ClearVote 2.3

ClearCount Reporting Guide

ClearCount Reporting Guide

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Table of contents

Preface

This section defines the purpose of this document.

About this document

This document provides descriptions of the various reports available within the ClearCount system.

Scope of this document

This document covers all ClearCount reporting methods, which include:

- Chapter 1. Overview
- Chapter 2. Web reports
- Chapter 3. PDF reports
- Chapter 4. Exported reports

The information for each reporting method provides all necessary concepts, instructions, and detailed descriptions for its use.

Intended audience

This document is for election officials and election staff who are responsible for operations and maintenance before, during, and after an election. Clear Ballot personnel also use this document to support election officials and election staff.

Conventions

This section describes conventions used in this document.

References to ClearVote products

A ClearVote® system can comprise the ClearAccess®, ClearCast®, ClearCount®, and ClearDesign® products. Jurisdictions are not required to purchase all products. You can ignore references to any ClearVote products that are not part of your voting system. Also ignore implementation options that are not relevant to your policies and procedures.

BDF and ADF

ClearAccess imports an election definition contained in an accessible definition file (ADF) created by ClearDesign. ClearCount and ClearCast import an election definition contained in a ballot definition file (BDF) created by ClearDesign.

Versions of ClearDesign earlier than 2.0 created unencrypted ADFs and BDFs. ClearDesign 2.0 and later versions produce encrypted ADFs and BDFs. You can distinguish between unencrypted and encrypted ADFs and BDFs by the ending of the filename.

File type	Filename ends in
Unencrypted accessible definition file	adf.zip
Encrypted accessible definition file	adfx.zip
Unencrypted ballot definition file	bdf.zip
Encrypted ballot definition file	bdfx.zip

In this document, the general terms ADF and BDF can refer to both the unencrypted and encrypted versions of these files.

For the specifics of the ADF and BDF file formats, see the following:

- *ClearDesign Accessible Definition File Guide*
- *ClearDesign Ballot Definition File Guide*

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If you have questions about using your product, contact your Clear Ballot representative.

Chapter 1. Overview

The ClearCount system provides a variety of reports in several formats for communicating election data. Report data is stored on the CountServer, but access to all reports occurs via a CountStation.

There are three formats of ClearCount reports listed in Table 1-1.

Table 1-1. ClearCount report formats

Report format	Description
Web reports (page 19)	Customizable operational and results reports that are viewed via browser pages, and can be copied, saved and printed
PDF reports (page 68)	Customizable results reports that are viewable and downloadable as PDF files
Exported reports (page 81)	Reports that are only viewable after downloading

1.1 Logging in as a report user

To log in to the ClearCount system as a report user:

1. (If necessary) Obtain the following information from your ClearCount administrator:

   • The address (URL) of the ClearCount CountServer

   • Your user name and password

2. Log in to a CountStation, open a browser window and enter the provided URL for the CountServer into the address field. The Clear Ballot Login dialog appears (Figure 1-1).
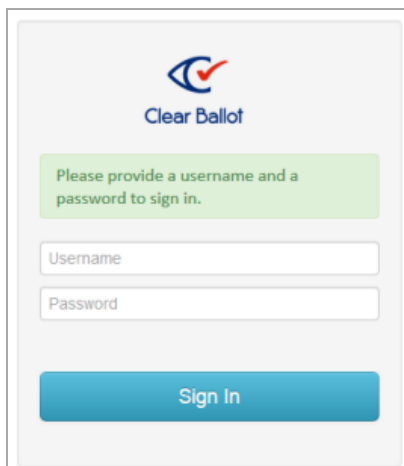
Figure 1-1. Clear Ballot Login dialog

3. In the User name field, enter your assigned case-sensitive user name.

4. In the Password field, enter your assigned case-sensitive password.

5. Click **Sign in**. The Election Index page (page 11) displays a list of the elections that currently reside on the CountServer.

6. From the Election column, select the election you want to view. The Dashboard (page 12) appears.

1.2   Election Index

The Election Index (Figure 1-2) provides access to all elections with data currently residing on the CountServer. You can select any election to view its details, and the Dashboard (page 12) for that election appears in its own browser tab.

Figure 1-2. Election Index (default columns shown)

> **Note**:   All links on the Election Index open web reports. Click the **Show/Hide Columns** button to select data to display.

Access

The Election Index appears when you log in to a CountStation.

Data

Data for each election appears in a table that has the columns listed in Table 1-2.

Table 1-2. Data for each election in the Election Index

Column	Description
Election	Name of an election whose data resides on the CountServer. Opens the Dashboard for that election.
Images	Total number of images scanned for the election to date.
Cards	Number of cards scanned for the election to date, not including those judged to be nonballots. Opens the Card Images report (page 21).
Unreadable	Number of scanned cards requiring manual resolution. Opens the Card Images report.
% (Unreadable)	Percentage of scanned cards requiring manual resolution.
Unresolved	Number of unreadable cards awaiting manual resolution. Opens the Card Images report.
% (Unresolved)	Percentage of scanned cards requiring manual resolution.
Boxes	Number of boxes scanned for the election. Opens the Card Inventory report (page 25).
Precincts	Number of precincts involved in the election.
ScanStations	Number of ScanStations involved in the election. Opens the ScanStation report (page 43).
Ballot Type	Ballot type for the election.
Phase	Current phase of the election (Scanning, Reviewing, or Closed).
Scan Date	Date when scanning occurred or started (yyyy-mm-dd).
Tabulation Date	Date when tabulation occurred or started (yyyy-mm-dd).

1.3 Dashboard

For each election, the ClearCount system displays a Dashboard that summarizes some key statistics about the election operations (Figure 1-3). The Dashboard also provides a drop-down menu in its title bar for accessing several election reports.

Figure 1-3. Dashboard

The remainder of this topic describes the sections of the Dashboard.

1.3.1 Election Data section (Dashboard)

The Election Data section of the Dashboard provides basic information about the election listed in Table 1-3.

Table 1-3. Contents of the Election Data section of the Dashboard

Field	Description
Election phase	Current phase of the election (Scanning, Reviewing, or Closed).
Ballot type	Ballot type for the election.
Approximate ballot image dimensions	Height and width of the card style in inches.
# Card styles	Number of card styles for the election. Opens the Card Styles report (page 31).
# Contests	Number of contests in the election. Opens the Contests report (page 33).

Table 1-3. Contents of the Election Data section of the Dashboard (continued)

Field	Description
# Choices	Number of choices in the election.
# Parties	Number of parties represented in the election.
# Counter groups	Number of counter groups represented in the election. Opens the Statement of Cards Cast with Counter Groups report (page 46).
# Precincts	Number of precincts participating in the election. Opens the Statement of Cards Cast with Precincts report (page 47).
# Precincts and card styles	Number of unique combinations of precinct and card styles. Opens the Precinct Election District and Card Style report (page 42).

Note: With the exception of the number in the # Precincts and card styles row, each of these values is filled out at the start of the election and does not change over the course of the scanning operation. As cards from precincts are scanned, the value in the # Precincts and card styles row increases until at least one card from each of the precincts is scanned.

1.3.2 Ballot-Scanning Operations section

The Ballot-Scanning Operations section of the Dashboard provides details about the scanning operation and access to the cards scanned for an election. Table 1-4 lists data contained in the Ballot-Scanning Operations section.

Table 1-4. Contents of the Ballot Scanning Operations section of the Dashboard

Field	Description
Scan date	Date when scanning occurred or started (yyyy-mm-dd).
Tabulation date	Date when tabulation occurred or ended (yyyy-mm-dd).
Tabulator software version	Version of BallotTabulator.exe. Value is an identifier.
# Scanners	Number of scanners used for the election. Opens the ScanStation report (page 43).
# Boxes scanned	Number of boxes of cards scanned for the election. Opens the Card Inventory report (page 25).

Table 1-4. Contents of the Ballot Scanning Operations section of the Dashboard (continued)

Field	Description
# Cards automatically adjudicated	Number of cards scanned for the election without need for manual resolution (unreadable cards are not included). Opens the Card Images report (page 21).
# Pages judged to be nonballots	Number of nonballot cards scanned for the election. This count includes target cards, as well as any stray or extraneous pages included in the ballots. Opens the Card Images report (page 21).
# Unreadable cards (*n*% rate)	Number and overall percentage of cards that require review because the system cannot read them for reasons such as stains, tears, folded corners, and scanner misfeeds. Opens the Card Images report (page 21).
# Pages scanned (ballots and nonballots)	Total number of pages scanned. Opens the Card Images report (page 21).
# Cards that are fully blank	Cards with no ovals marked. Opens the Card Images report (page 21).

1.3.3 Visual Resolution of Unreadable Cards section

The Visual Resolution of Unreadable Cards section of the Dashboard provides details about the cards that the ClearCount system is initially unable to tabulate. Information includes current resolution status data.

In an election where all cards are properly scanned and automatically analyzed, the Visual Resolution of Unreadable Cards section contains only zeroes.

Table 1-5 lists the data contained in the Visual Resolution of Unreadable Cards section of the Dashboard.

Table 1-5. Contents of the Visual Resolution of Unreadable Cards section of the Dashboard

Field	Description
Unreadable card images needing resolution	Number of initially unreadable cards that remain unresolved. Opens the Card Resolutions report (page 28).
Unreadable cards resolved & adjudicated	Number of initially unreadable cards already resolved by election officials. Opens the Opens the Card Resolutions report (page 28).

Table 1-5. Contents of the Visual Resolution of Unreadable Cards section of the Dashboard (continued)

Field	Description
Unvotable unreadable cards (could be resolved by rescanning *n* boxes)	*n*, a variable, opens a view of the Card Inventory report that identifies which boxes contain the unvotable cards. **Occluded or incomplete unreadable images**—Number of cards that cannot be adjudicated without rescanning because of occlusions or incomplete images. Opens the Card Images report (page 21). **Scanned unreadable images with multiple overlapping cards**—Number of cards that cannot be adjudicated without rescanning because of multifeeds. Opens the Card Images report (page 21).
Unreadable resolved as a nonballot	Number of unreadable items resolved as nonballots; these are usually work pages. Opens the Card Images report (page 21).
Unreadable cards	Total number of scanned cards requiring manual resolution. Opens the Card Images report (page 21).

