

# Dominion Response to Questions from Boulder & Pitkin Counties

### **Boulder County**

## Do you know if any system can do a 11by 17 page ballot. We have had to use an 11 by 17 in ballot in most even year elections.

Dominion's Democracy Suite is a flexible and efficient integrated Elections System. The Democracy Suite Election Management System can handle ballots which are 8.5" in width and up to 22" in length. In our extensive experience, this provides enough area for the vast majority of our customers to create ballots with a single card. If more area is needed, the system can seamlessly generate multiple ballot cards where necessary. Additionally, our EMS allows for fully customized naming and numbering of all ballot pdfs within the election.

How does the audio and print database fit together? Do you have to have the audio completed before you can finalize the database? Can you create a separate database for the accessible voting with audio and the paper database and easily combine the results? For long ballots, having to wait for audio in the already very tight timelines can cause significant delays in the process

As our solution is an integrated solution, audio content can be generated dynamically with ballot content. Pre-recorded content can also be batch loaded through the system efficiently. Our benchmark testing has shown that audio content for large-scale elections can be generated in a matter of minutes, providing for last minute generation of audio content with ballot content changes. As this data can be generated quickly, there is no need to provide a separate processing step when generating ballot content.

## Can any of the systems scramble ballot images upon export? If they can, scrambling the images would increase anonymity and reduce cost in make exporting the images for public.

As the proposed DVS solution provides for central scanning of all ballot images, there is no need for the scrambling of ballot image data if this data is released to the public. By definition, the ballots as they are fed are suitably randomized fully protecting voter privacy.

#### For all systems how is the image tied to the ballot? Seems like most rely on keeping them in order

Our patented AuditMark technology fully supports Risk Limiting Audits in conjunction with our digital export of all Cast Vote Record data. Each Cast Vote Record is tied directly to each image captured by the system. Each image is labeled with the tabulator, batch, and sequence number within the batch which corresponds to the physical ballot in the stack. The AuditMark is appended directly to the image showing how the vote was interpreted at scan time. This AuditMark will also include any adjudications applied to the ballot for voter intent. Even if ballots for a given batch are mixed after scanning, these multiple records provide a way of correlating the digital Cast Vote Record data to the image scanned and finally to the physical paper ballot.



We demonstrated this multiple times during the post-Election canvass process during the Denver election.

#### What are the projected lifespans for each of the systems?

Finally, with a minimum projected life-span of 10 years, we are confident that the proposed DVS solution is capable of meeting all future needs of the counties in Colorado, from the smallest to the largest county.

#### Can images be exported to use in any BOD system?

Our Democracy Suite ballots have interfaced with a variety of on-demand ballot printing solutions, including our own Mobile Ballot Printing module. Dominion is willing to work with the current state vendor to provide this service to the counties. The vendors qualified to print Dominion ballots within a VSPC are subject to a printing qualification process conducted by Dominion for quality assurance.

Can ballot name be custom edited to include district style and precinct in all systems? We name the styles in a way to make it very easy for judges to tell what ballot they are giving a voter

Democracy Suite allows for fully customized naming and numbering of all ballot pdfs within the election.



### <u>Pitkin County</u>

## *Ease in handling SCORE data integration with the system, and working with excess information from SCORE. Is the ballot style naming flexible with SCORE, especially with Everyone Counts.*

Democracy Suit is fully integrated with SCORE for importing the election definition utilizing the SCORE GEMS export. Democracy Suite allows for fully customized naming and numbering of all ballot pdfs within the election.

#### Programming precinct based elections versus style based.

Yes, Democracy Suite is capable of programming both precinct-based and style-based elections.

Ease in layout capability; i.e., editing, spacing between columns, no candidates for a listed race and does the race look similar on the ballot vs. ADA voting device, allow space/characters text for endorsements (candidates pledges to run only one term), are there character limits, can ballot footers be customized or removed, ability to edit again once generated, etc.

The Election Event Designer (EED) module of the Democracy Suite EMS makes it easy to make corrections to programming/ballot layout and it features an advanced ballot styling engine, allowing all text presented on the ballot to be customized, such as candidate names, party affiliation, designations, office titles, office headings, ballot headers and footers, number of desired columns and the space between these, instructions, and ballot question language. At the moment of editing and creating a ballot, the character limit on words is only limited by the size of the ballot. This module permits new ballot proofs to be generated quickly and accurately. PDF's can be generated by precinct or ballot style (at the request of the user), and will be generated in database order front followed by back. Ballots can be edited and generated as many times as necessary.

EED incorporates full RTF (Rich Text Format) support, allowing the display of any element that can be included in Microsoft Word including symbols, tables, images/vignettes, numbering and bullet points.

#### *Can a nonpartisan primary ballot be programmed? (Home Rule Charter)*

Yes

# Does the ADA compatible equipment offer flexibility in programming the template features of the audio ballot; including, the ability to speed up, slow down, and pause the audio as the voters needs necessitate.

The proposed accessible voting system options accommodate visually impaired voters by presenting the ballot in audio format during an accessible voting session. The Democracy Suite Election Event Designer module uses a third-party text-to-audio synthesizer to automatically generate audio ballots for the ImageCast X. Users also have the option to import human-recorded audio, with or without the help of the Audio Studio application, or fine tune pronunciation of the synthesized audio using the third-party application. The system outputs audio ballots (PNG images, SPX audio files and XML definition files), definition reports (XML, Excel or HTML files), and election definition files required to program the ImageCast X.



