the voter to correct the selections. <b>Note:</b> Please explain how your proposed system shall not allow a voter to overvote a contest and enable the voter to correct his or her selections.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.  The system will notify the voter that his or her ballot will not be accepted because of the overvote, and will return the ballot to the voter.
Ease of Use	D-28	Warn voters that they have undervoted a contest and permit them to correct or accept the undervote. <b>Note:</b> Please explain here how your proposed system shall warn voters that they have undervoted a contest and permit them to correct or accept the undervote.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.  The system will notify the voter that his or her ballot has an undervote, and will give them the option to accept or reject ("return") the ballot.
Ease of Use	D-29	Provide a means of recording the votes cast for write-in candidates for any contest that allows write-in candidates. This capability shall allow the entry of as many names of candidates as the voter is entitled to select for each contest in compliance with Colorado's Election Law. <b>Note:</b> Please explain how your proposed system allows for write-in votes for any authorized contest.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.  The ballot will have the appropriate amount of maximum write-in positions that allows for write-in votes for those authorized contests.
Ease of Use	D-30	During election setup, provide an option to provide the voter with a list of certified write-in candidates.	5	
Ease of Use	D-31	Provide a screen response that will allow a voter to request a list of certified write-ins if the election setup provided that option.	5	
Ease of Use	D-32	Allow authorized users the ability to modify the voter instructions for an electronic or audio voting session.	1	The Democracy Suite Election Management System has full functionality to meet this requirement.
Ease of Use	D-33	Provide an authorized user an ability to reset screen calibration, including between uses in an election. <b>Note:</b> Please explain if your electronic voting equipment logs such calibration and produces any warnings when calibration needs to be reset.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.  Our system both logs and will produce calibration warnings when required.



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Uninterrupted Operation	D-34	<p>Provide, in case of power interruption, a means for voting operations to continue. This feature shall consist of either an un-interruptible power supply (UPS) or other means to keep electronic voting equipment active.</p> <p><b>Note:</b> Please specify how your system will provide notice of power loss or low-battery state, so that election judges or election officials can take appropriate steps.</p>	1	<p>The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.</p> <p>The system's internal battery status is readily displayed on the ICE's LCD screen at all times.</p>
Uninterrupted Operation	D-35	<p>Provide for continuous uninterrupted operation for a minimum of two hours in case of power failure.</p> <p><b>Note:</b> Please specify how long your system will operate without an external power source and under what conditions. If the device does not have a battery backup, what size of UPS will be required to maintain operation for two hours?</p>	1	<p>The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.</p> <p>The system's internal battery is capable of functioning for a minimum of 2 hours in case of power failure.</p>
Uninterrupted Operation	D-36	<p>In the event of the failure of an electronic voting unit, retain a record of all votes cast prior to the failure.</p> <p><b>Note:</b> Please explain how your system retains and reports votes cast in the event of a loss of power.</p>	1	<p>The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.</p> <p>Despite the loss of power, the ICE unit will have kept all votes cast and audit records in non-volatile memory prior to loss of power.</p>
Voter Verifiable Paper Trail	D-37	<p>Include, with each voting device, the functionality of a Voter-Verified Paper Audit Trail (VVPAT) that meets all Federal and State Certification requirements.</p> <p><b>Note 1:</b> Please explain how your proposed voting device complies with this requirement.</p> <p><b>Note 2:</b> Explain if your proposed system has an alternate means of counting a non-ballot type of VVPAT for audit purposes. The alternative means can include but is not limited to the availability of bar codes and readers for the VVPAT.</p>	1	<p>The ImageCast Evolution is a paper-based system. The paper ballot serves as the official VVPAT.</p>