> **Note**: See "Resolving card tabulation issues" in the *ClearCount Election Administration Guide* for information about processing unreadable cards.

1.3.4 Card Reconciliation section

The Card Reconciliation section of the Dashboard provides the current state of the election in the ClearCount database, counting which ballots were successfully tabulated and which require additional attention. Each link in this section displays the specific card images.

Items in the Card Reconciliation section include the following:

- **Cards automatically adjudicated**—Number of cards scanned for the election without need for manual resolution (unreadable cards are not included). Opens the Card Images report (page 21).

- **Adjustments to card count for unreadables & modifications**
  - **Unreadable cards**—Number of scanned cards identified by the ClearCount system as unreadable, exclusive of nonballots and multifeeds. Opens the Card Images report (page 21).
  - **Cards resolved as a nonballot**—Number of unreadable items resolved through the ClearCount system as nonballots; these are usually work pages. Opens the Card Images report (page 21).

- ◦ **Cards (originally nonballots) resolved as a ballot**—Number of scanned cards originally identified by the ClearCount system as nonballots that have been resolved manually as ballots.
- ◦ **Estimated additional cards in multiple overlapping cards**—Estimated number of cards resolved through the ClearCount system as multiple cards because scanning initially processed multiple cards (a multifeed) as single images.
- ◦ **Adjustment to card count from visual resolution**—Net change to the number of cards counted by the ClearCount system due to manual resolution.
- **Final Total Card Count**—Total number of cards judged to be ballots that were processed by the ClearCount system.

1.4   Reports menu

The Reports for *ElectionName* drop-down menu located in the title bar of the Dashboard provides a selection of key reports for the active election (Figure 1-4).

The remainder of this topic describes the types of reports available in ClearCount.

ELECTION REPORTS

Statement of Votes Cast
Statement of Cards Cast
Dashboard
Contests Report
Statement of Votes Cast with Precincts
Generate PDF Report...

OTHER ITEMS

Card Inventory
Write-in Contests
Vote Centers
Election Activity Log
Card Resolutions
Causes of Unreadable Cards
Card Locator
Merged ClearCast Results
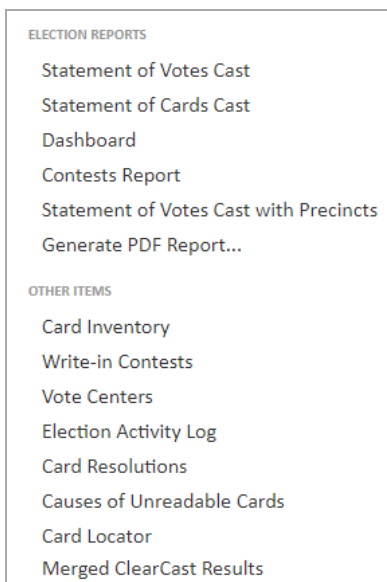
Figure 1-4. Reports for *ElectionName* drop-down menu

1.4.1 Election reports

The ClearCount system provides the following web reports through the Reports menu:

Table 1-6. Web reports

Menu selection/Report	See
Statement of Votes Cast	page 48
Statement of Cards Cast with Precincts	page 47
Contests	page 33
Statement of Votes Cast with Precincts	page 55

The Election reports section also includes links to the Dashboard (page 12) and the Generate PDF Report page (page 69).

1.4.2 Other items on the Reports menu

The Reports menu also provides easy access to these key items:

Table 1-7. Reports key items

Menu selection/Report	See
Card Inventory report	page 25
Contests with Write-ins report	page 36
Vote Centers report	page 60
Election Activity Log	*ClearCount Election Administration Guide*
Card Resolutions report	page 28
Distinct Causes of Unreadable Cards report	page 41
Card Locator report	page 27
ClearCast Merged Results report	page 32

Chapter 2. Web reports

After logging in to the ClearCount system on a CountStation, you can access the ClearCount web reports from the Election Index (page 11), from the Dashboard (page 12), from the Reports menu (page 17) of the Dashboard, or from other reports.

2.1 Controls on web report and log pages

The web reports and log pages include the controls listed in Table 2-1.

Table 2-1. Controls on web reports and log pages

Control	Description
User settings (stored locally)	
Entries per page	Controls how many entries display on each page without affecting search scope. Selections include: 10, 20, 50, 100, and All.
Show/Hide columns	Provides a list of selectable columns and the Restore Original and Show All options. Customize the display by selecting or deselecting the checkbox for a column.
Column sorter	If a column can be used to sort the table, the control appears to the right of its heading. A three-click sequence sorts the table rows by lowest to highest, highest to lowest, and default order based on the selected column.
Filters	
Filter fields	Filters the field by the selected filter options. Filter options include, but are not limited to, parameters such as Precinct, Counter Group, Contest, ScanStation, and Box. The default selection for all filtering options is All except when they are preselected to show a specific set of data. • Use the arrow keys to move up and down within a list of filter options. • Type alphanumeric characters into a filter field to advance to a matching option in the list. • Select multiple filters without dismissing a drop-down by pressing the Ctrl key as you click each option. • Press the Enter key to select a highlighted option. • Click the X on a selected filter option to remove it.
Change	Applies the selected filter field options to the table data.

Table 2-1. Controls on web reports and log pages (continued)

Control	Description
Filter table	Incremental search string applied to all visible columns of a report. When you type a value into the Filter table field, the table is automatically filtered according to the value.
	For reports that are divided into sections, the Filter table field searches the section headers as well as the data rows. If a filter string is found in a section header, the entire section is shown in the filtered table.
	The Filter table performs a search for discreet strings of characters and numbers: • When searching for a single digit, it is found if any string contains that value. For example *1* is found in the value *1* and in the value *16*. • Filter table does not search for phrases. Values separated by a space are treated as separate, but cumulative, values in the search. For example, if you enter the value *1 Day*, the two values are searched for separately. Any rows that contain both values anywhere within the row are found, such as *1 Day*, *1 Fine Day*, or even a row with *District 1* and *Day 4* in separate columns.
Navigation	
First	Displays the first page of the current report.
Previous	Displays the previous page of the current report. The keyboard shortcut is *p*.
Next	Displays the next page of the current report. The keyboard shortcut is *n*.
FF	Automatically steps through the pages of the current report until the last page is reached or you press the Esc key. To set the paging speed, click once to advance every 2 seconds, twice to advance every second, three times to advance every 0.5 second, four times to advance every 0.25 second. Incremental clicks speed up forwarding; a fifth click stops it. The keyboard shortcut is *f*.
Last	Displays the last page of the current report.

2.2 Descriptions of web reports

All users with access to an election can view its reports. All reports are read-only.

This section lists the web reports in alphabetical order.

2.2.1 Card Images report

The Card Images report provides access to thumbnail images of a filtered set of cards in the ClearCount database for the selected election (Figure 2-1).

The Thumbnail Size control (and its Change button) are used to change ballot image size (in pixels) for easier viewing when entries per page is more than 1. Images are not visible when the size is set to 0.

The Card Images report can process up to 100,000 images. (This is *not* a restriction on the number of cards that can be tabulated for an election.) If the message *Warning: Results limited to 100,000 cards.* appears, you can filter the records to search a smaller subset of cards.

Figure 2-1. Card Images report

Access

- Click the links to card images provided in many web reports, such as the Card Inventory report (page 25), the Card Resolutions report (page 28), and others.

- From the Ballot-Scanning Operations section (page 14) of the Dashboard, click the numeric value of Cards automatically adjudicated, Unreadable cards, Pages scanned (ballots and nonballots) or Cards that are fully blank. Clear Ballot advises *not* using the Dashboard to access this report unless an election is small.

Data

Data for each card includes the columns listed in Table 2-2

Table 2-2. Data—Card Images report

Column	Description
Side 1 Image	Image of the front of the card.
Side 2 Image	Image of the back of the card.
Scan Time	Time when the card was scanned.
Unreadable Reasons	Reasons why an unreadable card cannot be read. This column is blank for automatically adjudicated cards.
Resolution Status	For any card image processed through the Card Resolutions tool, indicates the way that the card was manually resolved. Empty if automatically adjudicated. The possible Resolution Status values are: • Resolved and tabulated • Resolved as nonballot • Resolved as occluded (cannot be voted) • Resolved as multiple ({n}) cards in a single image (cannot be voted) • Manual override of automatic adjudication
Precinct Style Name	This is similar to the ballot style and shows split information, if available.
Card Style	Unique identifier for the card style of the card.
Card ID	Unique identifier for the front card image. Opens the visually annotated card image.

2.2.2 Viewing annotations on Card images

The ClearCount system provides a visually annotated version of each card image that can be used for manual confirmation of system results.

This capability is useful for testing ballot definitions prior to an election, and for countering challenges.

To review the visually annotated version of a card:

1. From the Dashboard (page 12), click the **Reports** drop-down menu and select **Card Inventory**.

2. From the Card Inventory report (page 25), select a box ID.

   The Card Images report (page 21) appears.

3. Locate the card you want to review and click the card image to enlarge it.

   The full card image appears accompanied by card information on the left side.