The ImageCast X 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.

Full audio control is also available to the accessible-needs voter. Both volume and speed can be separately controlled through the ImageCast X User-Interface, or through our ATI or adaptive device like sip and puff, or paddles.

#### Provisional ballot programming and processes.

Yes, Democracy Suite allows for provisional ballot programming, following current state guidelines.

## How does the system handle multi-page ballots in an election; i.e., scanning, images, audits, etc.; and, what is the largest ballot paper size that can be produced.

The ImageCast Central is capable of scanning one-sided, two-sided and multiple-page ballots while recording the event as one ballot cast. The ImageCast Central results report will show two totals - one showing the total number of ballot cards cast (in the case of multi-page ballots) and the other showing the total number of voters. 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. The tabulator will read all valid ballot cards, regardless of the order in which they are cast.

The Dominion Voting Systems Democracy Suite product is a flexible and efficient integrated Elections System. The DVS election management system can handle ballots which are 8.5" in width and up to 22" in length.

#### Suppressing outcomes during tabulation due to death or withdrawal.

Yes, Democracy Suite is capable of suppressing outcomes during tabulation due to death or withdrawal.

## What stopgaps are in place to prevent reprogramming of the election database after media has been downloaded; and, stopgaps to separate the upload of media and tabulation of results.

All election files are signed and encrypted. If data is changed after the fact, the system can be configured to invalidate the previous keys. This prevents uploading inconsistent data. There are strong process workflow controls in the EMS that lock the database and associated activity once tabulators are programmed. Democracy Suite requires administrative override to revert the project from the "Ready for Elections" state in order to make any changes to the election definition.

For reporting, Democracy Suite has strong workflow controls in place that require results to be uploaded into the system. Once uploaded, these results will not show on reports until the data is first validated (this provides an opportunity for administrative review), and then a second step to "publish" the results. Not until the results are published can any reports with vote totals be generated.



#### Does the system provide various levels of administrative restrictions for authorized users.

The Democracy Suite system allows system administrators to establish different levels of user permissions through defined user-roles. 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. This access control approach provides authentication and authorization services and can be granular according to the jurisdiction's needs and organization. Complete user and role membership management is integrated within the Democracy Suite EMS Election Event Designer (EED) client module.

The Democracy Suite EMS platform implements role-based user management for provisioning access control mechanisms on each election project. Managing access control policies is integrated within the User Management activity of the EMS EED module. This activity is permitted only for users with administrative privileges.

#### Capability in extracting various types of reports.

Dominion Voting's election management system provides a high degree of flexibility in the design of election reports.

#### Default reports include:

- **Results per Precinct report**, which presents the overall number of votes received per precinct, as well as the number of votes received for each choice per Precinct;
- **Contest Overview Data report**, which presents the subdivision name and number of closed precincts (out of the total number of precincts in the project), the number of candidate positions (vote for number), the total number of cast ballots, and the number of undervoted and overvoted ballots. The report also specifies if a contest is acclaimed or disabled. In addition, the report presents the number of votes for each candidate, including a political party breakdown of these votes;
- **Canvass report**, which represents the turnout number. It lists the number of ballots cast, the total number of eligible voters, and the number of electors that voted per precinct with a breakdown of the counting and elector groups;
- **Provisional or Challenged status report**, which presents tabulator id, batch id, record id, result state;
- Locate Scanned Ballots report, presents located scanned ballots;
- *Number of Write in on Ballot report,* presents location name, location number, tabulator and write in number;
- **Registration and Turnout report**, presents reported and not reported precincts, registration, ballot cast and turnout.
- Contests on Margin report, lists the contests where the difference between the



first and the chosen candidate next below it's less than or equal to a given margin of votes;

- Tabulator Status report, presents tabulator id, name, load status and total ballot cast.

These default reports contain a set of filtering parameters, including counting group, tabulator, polling location, contest, subdivision type, etc. In other words, if a value is selected from the filtering options, a report will be created for these exact parameters. This flexibility allows comprehensive reporting capability.

The EMS can also produce:

- **Election Summary Report**, displays election results by race, and is summarized across the jurisdiction. The information on these reports includes the number of ballots cast, and the number of undervotes, overvotes, blank votes, and double votes.
- Statement of Votes Cast Report, provides election officials with the detailed results of an election. These reports are generated on a contest-by-contest basis and include the number of registered voters, the number of ballots cast, the voter turnout percentage, the vote totals for each candidate, and the number of write-ins, undervotes, and overvotes.
- Card Cast Report, displays the number of ballots cast in the election by both report precinct and voter group. The report also contains information regarding registered voters and voter turnout. Information on these reports include the vote center ID, vote center export ID, vote center label, report precinct ID, report precinct export ID, report precinct label, card number, and the card count.

User-controlled parameters are used to generate each of these reports.

The EMS can also generate exports compatible with the Colorado State reporting system.

## Scanning equipment - does the system assure issues are resolved before judges proceed, therefore assuring elections balance.

The ImageCast Central will notify the user if there is a paper jam or a ballot that cannot be read (for example, if the ballot is torn or the timing marks are damaged). The ImageCast Central will provide on-screen instructions on how to resolve the issue.

In addition, the ImageCast Central system will identify ballots that are unreadable due to ambiguous marks and send them directly to ImageCast Adjudication for review.

Safeguards to assure judges program the correct ballot style.

The ImageCast X server interfaces with SCORE to make ballot style selection easy and accurate.