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Voter Verifiable Paper Trail	D-38	Provide a means for voters with disabilities (visually impaired or unable to read) to review the VVPAT. <b>Note:</b> The review of the VVPAT by voters that cannot see or read the VVPAT requires a feature that enables read-back from the physical VVPAT.	1	The Democracy Suite ImageCast Evolution (ICE) has full functionality to meet this requirement.  Voters review the ballot – physical ballot, on a screen, or via audio - before it is cast.
Voter Verifiable Paper Trail	D-39	Have the capability, if proposing a VVPAT solution that is not an official marked ballot, for the print on the VVPAT to be large enough and dark enough for voters to verify and for election judges to read easily during a recount. <b>Note:</b> Please explain the type of paper used to record the VVPAT and the characteristics of the paper impression to ensure ease of reading and fade resistance. For instance; 18 point font, bold and double spaced would be preferred.	1	The ImageCast Evolution is a paper-based system. The paper ballot serves as the official VVPAT.
Transportability	D-40	Be easily transported. <b>Note:</b> Describe the transportability characteristics of your electronic voting equipment (e.g. weight, width, height, wheels).	1	The ImageCast Evolution tabulator is designed to be delivered to and from the polling site mounted to the ballot box. The ballot box has 2 lockable swivel wheels and 2 fixed wheels for easy handling and also has convenient handles on all four sides of the box to enable lifting or positioning as required. Ballot box is designed to fit through standard doorframes.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM E – AUTOMATED BALLOT ENVELOPE SCANNING AND SIGNATURE VERIFICATION				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Mail Ballot Envelope Processing	E-1	<p>Provide hardware with the capability to scan mail ballot envelopes and perform the following functions:</p> <ul style="list-style-type: none"> <li>a. Scan and capture voter ID barcode</li> <li>b. Scan and capture envelope and signature images</li> <li>c. Log envelope as received</li> <li>d. Endorse (customizable) &amp; date/time stamp envelope</li> <li>e. Separate envelopes that may need manual intervention</li> </ul> <p><b>Note 1:</b> Please provide information about your ballot envelope sorting equipment, including what versions are available for counties with various volumes of envelopes. Can your equipment perform all these above functions in a single pass? If not, please explain the number of passes required and the actions taken on each pass.</p> <p><b>Note 2:</b> Please indicate if your solution has the capability, assuming envelope and ballot are designed properly, to determine the ballot style of the enclosed ballot.</p>	5	
Mail Ballot Envelope Processing	E-2	Be capable of generating an output file, with voter ID and voter's envelope signature, to be matched with SCORE voter registration data and used in the Automated Signature Verification process.	5	
Mail Ballot Envelope Processing	E-3	<p>Be capable of updating the mail ballot envelope output file with status values (e.g. received, accepted, rejected) so that the SCORE system can use the output file to update voter registration records.</p> <p><b>Note:</b> Please provide a list of code values your system assigns for ballot envelope processing status.</p>	5	

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM E – AUTOMATED BALLOT ENVELOPE SCANNING AND SIGNATURE VERIFICATION				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Mail Ballot Envelope Processing	E-4	Allow an authorized user the ability to update the disposition code for an envelope (e.g. from “challenged” to “good”).	5	
Mail Ballot Envelope Processing	E-5	Be configurable for ballot envelope size and design.	5	
Mail Ballot Envelope Processing	E-6	Be configurable for thickness detection.	5	
Mail Ballot Envelope Processing	E-7	Automatically separate envelopes when voter ID required into a separate stack or identify them electronically for easy separation.	5	
Mail Ballot Envelope Processing	E-8	Have an option for sort/pass with the ability to customize sorting definition (e.g. style, precinct, district, unaccepted envelope, signature discrepancy and no signature). <b>Note:</b> Please explain the sort options available in your system.	5	
Mail Ballot Envelope Processing	E-9	Provide a high-volume solution for counties with a large voter population. <b>Note 1:</b> Please specify the throughput capacity on your high-volume envelope processor. <b>Note 2:</b> County size by registered voter population is as follows: Large = Over 25,000 voters Medium = 10,000 – 25,000 voters Small = Fewer than 10,000 voters	5	
Mail Ballot Envelope Processing	E-10	Provide a low-volume solution for counties with a small or medium voter population (see E-9 requirement Note 2). <b>Note:</b> Please specify the throughput capacity on your low-volume envelope processor.	5	

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM E – AUTOMATED BALLOT ENVELOPE SCANNING AND SIGNATURE VERIFICATION				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Mail Ballot Envelope Processing	E-11	Provide configurable reports for tray id, tray count and pieces status.	5	
Automated Signature Verification	E-12	Provide tested/proven Automated Signature Verification (ASV) software, which can automatically compare a voter's ballot envelope signature with the SCORE voter registration signature based on a customer selected confidence determination. <b>Note:</b> Please provide any information about your system that might be an alternative to manual removal of the signature security tab on mail ballot envelopes.	5	
Automated Signature Verification	E-13	Be configurable to meet or exceed a state established acceptance threshold for signature acceptance.	5	
Automated Signature Verification	E-14	Provide user activity log records that include full description of all human intervention during the ASV process.	5	
Automated Signature Verification	E-15	Provide an audit function to verify the accuracy of machine accepted signatures.	5	
Automated Signature Verification	E-16	Extract returned ballot envelopes for manual review when the signature does not meet the acceptance threshold level, is unreadable, or is missing.	5	
Automated Signature Verification	E-17	Create a record when the signature does not meet the acceptance threshold level. This record will be used to generate a letter when the signature cannot be manually verified. <b>Note:</b> Please explain your process for creating and using these records.	5	