4. The side information includes:

   - The Show visually annotated card link

   - The image name

   - The image scan time

   - The name of the computer that scanned the image

   - The model of the scanner

   - The scanner serial number

   - The precinct style name of the card

   - The card style

   - A legend of implicit and explicit choice modifications

     ◦ **R: Manual resolution replaced automatic adjudication**—when a choice has been modified due to manual adjudication by election officials

     ◦ **I: Implied by straight party**—when a choice is considered *voted* even though it was not explicitly selected by the voter; occurs when a contest is controlled by a straight-party selection contest

     ◦ **O: Overridden by crossover**—when a choice that was explicitly selected by the voter is overridden because the voter marked contests in multiple parties; occurs in a primary election when contests for multiple parties are on the same ballot

     ◦ **O: Overridden by straight party**—when a choice was explicitly selected by the voter, but is not *voted* because the contest containing the choice was controlled by a straight-party contest, which caused the explicitly selected choice to be overridden

   - The Modify Adjudication button

   - The list of contests and choices for the card

     ◦ Choice names in black indicate automatic adjudication by the ClearCount system

     ◦ Choice names in green indicate that the choices were manually resolved

     ◦ Choice names in red indicate overvoted choices

     ◦ Choice names in purple indicate undervoted contests

5. Click the **Show visually annotated card** link in the upper left corner (Figure 2-2).
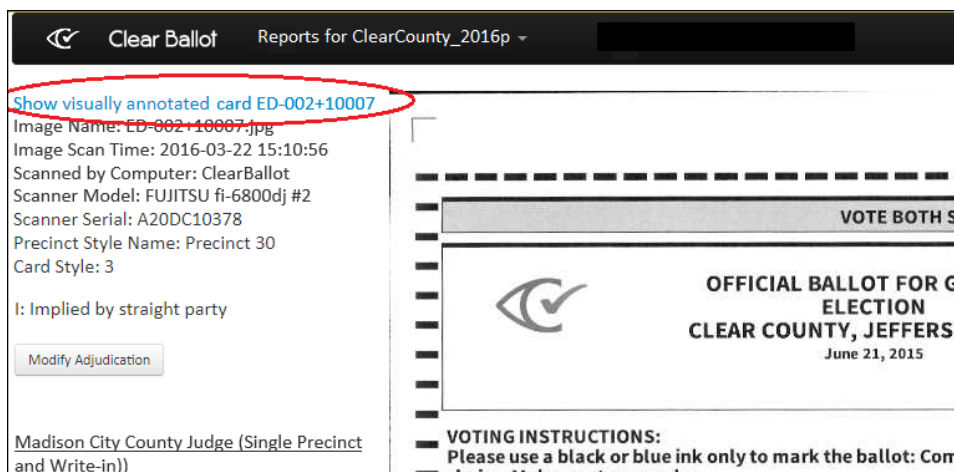
Figure 2-2. Selecting a visually annotated card image

ClearCount displays the annotated version of the card image (Figure 2-3).

- Each votable choice (oval) for every election is outlined by a red rectangle.

- Each valid voter selection is marked by a green bar.

- Any overvote is marked by a red bar.

Figure 2-3. Example of visual annotations (Dominion ballot)

You can also click any oval in the Vote Visualization report (page 61) to access the Visually Annotated Cards page.

2.2.3 Card Inventory report

The Card Inventory report details the contents of each ballot box (Figure 2-4).

Access

- From the Other items on the Reports menu (page 18) section of the Reports menu, choose **Card Inventory**.

- From the Precinct and Card Style report (page 42), click the numeric value of # Boxes.

- From the Links drop-down menu in many reports, including the Statement of Votes Cast report (page 48), select **Box List**.

Figure 2-4. Card Inventory report (default columns shown)

Data

Data on the Card Inventory report for each box includes the columns listed in Table 2-3.

Table 2-3. Data—Card Inventory report

Column	Description
Box ID	Unique identifier for the box. Opens the Card Images report (page 21).
Cards	Number of cards in the box, not including those judged to be nonballots. Opens the Card Images report (page 21).
Unreadable	Number of unreadable cards in the box. Opens the Card Images report (page 21).
(Unreadable) %	Percentage of unreadable cards in the box.
ScanStation	Name of the ScanStation where the box was scanned.
Scanner Model	Model number for the configured scanner.
Scanner Serial	Serial number of the configured scanner.
Start Scan Time	Time when scanning of the box began.
End Scan Time	Time when scanning of the box ended.
Scan Duration	Length of time taken to scan the box.
Cards per Hour	Rate the cards in the box were scanned.
# Precinct Styles	Number of distinct precinct/card style combinations in the box. Opens the Precinct and Card Style report (page 42) for the contest.

Filters

Filters include: Precinct, Counter Group, Contest, ScanStation, and Box. Select filter options and click **Change** to filter data. Use the Filter table option with or without the filter fields to perform incremental searches for alphanumeric strings. Click the **Show/Hide Columns** button to select data to display.

2.2.4 Card Locator report

The Card Locator report (Figure 2-5) supports physical retrieval of specific cards by allowing the user to search for specific card images using filter criteria. This capability is useful when cards are commingled.

Note: This report is blank when it opens. You must select filter criteria and click **Change** to populate the table with results.

Figure 2-5. Card Locator report (default columns shown)

Access

From the Other Items on the Reports menu (page 18) section, choose **Card Locator**.

Data

Data for each card listed in the Card Locator report includes the columns listed in Table 2-4.

Table 2-4. Data—Card Locator report

Column	Description
Card ID	Unique identifier for the card.
Precinct	This is similar to the card style and shows split information, if available.
Card Style	Unique identifier for the card style of the card.
Image Number From Last	Number of images between the card images in the current and preceding rows.

Filters

Filters include: Precinct, Counter Group, Contest, and ScanStation. Select filters from the filter fields and click **Change** to filter data. Use the Filter table option to perform incremental searches for alphanumeric strings. Click the **Show/Hide Columns** button to select data to display.

2.2.5 Card Resolutions report

The Card Resolutions report (Figure 2-6) shows the unresolved unreadable cards for the selected election and the manual resolutions recorded to date.

Figure 2-6. Card Resolutions report (default columns shown)

Access

From the Other items on the Reports menu (page 18) section, choose **Card Resolutions**.

Data—Unresolved cards

Data for each unresolved card includes the columns listed in Table 2-5.

Table 2-5. Data—Unresolved Cards in the Cards Resolution report

Column	Description
Card ID	Unique identifier for the card. Opens the Card Images report (page 21).
Resolution Status	Indicates that the card is unresolved.
Unreadable Reason	Explains why the card could not be adjudicated automatically.

Data—Resolved Cards

Data for each resolved card contains the columns listed in "Data—Resolved Cards in the Card Resolutions report" below.

Table 2-6. Data—Resolved Cards in the Card Resolutions report

Column	Description
Card ID	Unique identifier for the card. Opens the Card Images report (page 21).
Resolution Status	Indicates how the card was manually resolved: • Resolved and tabulated • Resolved as nonballot • Resolved as occluded (cannot be voted) • Resolved as multiple ({n}) cards in a single image (cannot be voted) • Manual override of automatic adjudication
Resolver	Name of the ClearCount user who resolved the card.
Resolution Date	Time when the card was resolved.

Filter table

Use the Filter table option to perform incremental searches for alphanumeric strings. Click the **Show/Hide Columns** button to select data to display.

2.2.6 Card Resolutions tool

Clicking a value in the Card ID column of the Card Resolutions report (page 28) displays the corresponding card image and provides access to the Card Resolutions tool (Figure 2-7).

- If your access level is read or below—You cannot resolve card issues and the Card Resolutions tool is not available.

- If your access level is modify or above—You can resolve card issues and the Card Resolutions tool is available.

See "Resolving card tabulation issues" in the *ClearCount Election Administration Guide* for more information.

Figure 2-7. Card Resolutions tool

2.2.7 Card Styles report

The Card Styles report (Figure 2-8) provides the number of ballots and precincts using each card style and a link to a sample ballot of each style. The report also provides the associated Voter Group information for each style.

Figure 2-8. Card Styles report (default columns shown)

Access

From the Election Data section (page 13) of the Dashboard, click the numeric value of # Card styles.

Data

Data for each card style includes the columns listed in Table 2-7.

Table 2-7. Data—Card Styles report
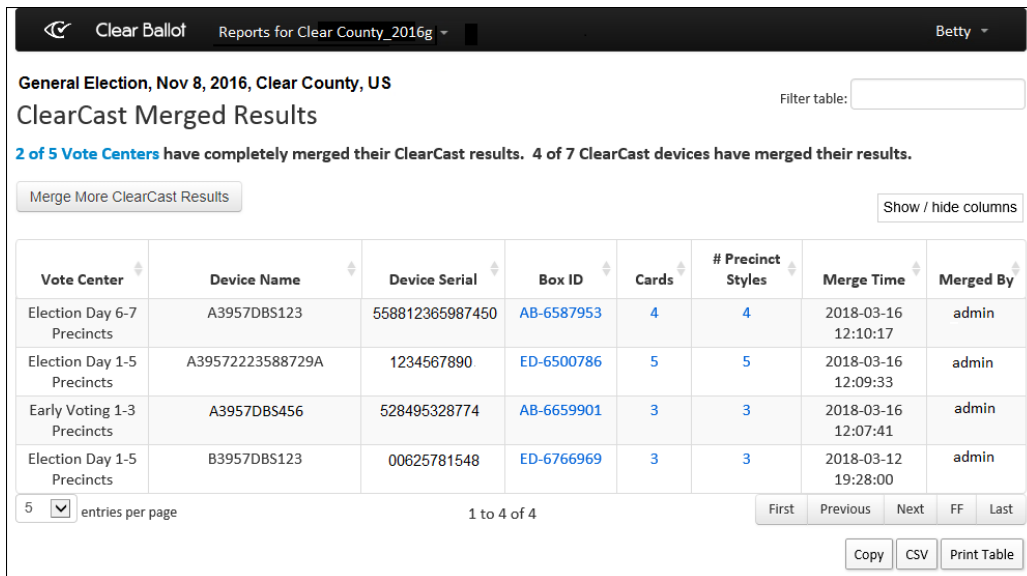
Column	Description
Card Style	Unique identifier for the card style of the card.
Ballots	Number of cards using the card style. Opens the Card Images report (page 21).
# Precincts	Number of precincts using the card style. Opens the Precinct and Card Style report (page 42).
Sample Card	Example of the card style, if available. Opens a visually annotated image of the sample card.
Blank Card PDF Filename	Name of the PDF source file for the card style.