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM F – MAIL BALLOT TRACKING				
Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Mail Ballot Tracking	F-1	Track a mail ballot envelope from the time it is prepared for the voter in an elections office or by a vendor, through every stage of the U.S. Postal Service mail delivery system.	5	
Mail Ballot Tracking	F-2	Track a mail ballot through stages of the ballot acceptance process after return to the County by the voter. <b>Note:</b> Explain which processes within the Elections Office can be tracked by your system after the ballot envelope is received in that office.	5	
Mail Ballot Tracking	F-3	Provide sufficient report capability for the election officials to ascertain the status of any and all mail ballots in each stage of the mail ballot process tracked by the system.	5	
Mail Ballot Tracking	F-4	Provide a system whereby voters can “opt in” to receive messages about their ballot’s status in the process.	5	
Mail Ballot Tracking	F-5	Provide a system whereby voters who have chosen to “opt in” to receive messages about their ballot’s status in the process can choose to “opt out”.	5	
Mail Ballot Tracking	F-6	Provide a messaging system that delivers messages via a website to voters who have requested notification about their ballot’s status.	5	
Mail Ballot Tracking	F-7	Provide a messaging system that delivers messages via email to voters who have requested notification about their ballot’s status.	5	
Mail Ballot Tracking	F-8	Provide a messaging system that delivers messages via text messaging to voters who have requested notification about their ballot’s status.	5	

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM F – MAIL BALLOT TRACKING				
Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Mail Ballot Tracking	F-9	Have sufficient capacity to provide the same level of service to as few as one or as many as 64 counties at the same time. (Estimate up to 4 million records if all counties are participating.)	5	
Mail Ballot Tracking	F-10	Be able to utilize all email and text messaging vendor systems in use in Colorado.	5	
Mail Ballot Tracking	F-11	Provide each individual county the ability to personalize messages to its voters based on its elections setup, processes, etc.	5	

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM G – VENDOR TRAINING & SUPPORT				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Hardware & Software Support	G-1	Include availability of vendor support personnel to assist in hardware and software installation and setup onsite.	1	Please see Section 6.1 – Project Management Approach, as well as Section 10 – Preliminary Project Schedule and Staffing Plan. Dominion will work closely with individual counties to determine their specific support and set up needs.
Hardware & Software Support	G-2	Include availability of vendor support personnel to assist in hardware and software installation and setup from a remote help desk.	1	Please see Section 6.1 – Project Management Approach, as well as Section 10 – Preliminary Project Schedule and Staffing Plan. Dominion will work closely with individual counties to determine their specific support and set up needs.
Training	G-3	Include availability of vendor supported onsite training personnel to train CDOS and County users.	1	Please see section 6.7 – Training
Training	G-4	Include availability of self-study user training via the Internet or electronic media.	1	Dominion does provide self-paced, e-learning tools. Please see section 6.7 – Training
Voting Period Support	G-5	Provide 24-hour available technical support for all system components beginning sixty days prior to an election and continuing until the completion of the official canvass (generally twenty days after an election). <b>Note:</b> Please describe your capability to provide extended support, beyond twenty days after and election, for circumstances such as a recount.	1	Please see Section 6.9 – Support. Dominion will work closely with individual counties to determine their specific extended support needs as required.



SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM G – VENDOR TRAINING & SUPPORT				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Hardware Parts and Supplies	G-6	<p>Include hardware solutions for the UVS that are supported by a supply chain contingency plan.</p> <p><b>Note:</b> Please provide an explanation of your supply chain contingency planning. The intent of this requirement is to assess the risk to Colorado of one or more of your suppliers not being able to provide needed components. Identify the depth of your supply chain (e.g. one, two, or more suppliers deep).</p>	1	<p>The supply chain for ImageCast product has several redundancies to protect against natural disasters and similar types of risk. There are also protections against a particular component supplier who becomes unable to supply portions of the ImageCast. Dominion Voting utilizes Flextronics for unit assembly. Flextronics has a number of facilities in the United States. These utilize common printed circuit board assembly processes and the same or similar assembly equipment types. Unit-level assembly uses common hand tools and simple fixturing – easily moved or replicated. Dominion Voting maintains copies of the unit-level test software and fixtures; and these copies could be deployed if needed. Component level suppliers are generally large players within that given commodity, for example Samsung for displays. If any of these suppliers suffer disaster they too often can move production to another facility. Dominion could also take advantage of inventory in the distribution portion of the supply chain, and there is inventory at Flextronics and Dominion facilities that could be enlisted to maintain production. Flextronics and other major suppliers have in place disaster recovery/business continuity plans.</p>
Hardware Parts and Supplies	G-7	Make equipment parts and supplies available through December 31, 2020.	1	Dominion understands and will comply with this requirement.
Hardware Parts and Supplies	G-8	Not require royalty fees, user fees, or other charges or limitations on the printing of ballots designed or printed on vendor devices. Similarly, no fee or limitation shall be placed on any electronic file, report or representation of the vote produced by vendor devices or software.	1	Dominion will work with and educate the ballot producers to certify that they are capable of producing quality Dominion ballots that are assured to be read by the system.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM H – MISCELLANEOUS REQUIREMENTS				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Auditing	H-1	<p>Store sufficient data in an unalterable system audit log file to allow the auditing of all operations related to election setup, ballot creation, ballot tabulation, results consolidation and report generation. The audit log file shall contain:</p> <ol style="list-style-type: none"> <li>An identification of the program and version being run.</li> <li>An identification of the election file being used.</li> <li>A record of all options entered by the operator, including operator ID.</li> <li>A record of all actions performed by a subsystem of the system.</li> <li>A record of all tabulation and consolidation input.</li> <li>Audit log records that are created and maintained in the sequence in which operations were performed, with date/time stamps.</li> </ol> <p><b>Note 1:</b> Please explain what audit trail techniques and audit reports are incorporated in your proposed system.</p> <p><b>Note 2:</b> Please provide a list of all audit log files, the file location within the voting system, and the procedures to navigate to and retrieve them from the voting system.</p> <p><b>Note 3:</b> Please describe steps needed to protect the audit logs from possible unintentional or intentional erasure or alteration.</p> <p><b>Note 4:</b> Please provide a sample set of audit reports (system logs, etc.) from an election in a county with 200,000 or more registered voters (not necessarily in Colorado).</p>	1	<p>The Dominion Voting Democracy Suite's Election Management System (EMS) has full functionality to meet this requirement.</p> <p>The system incorporates a full, secure audit trail and log with the ability to drill down, based on specific user and time frame.</p> <p>The EMS audit log is located inside the secure database along with all other election data. It is accessible through Election Event Designer (EED). The ImageCast Evolution audit log is located and replicated on both CF cards, and is accessible directly off those cards or through Results Tally &amp; Reporting (RTR) after the cards are loaded into the system.</p> <p>The audit logs are digitally signed using SHA256 hashes.</p> <p>Please see sample reports in Section 7.</p>