Filter table

Use the Filter table option to perform incremental searches for alphanumeric strings. Click the **Show/Hide Columns** button to select data to display.

2.2.8 ClearCast Merged Results report

The ClearCast Merged Results report (Figure 2-9) provides a summary of ClearCast election results that have been merged into the ClearCount system.

Figure 2-9. ClearCast Merged Results report

Access

From the Other items on the Reports menu (page 18) section, choose **Merged ClearCast Results**.

Data

Data for each vote center includes the columns listed in Table 2-8.

Table 2-8. Data—ClearCast Merged Results report

Column	Description
Vote Center	Name of the vote center that was set within the ClearDesign election management system (EMS).
Device Name	Name of the ClearCast voting station.
Device Serial	Serial number of the ClearCast voting station.
Box ID	Unique identifier for the box. Opens the Card Images report (page 21).

Table 2-8. Data—ClearCast Merged Results report (continued)

Column	Description
Cards	Number of cards in the box, not including those judged to be nonballots. Opens the Card Images report (page 21).
# Precinct Styles	Number of distinct precinct/card style combinations in the box. Opens the Precinct and Card Style report (page 42) for the contest.

Filter table

Use the Filter table option to perform incremental searches for alphanumeric strings. Click the **Show/Hide Columns** button to select data to display. Click the **X of X Vote Centers** link to open the "Vote Centers report" on page 60. Click the **Merge More ClearCast Results** button to merge additional election results from ClearCast voting stations.

2.2.9 Contests report

The Contests report (Figure 2-10) provides details, including winners, for each contest in the selected election.

Figure 2-10. Contests report (default columns shown)

> **Note**: If your election includes a judge initials contest (when judge initials are required on a ballot card), a contest called *Judges Initials* appears on the Contests report. See "Resolving judge initials cards" in the *ClearCount Election Administration Guide* for more information.

Access

- From the Election reports (page 18) section of the Reports menu, choose **Contests report**.
- From the Election Data section (page 13) of the Dashboard, click the numeric value of # Contests.

Data

Data for each contest includes the columns listed in Table 2-9.

Table 2-9. Data—Contests report

Column	Description
Contest	Description of the contest. Opens the Statement of Votes Cast report (page 48).
Vote Rule	Number of choices each voter can make for the contest.
# Choices	Number of candidates or options. Opens the Statement of Votes Cast report (page 48).
# Precincts	Number of precincts with the contest.
# Ballots	Number of ballots with the contest. Opens the Contest Images view of the Card Images report (page 21) showing those voted contest images. **Note**: From the Contest Images view, you can click an image's filename link to access the Modify Adjudication button to adjudicate overvotes.
Voted	Number of times the contest was validly voted. Opens the Contest Images view of the Card Images report (page 21) showing those voted contest images.
Blank-Voted	Number of times voters skipped the contest. Opens the Contest Images view of the Card Images report (page 21) showing those voted contest images.
Overvoted	Number of times the contest was overvoted (the vote rule was exceeded). Opens the Contest Images view of the Card Images report (page 21) showing those voted contest images.
Overvoted %	Percentage of times the contest was overvoted.
Margin	Number of votes needed to alter the outcome of the election, calculated as the difference between the lowest vote-getting winner and highest vote-getting loser.
Margin %	Margin percentage.

Filters

Filters include: Precinct, Counter Group, and Box. Select filters from the filter fields and click **Change** to filter data. Use the Filter table option with or without the filter fields to perform incremental searches for alphanumeric strings. Click the **Show/Hide Columns** button to select data to display.

2.2.10 Contest Images report

The Contest Images report (Figure 2-11) provides access to thumbnail images of a filtered set of contest images in the ClearCount database for the selected election.
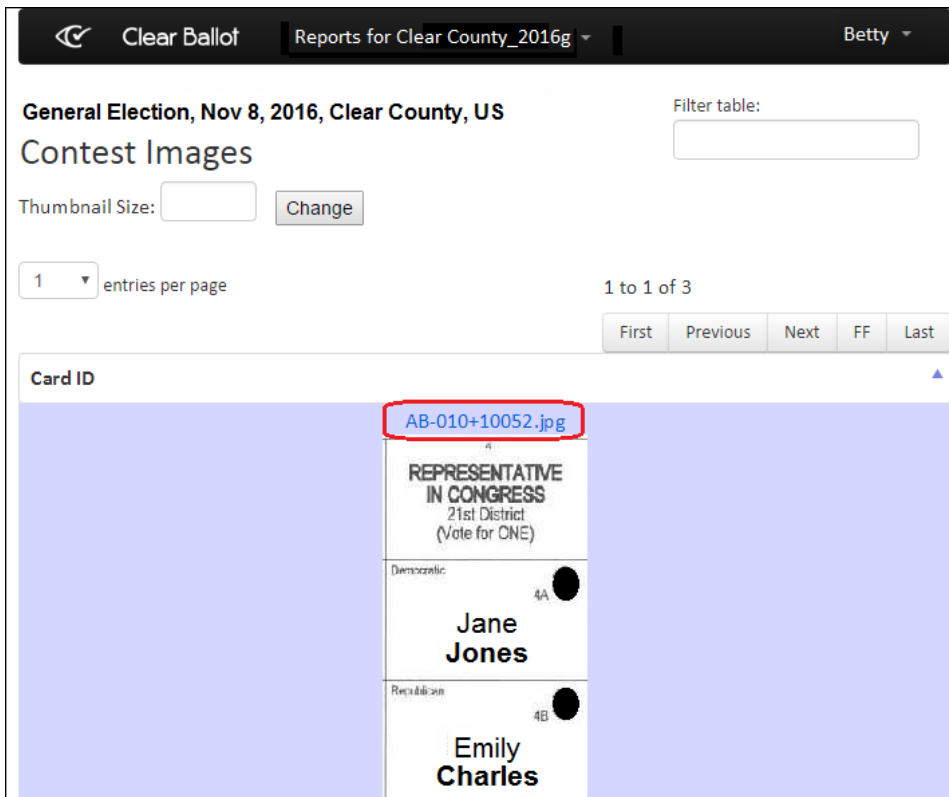
Figure 2-11. Contest Images report

The Thumbnail Size field (and its Change button) are used to change the image size for easier viewing when entries per page is more than 1. Images are not visible when the size is set to 0. Units are pixels.

Access

Click links to images provided in web reports, such as the Statement of Votes Cast report (page 48), the Statement of Votes Cast with Precincts report (page 55), the Contests report (page 33), and others.

Data

Data for each image includes the **Card ID**, a unique identifier for the front card image. Opens the full card image.

2.2.11 Contests with Write-ins report

The Contests with Write-ins report (Figure 2-12) provides an overview of all contests that have write-in choices. It lists each contest with its total number of write-in choice zones (whether or not they have been voted), the number of assigned and unassigned write-in choice zones, and the number of write-in candidate names that have already been entered for that contest.

Figure 2-12. Contests with Write-ins report (default columns shown)

Access

From the Other items on the Reports menu (page 18) section, choose **Write-in Contests**.

Data

Data for each contest includes the columns listed in Table 2-10.

Table 2-10. Data—Contest with Write-ins report

Column	Description
Contest	Description of the contest. Opens the Write-in Candidates by Contest report (page 39).
Total Write-ins	Number of write-in choice zones for the contest. Opens the Write-in Assignments tool (page 38).
Assigned Write-ins	Number of write-in choice zones that have been assigned to candidate names. Opens the Write-in Assignments tool (page 38).

Table 2-10. Data—Contest with Write-ins report (continued)

Column	Description
Unassigned Write-ins	Number of write-in choice zones that have not been assigned to candidate names. Opens the Write-in Assignments tool (page 38).
# Write-in Names	Number of candidates associated with the contest as write-in candidates. By default, there is always one write-in name called *Invalid* that you can use to assign to choice zones that are not filled in with valid candidate names or text. The Invalid write-in name can be changed as jurisdictions deem appropriate. Opens the Write-in Candidates by Contest report (page 39).

Filters

Filters include: Precinct, Counter Group, Box, and Mark Type. Select filters from the filter fields and click **Change** to filter data. Use the Filter table option with or without the filter fields to perform incremental searches for alphanumeric strings. Click the **Show/Hide Columns** button to select data to display.

When selecting filters to limit the data that displays for the Contests with Write-ins report, the Write-in Assignments tool (page 38) also uses those filters to limit the data that appears. The Write-in Candidates by Contest report (page 39) only uses the Contest filter.

Mark Type

Table 2-11 lists the options for filtering by **Mark Type**.

Table 2-11. Options for filtering by Mark Type

Option	Description
Filled ovals	Default, limits the data to write-in choice zones with filled ovals, including overvotes.
Undervoted unfilled ovals	Limits the data to write-in choice zones with unfilled ovals that are also undervotes.
With text	Limits the data to write-in choice zones with probable marks in the write-in choice zone, including the oval (based on density).
Unfilled ovals	Limits the data to write-in choice zones with unfilled ovals.

Table 2-11. Options for filtering by Mark Type (continued)

Option	Description
Unreadable cards	Limits the data to unreadable cards that have write-in choice zones. When this filter carries over to the Write-in Assignments tool, the ovals are sorted first by Card ID (grouping all choice zones for that contest on that card together) and then by Choice ID to make adjudication of these unreadable cards easier.
All write-ins	Does not limit the data; displays all write-in choice zones.

2.2.12 Write-in Assignments tool

Clicking a value in the Total Write-ins, Assigned Write-ins, or Unassigned Write-ins column in the Contests with Write-ins report (page 36) provides access to the Write-in Assignments tool (Figure 2-13).