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM H – MISCELLANEOUS REQUIREMENTS				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Auditing	H-2	Accommodate random audits on electronic voting and tabulation devices.	1	All Dominion Voting systems are available for random audits.
Auditing	H-3	Accommodate random audits on paper vote capture and tabulation devices.	1	All Dominion Voting systems are available for random audits.
Auditing	H-4	Log all activity on voting equipment including: when turned on/off, any errors, power failure, power restoration, when an error occurred and when an error was resolved.	1	The Dominion Voting Democracy Suite Election Management System (EMS), the ImageCast Evolution (ICE), and the ImageCast Central (ICC) are all fully compliant with this requirement.
Auditing	H-5	Run real time reports, when needed.	1	The Dominion Voting Democracy Suite Election Management System (EMS), the ImageCast Evolution (ICE), and the ImageCast Central (ICC) are all fully compliant with this requirement.
Auditing	H-6	Run post-election diagnostics on all auditable equipment in a manner that does not endanger the integrity of the election record. <b>Note:</b> Please explain your system's post-election diagnostic capabilities.	1	The Dominion Voting Democracy Suite Election Management System (EMS), the ImageCast Evolution (ICE), and the ImageCast Central (ICC) are all fully compliant with this requirement.  All systems have the ability to produce diagnostic reports based on supportable features for the applicable product on demand.
Auditing	H-7	Provide for adequate information to facilitate a recount under Colorado law.	1	The Dominion Voting Democracy Suite Election Management System (EMS), the ImageCast Evolution (ICE), and the ImageCast Central (ICC) are all fully compliant with this requirement.
Auditing	H-8	Have a permanent paper record of each vote for audit purposes.	1	Dominion's system is paper-based and the paper ballots used in the election constitute the permanent paper record.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM H – MISCELLANEOUS REQUIREMENTS				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Auditing	H-9	<p>Support a Risk Limiting Audit, as defined in section 1-7-515(5)(b), C.R.S. sufficient to audit the functionality of electronic and paper vote capture as well as vote tabulation devices.</p> <p><b>Note 1:</b> Please describe how your proposed system supports the execution of a Risk Limiting Audit.</p> <p><b>Note 2:</b> Does your solution place unique identifying numbers on ballots as they are scanned?</p> <p><b>Note 3:</b> Section 1-7-515, C.R.S. stated that Colorado must begin risk-limiting audits in 2014, but was revised in the 2013 session to extend the start of the requirement to 2017.</p>	1	<p>The Dominion Voting Democracy Suite Election Management System (EMS), the ImageCast Evolution (ICE), and the ImageCast Central (ICC) are all fully compliant with this requirement.</p> <p>Note1: The AuditMark – a summary of how the tabulator interpreted the vote on the ballot appended to each scanned ballot image – facilitates Risk Limiting Audits, by providing a simple and clear cast vote record of one, for each and every ballot.</p> <p>Note 2: No distinct marks are added to the ballots as they are scanned on the ImageCast Evolution. A timestamp and tabulator number are added to ballots scanned through the ImageCast Central system.</p>
Auditing	H-10	Incorporate a real time clock as part of the system hardware and all audit log record entries shall include a date/time stamp.	1	The Dominion Voting Democracy Suite Election Management System (EMS), the ImageCast Evolution (ICE), and the ImageCast Central (ICC) are all fully compliant with this requirement.
Auditing	H-11	Use a real time clock that will continue to run during a power loss.	1	The Dominion Voting Democracy Suite Election Management System (EMS), the ImageCast Evolution (ICE), and the ImageCast Central (ICC) are all fully compliant with this requirement.
Auditing	H-12	<p>Print audit reports on the standard system hardcopy output device when the following conditions are met:</p> <ol style="list-style-type: none"> <li>The generation of an audit trail report does not interfere with the production of other output reports.</li> <li>The entries can be identified so as to facilitate their recognition, segregation and retention.</li> <li>The physical security of the audit record entries can be ensured.</li> </ol>	1	The Dominion Voting Democracy Suite Election Management System (EMS), the ImageCast Evolution (ICE), and the ImageCast Central (ICC) are all fully compliant with this requirement.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM H – MISCELLANEOUS REQUIREMENTS				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Auditing	H-13	Create audit records during the election definition and ballot preparation phases showing completion of the baseline ballot layouts and any modifications to them, a description of the modifications and a date/time stamp.	1	The Dominion Voting Democracy Suite Election Management System (EMS) is fully compliant with this requirement.
Auditing	H-14	Create audit records during the pre-election phase that include electronic and manual data entered and maintained by election personnel, election definitions, instances of all final ballot layouts and the ballot preparation edit event log.	1	The Dominion Voting Democracy Suite Election Management System (EMS) is fully compliant with this requirement.
Auditing	H-15	Create audit records prior to the initiation of ballot counting to verify hardware and software status. These particular audit records shall include the identification of the software release, the identification of the election to be processed and the results of hardware and software diagnostic tests.	1	The Dominion Voting Democracy Suite ImageCast Evolution (ICE) and ImageCast Central (ICC) are both fully compliant with this requirement.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM H – MISCELLANEOUS REQUIREMENTS				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Auditing	H-16	<p>Create in-process audit records containing data documenting system operation during diagnostic routines and any machine generated error and exception messages. Examples of these audit records include:</p> <ul style="list-style-type: none"> <li>a. System startup diagnostic and status messages.</li> <li>b. Checks that pre-count reports show zeroes.</li> <li>c. The source and disposition of system interrupts resulting in entry into exception handling routines.</li> <li>d. All messages generated by exception handlers.</li> <li>e. The identification code and number of occurrences for each hardware and software error or failure.</li> <li>f. All operator actions.</li> <li>g. Notification of system login or access errors, file access errors and physical violations of security.</li> <li>h. Other exception events such as power failures, failure of critical hardware components, data transmission errors, and other types of operating anomalies.</li> </ul>	1	The Dominion Voting Democracy Suite Election Management System (EMS), the ImageCast Evolution (ICE), and the ImageCast Central (ICC) are all fully compliant with this requirement.
Auditing	H-17	Provide an in-process audit report, for post-election use, consisting of data containing a record when each vote is initiated and each ballot is cast.	1	The Dominion Voting Democracy Suite ImageCast Evolution (ICE) and ImageCast Central (ICC) are both fully compliant with this requirement.

SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM H – MISCELLANEOUS REQUIREMENTS				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Auditing	H-18	<p>Print reports necessary to assist election officials in performing a manual count as required by Colorado election law and rules.</p> <p><b>Note 1:</b> Please explain how your proposed system can create the reports necessary to allow election officials to perform and validate a manual count.</p> <p><b>Note 2:</b> Please explain how, in the case of a recount, the election can be reconstructed ballot by ballot, while still maintaining voter privacy.</p>	1	<p>The Dominion Voting Democracy Suite Election Management System (EMS), the ImageCast Evolution (ICE), and the ImageCast Central (ICC) are all fully compliant with this requirement.</p> <p>The ImageCast Evolution (ICE) prints a results tape at the end of the polling day, along with the reports generated in Results Tally &amp; Reporting (RTR), that can separate and/or aggregate results coming from the ICE and ImageCast Central (ICC).</p> <p>Counting each ballot manually does not degrade voter privacy during this process.</p>
Auditing	H-19	Record audit log entries onto durable non-volatile storage.	1	The Dominion Voting Democracy Suite Election Management System (EMS), the ImageCast Evolution (ICE), and the ImageCast Central (ICC) are all fully compliant with this requirement.
Auditing	H-20	Export audit logs in formats suitable for use by elections officials and the public including common electronic formats (PDF, Excel, CSV, TXT, EML).	1	The Dominion Voting Democracy Suite Election Management System (EMS) is fully compliant with this requirement.
Certification	H-21	<p>Be certified or certifiable by the EAC, another state, or Colorado.</p> <p><b>Note 1:</b> If not certified, please explain.</p> <p><b>Note 2:</b> See section 1-5-601.5, C.R.S. for Colorado voting system certification compliance with federal regulations. RFP section 5.3.11 has a question on certification status of vendor proposed solutions.</p>	1	<p>Dominion's Democracy Suite 4.6 and 4.14 are certified by EAC to VVSG 2005 standards.</p> <p>Dominion is providing certification documents (federal and state) in Appendix 4 and 5.</p>



SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM H – MISCELLANEOUS REQUIREMENTS				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Testing	H-22	Be configurable so as to be capable of performing the following functions on all system hardware/software, in compliance with current Colorado statutes and rules: a. Hardware test b. Logic and Accuracy Test c. Post-Election Audit d. Pre-Recount Logic and Accuracy Test e. And capable of performing the Colorado Risk Limiting Audit commencing no later than 2017.	1	The Dominion Voting Democracy Suite Election Management System (EMS), the ImageCast Evolution (ICE), and the ImageCast Central (ICC) are all fully compliant with this requirement.
Testing	H-23	Allow authorized user creation of scripted simulation Logic and Accuracy tests with various patterns (e.g. 1,2,3 or 1,1,1 or 1,2,3,4,5...). <b>Note:</b> Please explain how your system allows for pre-determined simulation for creating test ballots and electronic voting equipment test input.	1	The Dominion Voting Democracy Suite Election Management System (EMS) is fully compliant with this requirement.  The EMS can generate pre-marked ballots with various prescribed patterns and corresponding results, that can create this scripted simulation environment.
Testing	H-24	Have the capability to test ballot layouts to verify the allowable number of votes for a contest or question and the combinations of voting patterns permitted or required by the using jurisdiction.	1	The Dominion Voting Democracy Suite Election Management System (EMS) is fully compliant with this requirement.  The EMS can generate pre-marked ballots with various prescribed patterns and corresponding results, that can create this scripted simulation environment.
Testing	H-25	Provide capability to permit diagnostic testing of all the major components within each electronic vote capture device.	1	The Dominion Voting Democracy Suite ImageCast Evolution (ICE) and ImageCast Central (ICC) are both fully compliant with this requirement.
Testing	H-26	Ensure non-contamination of voting data through tests of all data paths and memory locations to be used in actual vote recording.	1	The Dominion Voting Democracy Suite Election Management System (EMS), the ImageCast Evolution (ICE), and the ImageCast Central (ICC) are all fully compliant with this requirement.



SYSTEM REQUIREMENTS TABLE for the COLORADO UNIFORM VOTING SYSTEM H – MISCELLANEOUS REQUIREMENTS				
Requirement Sub-Category	Req. ID	UVS Requirement (The System will ...)	Response Code	Vendor Response
Testing	H-27	Provide evidence in an audit record that test data has been expunged.	1	The Dominion Voting Democracy Suite Election Management System (EMS), the ImageCast Evolution (ICE), and the ImageCast Central (ICC) are all fully compliant with this requirement.
Testing	H-28	Allow the ability to load and test audio ballots in electronic vote capture equipment.		The Dominion Voting Democracy Suite ImageCast Evolution (ICE) is fully compliant with this requirement.
Testing	H-29	Provide the ability to print all necessary reports for proofing the results of logic and accuracy testing.	1	The Dominion Voting Democracy Suite Election Management System (EMS) is fully compliant with this requirement.
Security	H-30	Provide an environment whereby all databases and data are maintained with provisions for operational security, access control and auditability. <b>Note 1:</b> Please describe the authentication protocols for access to the EMS database and your system's processes for providing operational security and auditability. <b>Note 2:</b> System security must not obstruct authorized access to event or audit logs, and printing or exporting of reports.		The Dominion Voting Democracy Suite Election Management System (EMS), the ImageCast Evolution (ICE), and the ImageCast Central (ICC) are all fully compliant with this requirement.  For security protocols/information, please see answer below.  System security does not prevent or obstruct authorized access to event or audit logs, and printing or exporting of reports.