Figure 2-13. Write-in Assignments tool

> **Note**: If your access level is read or below, you cannot assign write-in choices and the Write-in Assignments tool is unavailable. You must have an access level of modify or above to assign write-in choices.

See "Assigning write-in choices" in the *ClearCount Election Administration Guide* for more information.

2.2.13 Write-in Candidates by Contest report

The Write-in Candidates by Contest report (Figure 2-14) provides a list of the candidates associated with a contest as write-in options. It also shows the number of assignments for each candidate and the number of voted assignments.

Figure 2-14. Write-in Candidates by Contests report (default columns shown)

Access

From the Contests with Write-ins report (page 36), click a link in the Contest column or the # Write-in Names column.

Data

Data for each contest includes the columns listed in Table 2-12.

Table 2-12. Data—Write-in Candidates by Contest report

Column	Description
Candidates	Names of write-in candidates associated with the contest.
All Assignments	Number of write-in choice zones to which the candidate has been assigned.
Voted Assignments	Number of assignments that are valid votes.
Actions	Provides a drop-down menu of options for the candidate entry, including the ability to rename or delete it.

Filters

Filters include: Contest (Contest filters that have been selected for the Contests with Write-ins report (page 36) carry over to this report. Select filters from the filter fields and click **Change** to filter data. Use the Filter table option with or without the filter fields to perform incremental searches for alphanumeric strings. Click the **Show/Hide Columns** button to select data to display.

> **Note**:   The ability to add, merge, rename or delete a candidate name is available only to users whose access level is modify or above.

Adding a Candidate

Click the **Add Candidate** button to open the Add Write-in Candidate dialog (Figure 2-15), select the desired contest from the drop-down list, enter the candidate's name (up to 128 characters), and click **Save**. The candidate appears in the Candidates column for the selected contest.

Figure 2-15. Add Write-in Candidate dialog

Renaming a Candidate

To rename a candidate, click the **Action** button for the desired candidate and select the **Rename** option from the drop-down menu. When ClearCount displays the Edit Write-in Candidate dialog (Figure 2-16), edit the name and click **Save**.

Figure 2-16. Edit Write-in Candidate dialog

Merging Candidate Names

If you have multiple entries for a candidate name due to misspellings, you can merge the incorrect entries into the correct entry.

To merge candidate entries:

1. Click the **Action** button for the incorrect candidate and select the **Rename** option from the drop-down menu.

2. Enter the correct name in the Name field, select the **Merge if duplicate** checkbox and click **Save**.

3. The ClearCount system merges the write-in assignments for both entries.

2.2.14 Distinct Causes of Unreadable Cards report

The Distinct Causes of Unreadable Cards report (Figure 2-17) provides an overview of why the ClearCount system could not interpret certain cards.

Figure 2-17. Distinct Causes of Unreadable Cards report (default columns shown)

Access

From the Other items on the Reports menu (page 18) section, select **Causes of Unreadable Cards**.

Data

Data for each error includes the columns listed in Table 2-13.

Table 2-13. Data—Distinct Causes of Unreadable Cards report

Column	Description
Unreadable reason	Description of the reason a card was unreadable.
# Cards	Number of cards that were unreadable for the given reason.
# Resolved	Number of cards that were unreadable for the given reason that are already resolved.

Filter table

Use the Filter table option to perform incremental searches for alphanumeric strings. Click the **Show/Hide Columns** button to select data to display.

2.2.15 Precinct and Card Style report

The Precinct and Card Style (Figure 2-18) report lists the precincts, the number of cards scanned for each one, and the corresponding ClearCount box IDs. Having this information can simplify the task of identifying scanned cards for a specific precinct.

In the Election Data section on the Dashboard, the value of the # Precincts and card styles row increases with the first card scanned from a precinct. This number does not indicate that *every* card from the precinct was successfully scanned and analyzed. However, the number is very useful for identifying the overall progress of the scanning operation. Similarly, the Precinct and Card Style report helps determine which precincts remain to be scanned.

Figure 2-18. Precinct and Card Style report (default columns shown)

If your election uses consolidated precincts, all ballots and cards associated with the consolidated precinct are reported together and are separate from the ballots and cards of the individual precincts.

If the scanning process for a precinct has not started, no entry for that precinct appears in the Precinct and Card Style report.

Access

From the Election Data section (page 13) of the Dashboard, click the numeric value of # Precincts and card styles.

Data

Data for each precinct and card style combination includes the columns listed in Table 2-14.

Table 2-14. Data—Precinct and Card Style report

Column	Description
Whole Precinct Name	Full name of the precinct.
Precinct Style Name	This is similar to the ballot style and shows split information, if available. Opens the Card Images report (page 21) showing the cards that have that precinct/card style combination.
Card Style	Unique identifier of the card style for the card.
Cards	Number of cards cast. Opens the Card Images report (page 21).
# Boxes	Number of boxes containing the ballots. Opens the Card Inventory report (page 25).

Filters

Filters include: Style, Box, Counter Group, Contest, and ScanStation. Select filters from the filter fields and click **Change** to refilter data. Use the Filter table option with or without the filter fields to search incrementally for alphanumeric strings. Click the **Show/Hide Columns** button to select data to display.

2.2.16 ScanStation report

The ScanStation report (Figure 2-19) provides information about each ScanStation and scanner used in an election, the number of boxes and cards processed, the duration of the session, and the scanning rate.

Figure 2-19. ScanStation report (default columns shown)

Access

From the Ballot-Scanning Operations section (page 14) of the Dashboard, click the numeric value for # Scanners.

Data

Data for each ScanStation includes the columns listed in Table 2-15.

Table 2-15. Data—ScanStation report

Column	Description
ScanStation	Identifier for the ScanStation computer.
Boxes	Number of boxes scanned on that ScanStation. Opens the Card Inventory report (page 25).
Cards	Number of card scanned on that ScanStation.
Unreadable	Number of scanned cards found to be unreadable on that ScanStation. This number is helpful in determining whether a particular ScanStation or scanner is having issues.
% (Unreadable)	Percentage of scanned cards found to be unreadable on that ScanStation.
Scanner Model	Model identifier for the scanner.
Scanner Serial	Serial number of the scanner.
Start Scan Time	Time that scanning of the boxes began on that ScanStation.
End Scan Time	Time that scanning of the boxes ended on that ScanStation.
Scan Duration	Length of time taken to scan the boxes on that ScanStation.

Filter table

Use the Filter table option to perform incremental searches for alphanumeric strings. Click the **Show/Hide Columns** button to select data to display.

2.2.17 Server Background Jobs

The Server Background Jobs report (Figure 2-20) displays all of the background jobs since the last CountServer restart. It automatically opens when generating reports or performing election functions (such as backing up or restoring). The Progress indicator for the running job refreshes every 10 seconds until the job is complete. The Status column shows when a job is complete.

For PDF reports and XML results, you can click a link in the Final Result column to view the file.

Figure 2-20. Server Background Jobs window with links

> **Note**: This page may not appear if the election is so small that the job completes before the page has time to open.

Access

From the **Server Background Jobs** option in the user name drop-down menu at the top right of a page.

Data

Data for each job includes the columns listed in Table 2-16.

Table 2-16. Data—Server Background Jobs report

Column	Description
Job ID	Unique identifier for the job
Time	Date and time that the job started
User	Name of the user who performed the job

Filter table

Use the Filter table option to perform incremental searches for alphanumeric strings. Click the **Show/Hide Columns** button to select data to display.

2.2.18 Statement of Cards Cast with Counter Groups report

The Statement of Cards Cast with Counter Groups report (Figure 2-21) provides the number of cards for each counter group, such as early voting (EV), absentee (AB), Election Day (ED) as well as the reporting status of a counter group. Those counter groups which are set to report via ClearDesign counter group settings will declare a precinct reporting if cards with that counter group are merged or scanned into ClearCount. Those counter groups not set to report will not impact the precinct reporting status of a precinct. This is useful for early voting or other counter groups which should not impact election night precinct reporting status.

Figure 2-21. Statement of Cards Cast with Counter Groups report (default columns shown)

Access

From the Election Data section (page 13) of the Dashboard, click the numeric value for # Counter Groups.

Data

Data for each counter group includes the columns listed in Table 2-17.

Table 2-17. Data—Statement of Cards Cast with Counter Groups report

Column	Description
Counter Group ID	Two-character identifier for the counter group.
Counter Group	Name of the counter group.
Sets Precincts Reporting	States if this counter group will impact precinct reporting counts.
Cards	Number of cards scanned for that counter group. Opens the Card Images report (page 21).

Filters

Filters include: Precinct, Counter Group, Contest, ScanStation, and Box. Select filter options and click **Change** to filter data. Use the Filter table option with or without the filter fields to search incrementally for alphanumeric strings. Click the **Show/Hide Columns** button to select data to display.

2.2.19 Statement of Cards Cast with Precincts report

The Statement of Cards Cast with Precincts report (Figure 2-22) provides a list of cards for each precinct.

If your election uses consolidated precincts, all ballots and cards associated with the consolidated precinct are reported together and are separate from the ballots and cards of the individual precincts. Selecting one of the individual precincts as a Precinct filter option does not include the consolidated precinct in the results. The consolidated precinct is a separate entity from the individual precincts within it.

Figure 2-22. Statement of Cards Cast with Precincts report (default columns shown)

Access

From the Election reports (page 18) section of the Reports menu, choose **Statement of Cards Cast**.

From the Election Data section (page 13) of the Dashboard, click the numeric value for # Precincts.

Data

Data for each precinct includes the columns listed in Table 2-18

Table 2-18. Data—Statement of Cards Cast with Precincts report

Column	Description
Precinct	Precinct name.
Cards	Number of cards scanned for that precinct. Opens the Card Images report (page 21).
# Boxes	Number of boxes scanned with cards for that precinct. Opens the Card Inventory report (page 25).

Table 2-18. Data—Statement of Cards Cast with Precincts report (continued)

Column	Description
Reporting	Gives the true or false status of if the precinct is considered reporting based on cards scanned against reporting counter groups. If the precinct is manually overridden by the Actions button, this will also set the precinct as reporting.
Override Reported	States if the user has set the precinct manually as reporting. This is useful if no ballots were cast for a precinct but the precinct should be considered as fully reporting.
Actions	Allows the user to manually set the override status of a given precinct.

Filters

Filters include: Precinct, Counter Group, Contest, ScanStation, and Box. Select filters from the filter fields and click **Change** to filter data. Use the Filter table option with or without the filter fields to search incrementally for alphanumeric strings. Click the **Show/Hide Columns** button to select data to display.

2.2.20 Statement of Votes Cast report

The Statement of Votes Cast report (Figure 2-23) summarizes the tabulated vote totals of an election. In the case of cross-endorsed candidates where state law makes provisions (over-emphasis) for overvotes involving a single candidate, the vote is adjudicated by the jurisdiction in the manner prescribed by the jurisdiction.

Figure 2-23. Statement of Votes Cast report (default columns shown)

If the election has nonvotable cards, a warning appears at the top of the report indicating that the vote totals are not yet complete.

Figure 2-24. Nonvotable cards warning message

> **Note**:   If your election includes a judge initials contest (when judge initials are required on a ballot card), a contest called *Judges Initials* appears on the Statement of Votes Cast report. See "Resolving judge initials cards" in the *ClearCount Election Administration Guide* for more information.

Access

From the Election reports (page 18) section of the Reports menu, choose **Statement of Votes Cast**.

Data

Data for each choice includes the columns listed in Table 2-19.

Table 2-19. Data—Statement of Votes Cast report

Column	Description
Choice Order	(Hidden by default). You can displays the Choice Order column by clicking **Show/hide columns** and selecting **Choice Order** or **Show All**. When the Choice Order columns appears on screen, click the column header to sort the choices in the order that they appear on the ballot.
Choice	Candidate/Option for which votes are reported.
Ballots with Contest	Number of scanned cards containing this contest. Opens the Card Images report (page 21).
Votes	Number of votes for the choice. Opens the Votes section of the Vote Visualization report (page 61).
Overvoted with Vote for this Choice	Number of ballots where the contest was overvoted and this choice was one of those marked. Opens the Overvotes section of the Vote Visualization report(page 61).

Table 2-19. Data—Statement of Votes Cast report (continued)

Column	Description
Undervoted without Vote for this Choice	Number of ballots where the choice's vote target was empty and the number of votes tabulated for all choices in that contest was fewer than allowed by the voting rule. Opens the Undervotes section of the Vote Visualization report (page 61).
Ballots with Votes for Others	Ballots awarded to another choice.
Links	Provides a drop-down menu. Choices include: • **Precinct Subtotals**—Opens the Statement of Votes Cast with Precincts report (page 55). • **Counter Group Subtotals**—Opens the Statement of Votes Cast with Counter Groups report (page 52). • **Party Subtotals**—Opens the Statement of Votes Cast with Parties report (page 53). • **Box List**—Opens the Card Inventory report (page 25).

Filters

Filters include: Precinct, Counter Group, Contest, ScanStation, Box, and Show Write-ins. Select filters from the filter fields and click **Change** to filter data. Use the Filter table option with or without the filter fields to perform incremental searches for alphanumeric strings. Click the **Show/Hide Columns** button to select data to display.

When this report is filtered by precinct and the **Redact Small Vote Subtotals** option is selected on the Election Administration page, subtotals of fewer than 10 votes are hidden to ensure individual voter's confidentiality.

Show Write-ins

Select the **Show Write-ins** check box to display a sublist of the write-in candidate names and votes at the bottom of the Choice column for each contest that includes write-in choices. Candidate names appear preceded by *[Write-in]*.

Figure 2-25. Statement of Votes Cast report showing write-ins sublist

When a contest includes multiple write-in choices, *Write-in* appears in the Choice column the equivalent number of times.

The ClearCount system removes all duplicate write-in candidate assignments (when a unique write-in candidate name is assigned to more than one write-in choice zone for the same contest on the same card). When a duplicate is removed, it appears on the Statement of Votes Cast report as *[Write-in]Duplicate*. The ClearCount system does *not* remove a write-in candidate assignment when it is a duplicate of a certified candidate listed on the ballot.

The report does not include candidate names (or the unassigned category) that have zero votes.

2.2.21 Statement of Votes Cast with Counter Groups report

The Statement of Votes Cast with Counter Groups report (Figure 2-26) provides election subtotals by counter group, such as early voting (EV), absentee (AB), Election Day (ED).

Figure 2-26. Statement of Votes Cast with Counter Groups report (default columns shown)

Access

From the **Links** menu of the Statement of Votes Cast report (page 48), choose **Counter Group Subtotals**.

Data

Data for each choice includes:

Table 2-20. Data—Statement of Votes Case with Counter Groups report

Column	Description
Choice Order	(Hidden by default). You can displays the Choice Order column by clicking **Show/hide columns** and selecting **Choice Order** or **Show All**. When the Choice Order columns appears on screen, click the column header to sort the choices in the order that they appear on the ballot.
Choice	Candidate/Option for which votes are reported.
Counter Group	Name of the counter group.

Filters

Filters include: Precinct, Counter Group, Contest, ScanStation, Box, and Show Write-ins. Select filters from the filter fields and click **Change** to filter data. Use the Filter table option with or without the filter fields to search incrementally for alphanumeric strings. Click the **Show/Hide Columns** button to select data to display.

When this report is filtered by precinct and the **Redact Small Vote Subtotals** option is selected on the Election Administration page, subtotals of fewer than 10 votes are hidden to ensure individual voter's confidentiality.

If the election has unresolved cards, a warning appears at the top of the report indicating that the vote totals are not yet complete.

Show Write-ins

Select the **Show Write-ins** check box to display the write-in candidate names and votes at the bottom of the Choice column for each contest that includes write-in choices. Candidate names appear preceded by *[Write-in]*.

When a contest includes multiple write-in choices, *Write-in* appears in the Choice column the equivalent number of times.

The ClearCount system removes all duplicate write-in candidate assignments (when a unique write-in candidate name is assigned to more than one write-in choice zone for the same contest on the same card). When a duplicate is removed, it appears on the Statement of Votes Cast report as *[Write-in]Duplicate*. The ClearCount system does *not* remove a write-in candidate assignment when it is a duplicate of a certified candidate listed on the ballot.

The report does not include candidate names (or the unassigned category) that have zero votes.

2.2.22 Statement of Votes Cast with Parties report

The Statement of Votes Cast with Parties report (Figure 2-27) provides election subtotals by party. The report also includes contests that do not appear on the ballot (but exist in the BDF), as well as parties with no votes. In the case of cross-endorsed candidates where state law makes provisions for overvotes (overemphasis) involving a single candidate, the vote is adjudicated by the jurisdiction in the manner prescribed by the jurisdiction.

In a contest that is endorsed by multiple voter groups, if a candidate is not assigned to a partisan voter group, vote totals for that candidate are reported with the first party associated with the contest. For example, if a contest is endorsed by the Orange and Yellow parties, the votes for the nonpartisan candidates are attributed to the Orange party. If multiple party endorsements are required for a contest, the contest can be configured accordingly in the ballot definition file (BDF). See the *ClearDesign User Guide* for more information.

If the election has unresolved cards, a warning appears at the top of the report indicating that the vote totals are not yet complete.

Figure 2-27. Statement of Votes Cast with Parties report (default columns shown)

When straight-party voting is used and each cross-endorsed candidate appears only once on the ballot (with all parties that endorsed that candidate listed after the choice name), any ballots that were straight-party-voted via the ClearAccess ballot-marking station attribute choices to the undetermined party, rather than the endorsing party.

Access

From the Statement of Votes Cast report (page 48), choose **Links> Party Subtotals**.

Data

Data for each choice includes the columns listed in Table 2-21.

Table 2-21. Data—Statement of Votes Cast with Parties report

Column	Description
Choice Order	(Hidden by default). You can displays the Choice Order column by clicking **Show/hide columns** and selecting **Choice Order** or **Show All**. When the Choice Order columns appears on screen, click the column header to sort the choices in the order that they appear on the ballot.
Choice	Candidate/Option for which votes are reported.
Party	Political party of the choice.
Votes	Number of votes for that choice/party combination. Opens the Votes section of the Vote Visualization report (page 61).

Filters

Filters include: Precinct, Counter Group, Contest, ScanStation, Box, and Show Write-ins. Select filters from the filter fields and click **Change** to filter data. Use the Filter table option with or without the filter fields to search incrementally for alphanumeric strings. Click the **Show/Hide Columns** button to select data to display.

When this report is filtered by precinct and the **Redact Small Vote Subtotals** option is selected on the Election Administration page, subtotals of fewer than 10 votes are hidden to ensure individual voter's confidentiality.

Show Write-ins

Select the **Show Write-ins** check box to display the write-in candidate names and votes at the bottom of the Choice column for each contest that includes write-in choices. Candidate names appear preceded by *[Write-in]*.

When a contest includes multiple write-in choices, *Write-in* appears in the Choice column the equivalent number of times.

The ClearCount system removes all duplicate write-in candidate assignments (when a unique write-in candidate name is assigned to more than one write-in choice zone for the same contest on the same card). When a duplicate is removed, it appears on the Statement of Votes Cast report as *[Write-in]Duplicate*. The ClearCount system does *not* remove a write-in candidate assignment when it is a duplicate of a certified candidate listed on the ballot.

The report does not include candidate names (or the unassigned category) that have zero votes.

2.2.23 Statement of Votes Cast with Precincts report

The Statement of Votes Cast with Precincts report (Figure 2-28) provides election subtotals by precinct.

Figure 2-28. Statement of Votes Cast with Precincts report (default columns shown)

If the election has unresolved cards, a warning appears at the top of the report indicating that the vote totals are not yet complete.