### Overview

Dominion implements security protocols that meet or exceed EAC VVSG 2005 requirements. All of Dominion's security protocols are designed and implemented to stay current with the rapidly evolving EAC security requirements set forth by various iterations of the VVSG.

Dominion's security technology is unprecedented insofar as it takes into account every aspect and every component of the Democracy Suite platform. This includes – but is not limited to – the full encryption of election projects, iButton security keys, Compact flash cards, election data, software applications, elections results files, and data transmission.

### Maintaining Data Integrity

Data generated by the Democracy Suite platform is protected by the deployment of FIPS-approved symmetric AES and asymmetric RSA encryption. The Democracy Suite Election Management System uses these techniques to encrypt election files prior to their use on ImageCast tabulators. Once the polls have been closed, the ImageCast tabulators encrypt all of

the results files prior to transmitting them back to EMS.

SHA-256 hashes are used for all data integrity and verification. Should an intrusive process or altering of any file occur, hash values will be, in turn, altered as well. With that said, any presence of an intrusive process will be detected, as the hashes of any altered data will not match the value initially determined expected values.

### EMS Security

To protect from modification of software by malicious users, the Democracy Suite Election Management System integrates the Microsoft .NET Framework code signing process, within which, Dominion Voting digitally signs every executable and library (DLL) during the software build procedure. After the installation of Election Management software, only successfully verified EMS software components will be available for use. Digital signature verification is performed by the .NET Framework runtime binaries. If a malicious user tries to replace or modify any EMS executables or library files, the digital signature verification will fail and the user will not be able to start the EMS application.

### Role-based access controls

The Dominion Democracy Suite system integrates a role-based access control system for all software and hardware components. Users can belong to only one role, where each role has a set of clearly defined permissions within the system. This access control approach provides authentication and authorization services and can be granular according to jurisdiction's needs and organization. Complete user and role membership management is integrated within the Democracy Suite EMS Election Event Designer client application.

The Democracy Suite EMS platform implements role-based user management for provisioning access control mechanisms on each election project. Each user accessing the system is the member of one of the predefined or custom-made roles. Each role has its own set of permissions, or actions that users of that role are allowed to perform. Managing access control policies is integrated within the User Management activity of the EMS EED client application. This activity is permitted only for users with administrative privileges.

### Hardware Access Controls

Democracy Suite utilizes hardware-based security tokens (iButton security keys) in the process of access control for ImageCast Precinct and ImageCast Evolution tabulators. These password paired hardware tokens contain data encryption information used in the voting process (encryption and signing keys). Without a valid security token, and paired access password, the administrative functions of election tabulators are effectively locked.



The poll worker applies his/her iButton security key to the tabulator to access various

### Communications

For communication channels (as well as data storage) a combination of security techniques for data integrity, authenticity and confidentiality is implemented. By utilizing FIPS-140 level 2 approved algorithms, these requirements are met. The Dominion Democracy Suite

integrates AES or RSA encryption algorithms for data confidentiality, along with SHA-256 and HMAC digital signatures for data signing (data authenticity and integrity). The system does not require external Internet connections.

### Effective Password Management

Proper password management requires multiple activities and controls, namely:

- Input data validation
- Data quality
- Utilization of one-way (hash) cryptography
- Computer generated passwords for greater entropy and protection from dictionary attacks
- Different password strength profiles for different user levels
- Utilization of hardware tokens for storing user credentials (two-level authentication security: something you know and something you have)
- User state machine (initial, active, inactive)

All of these activities and controls are integrated within the Democracy Suite platform. Dominion utilizes authentication and authorization protocols that meet EAC VVSG 2005 standards. In addition, Dominion's solution relies on industry-standard security features to ensure that the correct users based on a user role or group are granted the correct privileges. Finally, each jurisdiction is responsible for ensuring that only authorized personnel have access to both the system and tools used for installation and configuration purposes. All back end system, and tabulator operations are continuously and completely logged at all times to maintain a complete record of all election-related processes.

		Mode 1- Symmetric Crypto	
File Type	Storage Place	Confidentiality	Integrity
Election files (ICP) and election database (ICE), DCF (ICP) and MBS (ICE), result files (ICP/ICE)	NAS and Compact Flash	AES-128/256	HMAC (SHA-256)
Reports and Logs	NAS and Compact Flash	AES-128/256	HMAC (SHA-256)
Ballot Images	NAS and Compact Flash	-	HMAC (SHA-256)
Ballot Layout Definition (XML)	NAS and Compact Flash	-	HMAC (SHA-256)
Official Ballots	NAS	X.509 Digital Certificate	
User Credentials	iButton	HMAC (SHA-256)	HMAC (SHA-256)

### File Type to Security Algorithmic Mappings

Security	H-31	Require two factor authentication for access to the EMS and all tabulation equipment. This means an authorized user will need a physical device (e.g. token, card) and something memorized (e.g. password) to access the software or equipment.	1	<p>The Dominion Voting Democracy Suite ImageCast Evolution (ICE) is fully compliant with this requirement.</p> <p>Dominion's systems implement proper password management, which requires multiple activities and controls, namely:</p> <ul style="list-style-type: none"> <li>- Input data validation</li> <li>- Data quality</li> <li>- Utilization of one-way (hash) cryptography</li> <li>- Computer generated passwords for greater entropy and protection from dictionary attacks</li> <li>- Different password strength profiles for different user levels</li> <li>- Utilization of hardware tokens for storing user credentials (two-level authentication security: something you know and something you have)</li> <li>- User state machine (initial, active, inactive)</li> </ul>
Security	H-32	<p>Allow tamper evident seals to be placed on all equipment doors, openings, and data access points such that unauthorized access is either prevented or clearly indicated by the damage to or destruction of a seal.</p> <p><b>Note:</b> Please describe the security offered by your proposed system relating to tamper evident seal placements.</p>	1	<p>The Dominion Voting Democracy Suite ImageCast Evolution (ICE) is fully compliant with this requirement.</p> <p>The following physical security mechanisms are integrated within the tabulator devices:</p> <ul style="list-style-type: none"> <li>• Tamper-proof screws are used for all external fixturing.</li> <li>• Each device door is secured with an appropriate locking mechanism (hasp-type for either physical locks or tamper seals and security screws).</li> <li>• Built-in circuits on the motherboard are powered by a coin cell, with a microprocessor to separately record every instance where the unit is physically opened. Each tamper switch is tripped when the protected devices access door is opened. There are eight such switches positioned inside the machine.</li> <li>• The ballot box has its own locks for each of the ballot box compartments.</li> </ul>

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Security	H-33	Allow all access points to equipment to be visible and subject to oversight of seals, unless the access point is behind doors or a cover. Access points that are not visible should also accommodate tamper evident seals.	1	The Dominion Voting Democracy Suite ImageCast Evolution (ICE) is fully compliant with this requirement.
Security	H-34	Report unauthorized modifications to audit data or audit logs. <b>Note:</b> Please explain your system's capabilities to restrict user authorizations and access rights for creating, reading, modifying, and deleting audit data or logs.	1	<p>The Dominion Voting Democracy Suite Election Management System (EMS), the ImageCast Evolution (ICE), and the ImageCast Central (ICC) are all fully compliant with this requirement.</p> <p>Role-based access controls The Dominion Democracy Suite system integrates a role-based access control system for all software and hardware components. Users can belong to only one role, where each role has a set of clearly defined permissions within the system. This access control approach provides authentication and authorization services and can be granular according to jurisdiction's needs and organization. Complete user and role membership management is integrated within the Democracy Suite EMS Election Event Designer client application.</p> <p>The Democracy Suite EMS platform implements role-based user management for provisioning access control mechanisms on each election project. Each user accessing the system is the member of one of the predefined or custom-made roles. Each role has its own set of permissions, or actions that users of that role are allowed to perform. Managing access control policies is integrated within the User Management activity of the EMS EED client application. This activity is permitted only for users with administrative privileges.</p>
Security	H-35	Allow for installation and auditing of a Trusted Build per Colorado Election Rules.	1	The Dominion Voting Democracy Suite Election Management System (EMS), the ImageCast Evolution (ICE), and the ImageCast Central (ICC) are all fully compliant with this requirement.

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Documentation	H-36	Include a clear set of documented instructions for election judges to set up voting equipment. These instructions should be modifiable by county personnel.	1	Dominion understands and will comply with this requirement.
Documentation	H-37	Include documented instructions for troubleshooting any voting equipment issues that may arise.	1	Dominion understands and will comply with this requirement.
Documentation	H-38	Include a complete set of User and Technical documentation.	1	Dominion understands and will comply with this requirement.
Documentation	H-39	Include current certification documentation and VSTL and/or state test reports.	1	Dominion understands and will comply with this requirement.

## Appendix 1 – Sample Hardware Maintenance Agreement

## Appendix 2 – Sample Software License Agreement



## Appendix 3 – Sample Security Auditing Procedures

## Appendix 4 – EAC VVSG 2005 Certificate

## Appendix 5 – State Certifications