If your election uses consolidated precincts, all ballots and cards associated with the consolidated precinct are reported together and are separate from the ballots and cards of the individual precincts. Selecting one of the individual precincts as a Precinct filter option does not include the consolidated precinct in the results. The consolidated precinct is a separate entity from the individual precincts within it.

If your election includes a judge initials contest (when judge initials are required on a ballot card), a contest called *Judges Initials* appears on the Statement of Votes Cast with Precincts report and its linked subtotal reports. See "Resolving judge initials cards" in the *ClearCount Election Administration Guide* for more information.

Access

- From the Election reports (page 18) section of the Reports menu, choose **Statement of Votes Cast with Precincts**.
- From the Statement of Votes Cast report (page 48), choose **Links> Precinct Subtotals**.

Data

Data for each choice includes the columns listed in Table 2-22.

Table 2-22. Data—Statement of Votes Cast with Precincts report

Column	Description
Choice	Candidate/Option for which votes are reported.
Precinct	Precinct name.
Ballots with Contest	Number of ballots containing the contest. Opens the Card Images report (page 21).
Votes	Number of votes for the choice. Opens the Votes section of the Vote Visualization report (page 61).
Overvoted with Vote for this Choice	Number of ballots where the contest was overvoted and this choice was one of those marked. Opens the Overvotes section of the Vote Visualization report (page 61).
Undervoted without Vote for this Choice	Number of ballots where the choice's vote target was empty and the number of votes tabulated for all choices in that contest was fewer than allowed by the voting rule. Opens the Undervotes section of the Vote Visualization report (page 61).
Ballots with Votes for Others	Ballots awarded to another choice.

Table 2-22. Data—Statement of Votes Cast with Precincts report (continued)

Column	Description
Links	Provides a drop-down menu. Choices include: • **Counter Group Subtotals**—Opens the Statement of Votes Cast with Precincts and Count Groups report (page 58). • **Box List**—Opens the Card Inventory report (page 25).

Filters

Filters include: Precinct, Counter Group, Contest, ScanStation, Box, and Show Write-ins. Select filters from the filter fields and click **Change** to filter data. Use the Filter table option with or without the filter fields to perform incremental searches for alphanumeric strings. Click the **Show/Hide Columns** button to select data to display.

When this report is filtered by precinct and the **Redact Small Vote Subtotals** option is selected on the Election Administration page, subtotals of fewer than 10 votes are hidden to ensure individual voter's confidentiality.

Show Write-ins

Select the **Show Write-ins** check box to display the write-in candidate names and votes at the bottom of the Choice column for each contest that includes write-in choices. Candidate names appear preceded by *[Write-in]*.

When a contest includes multiple write-in choices, *Write-in* appears in the Choice column the equivalent number of times.

The ClearCount system removes all duplicate write-in candidate assignments (when a unique write-in candidate name is assigned to more than one write-in choice zone for the same contest on the same card). When a duplicate is removed, it appears on the Statement of Votes Cast report as [Write-in]Duplicate. The ClearCount system does *not* remove a write-in candidate assignment when it is a duplicate of a certified candidate listed on the ballot.

The report does not include candidate names (or the unassigned category) that have zero votes.

2.2.24 Statement of Votes Cast with Precincts and Counter Groups report

The Statement of Votes Cast with Precincts and Counter Groups report (Figure 2-29) provides election subtotals by precinct and counter group, such as early voting (EV), absentee (AB), Election Day (ED).

Figure 2-29. Sample Statement of Votes Cast with Precincts and Counter Groups report

If your election uses consolidated precincts, all ballots and cards associated with the consolidated precinct are reported together and are separate from the ballots and cards of the individual precincts. Selecting one of the individual precincts as a Precinct filter option does not include the consolidated precinct in the results. The consolidated precinct is a separate entity from the individual precincts within it.

If the election has unresolved cards, a warning appears at the top of the report indicating that the vote totals are not yet complete.

Access

From the Statement of Votes Cast with Precincts report (page 55), choose **Links> Counter Group Subtotals**.

Data

Data for each choice includes the columns listed in Table 2-23.

Table 2-23. Data—Statement of Votes Cast with Precincts and Counter Groups report

Column	Description
Choice	Candidate/Option for which votes are reported.
Precinct	Precinct name.
Counter Group	Name of the counter group.
Ballots with Contest	Number of ballots containing the contest. Opens the Card Images report (page 21).
Votes	Number of votes for the choice. Opens the Votes section of the Vote Visualization report (page 61).
Overvoted with Vote for this Choice	Number of ballots where the contest was overvoted and this choice was one of those marked. Opens the Overvotes section of the Vote Visualization report (page 61).
Undervoted without Vote for this Choice	Number of ballots where the choice's vote target was empty and the number of votes tabulated for all choices in that contest was fewer than allowed by the voting rule. Opens the Undervotes section of the Vote Visualization report (page 61).
Ballots with Votes for Others	Ballots awarded to another choice.
Links	Provides a drop-down menu. Choices include: Box List—Opens the Card Inventory report (page 25).

Filters

Filters include: Precinct, Counter Group, Contest, ScanStation, Box, and Show Write-ins. Select filters from the filter fields and click **Change** to filter data. Use the Filter table option with or without the filter fields to perform incremental searches for alphanumeric strings. Click the **Show/Hide Columns** button to select data to display.

When this report is filtered by precinct and the **Redact Small Vote Subtotals** option is selected on the Election Administration page, subtotals of fewer than 10 votes are hidden to ensure individual voter's confidentiality.

Show Write-ins

Showing write-ins—Select the **Show Write-ins** check box to display the write-in candidate names and votes at the bottom of the Choice column for each contest that includes write-in choices. Candidate names appear preceded by *[Write-in]*.

When a contest includes multiple write-in choices, *Write-in* appears in the Choice column the equivalent number of times.

The ClearCount system removes all duplicate write-in candidate assignments (when a unique write-in candidate name is assigned to more than one write-in choice zone for the same contest on the same card). When a duplicate is removed, it appears on the Statement of Votes Cast report as [Write-in]Duplicate. The ClearCount system does *not* remove a write-in candidate assignment when it is a duplicate of a certified candidate listed on the ballot.

The report does not include candidate names (or the unassigned category) that have zero votes.

2.2.25 Vote Centers report

The Vote Centers report (Figure 2-30) provides a summary of vote centers that have had ClearCast election results merged into the ClearCount system.

Figure 2-30. Vote Centers report

Access

From the Other items on the Reports menu (page 18) section, choose **Vote Centers**.

Data

Data for each vote center includes the columns listed in Table 2-24.

Table 2-24. Data—Vote Centers report

Column	Description
Vote Center	Name of the vote center that was set within ClearDesign.
# ClearCast Devices	Number of ClearCast voting stations specified in ClearDesign for the vote center.

Table 2-24. Data—Vote Centers report (continued)

Column	Description
# Merged Devices	Number of ClearCast voting stations that have had results merged for the vote center.
# Remaining Devices	Number of ClearCast voting stations that have not had results merged for the vote center.

Filter table

Use the Filter table option to perform incremental searches for alphanumeric strings. Click the **Show/Hide Columns** button to select data to display. Select the **Show only vote centers with missing results** option to filter the vote centers accordingly so that you can quickly determine which vote centers still have outstanding results. The "ClearCast Merged Results report" on page 32 provides additional information about the status of the ClearCast voting stations at each vote center.

2.2.26 Vote Visualization report

The Vote Visualization report (Figure 2-31) uses high-resolution images of scanned ballots to allow click-through examination of every vote on every ballot.

Each oval on the Vote Visualization report links to the full card image, giving election officials greater transparency and control when reviewing an election and determining voter intent.

Figure 2-31. Vote Visualization report

Access

From all vote total links in any report that shows vote results for a specific choice, including all of the Statement of Votes Cast reports. Clicking a summarized vote total (Votes, Overvotes, Undervotes and so forth) for a choice in a report opens the Vote Visualization report in a new tab showing the ovals for that choice in that contest.

Data

The title states the specific contest/choice pair for which you are viewing results. The following sections can appear on the Vote Visualization report:

- Vote Visualization: Least confident votes (page 63) for *contest: choice*

- Vote Visualization: Overvoted with vote (page 64) for *contest: choice*

- Vote Visualization: Least confident nonvotes in undervoted ballots without vote (page 64) for *contest: choice*

- Vote Visualization: Least confident nonvotes in ballots without vote (page 65) for *contest: choice*

- Vote Visualization: Least confident cross-endorsed "double votes" (page 66) for *contest: choice*

Filters

Filters include: Precinct, Counter Group, Contest, ScanStation, Box, and # Ovals. Select filters from the filter fields and click **Change** to filter data. Use the Filter table option with or without the filter fields to perform incremental searches for alphanumeric strings.

Actions for ovals

Hovering over an oval displays the contest section of the card for that oval. Clicking an oval opens the Visually annotated cards (page 22) for the related ballot.

Figure 2-32. Contest section of the card

Choice modifications

Table 2-25 lists the available implicit and explicit choice modifications.

Table 2-25. Implicit and explicit choice modifications

Selection	Description
Manually Resolved	A choice has been modified due to manual adjudication by election officials.
Implied Straight Party	A choice is considered *voted* even though the voter did not explicitly select the choice. This situation can occur when a straight party selection contest controls the choice.
Overridden Crossover	A choice that the voter selected was explicitly overridden because the voter marked contests in multiple parties. This situation can occur in a primary election when contests for multiple parties are on the same ballot.
Overridden Straight Party	The voter explicitly selected a choice, but the choice is considered not *voted* because a straight party contest controls the contest containing the choice. This situation causes an override of the explicitly selected choice.

2.2.26.1 Vote Visualization: Least confident votes

The Least Confident Votes section of the Vote Visualization report (Figure 2-33) shows ovals that were counted as votes for the choice that are the least likely of those votes to be valid votes.

- The votes shown are those that are least likely to be valid votes out of all the votes for that contest/choice pair.

- The votes are shown in order from the most confident vote on top (the highest oval density) to the least confident vote at the bottom (the lowest oval density)

- Increasing the number of ovals displayed (by using the # Ovals field) adds more ovals to the top of the list. Note that the ovals that are added when you increase the # Ovals shown have higher oval density and, therefore, are more likely to be valid votes than those already displayed.
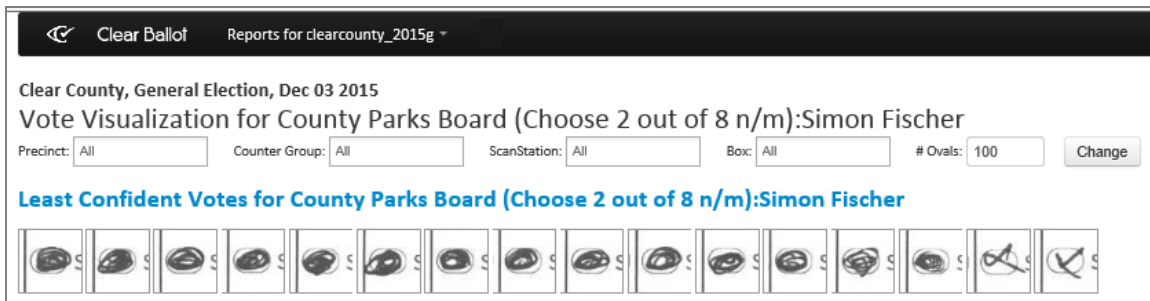
Figure 2-33. Vote Visualization report: Least confident votes section

The Vote Visualization page shows the number of more confident ovals that are not displayed. However when no filters are selected or the filters selected would result in a very large number of ovals to check, the check is limited to 100,000 ovals. As a result, the Vote Visualization page may display a message "more than 100,000 ..." instead of the actual oval count.

2.2.26.2 Vote Visualization: Overvoted with vote

The Overvoted with Vote for *contest: choice* section of the Vote Visualization report (page 61) shows all ovals that were marked for a choice where the vote rule for the contest was exceeded and that choice was one of the marked ovals that contributed to the overvote. For the given choice, the ovals in this section are sorted by card ID, then by contest and oval density. This information if useful when searching for a specific oval on a specific card for the choice.
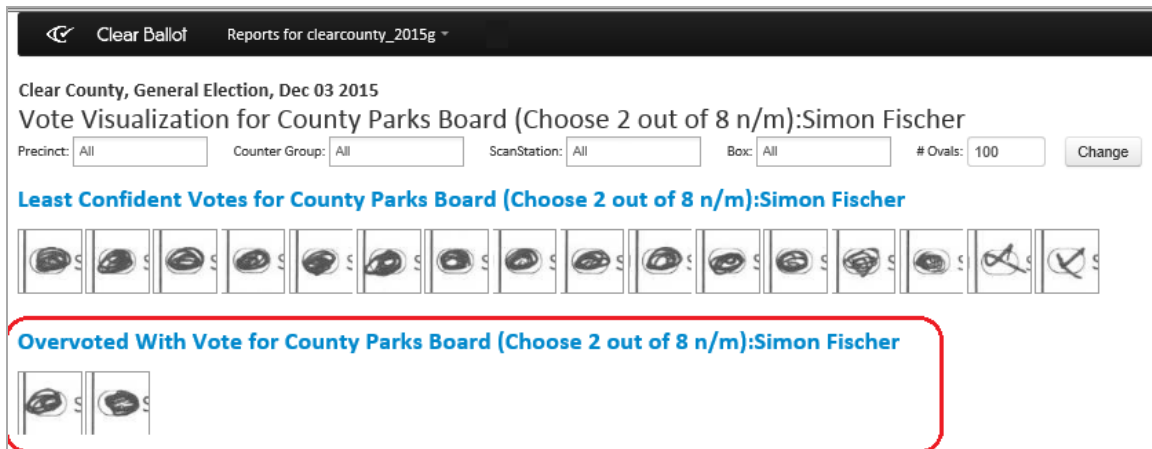
Figure 2-34. Vote Visualization report: Overvoted with vote section

2.2.26.3 Vote Visualization: Least confident nonvotes in undervoted ballots without vote

In cases where the vote rule for the contest was not met (the contest was undervoted), this section of the Vote Visualization report (page 61) shows those ovals for the choice that were counted as nonvotes, but which are the most likely to be valid votes.
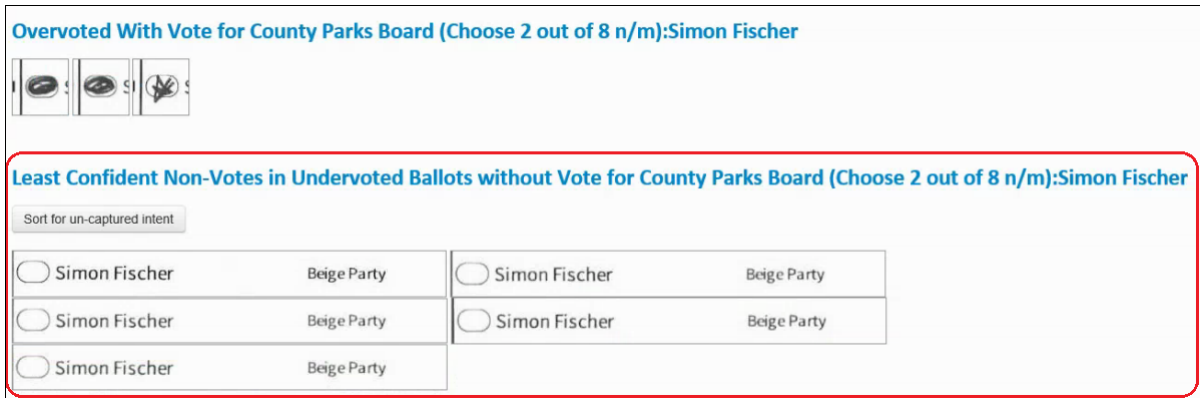
Figure 2-35. Vote Visualization report: Least confident nonvotes in undervoted ballots without vote section

- Ovals in this section are displayed with an expanded choice zone to present a more data-rich picture of voter intent.

- Ovals in this section are shown from highest oval/zone density to lowest oval/zone density.

  - If the choice for which ovals are being displayed is a named candidate or option, the sort order is based on oval density.

  - If the choice for which ovals are being displayed is a write-in option, the sort order is based on zone density.

  - The sort button allows you to easily change the method used to sort the ovals. Just click it to see the opposite method.

    - Sort for uncaptured intent sorts by zone density.

    - Sort for marks in ovals sorts by oval density.

2.2.26.4 Vote Visualization: Least confident nonvotes in ballots without vote

The Least Confident Nonvotes in Ballots without Votes for *contest: choice* section of the Vote Visualization report (page 61) shows those ovals that are least likely to be nonvotes (those most likely to actually be valid votes) on any card where a vote is not recorded for the choice, but the vote rule for the contest has been met by a vote for a different choice or choices.

This allows election officials to easily view those ovals where a vote is not recorded for the choice, but the oval or zone density is at a higher level and, therefore, might indicate that there is a mark that was intended to be a vote.
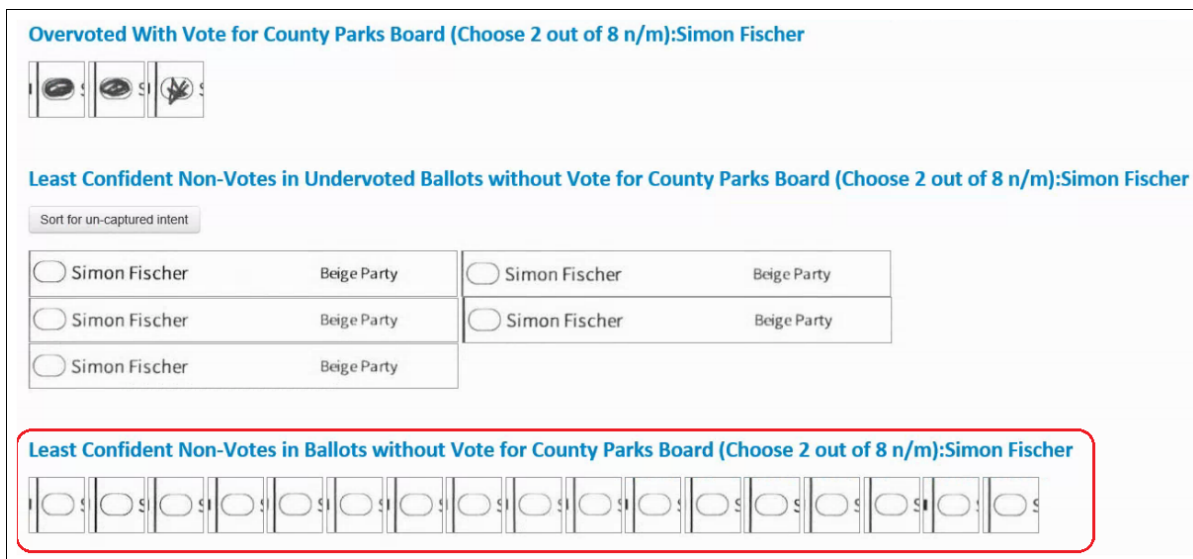
Figure 2-36. Vote Visualization report: Least confident nonvotes in ballots without vote section

The ovals in this section are sorted from highest oval density (most likely to be a valid vote) to lowest oval density (most likely to be a valid nonvote). This gives visual priority to those ovals that election officials most need to examine.

2.2.26.5 Vote Visualization: Least confident cross-endorsed "double votes"

This section of the Vote Visualization report (page 61) only appears when there is at least one contest where a cross-endorsed choice (which has multiple ovals) has been voted for more than once on the same contest. When a choice is cross-endorsed, that choice has multiple ovals (one for each party) in the contest on the ballot. If a voter fills out more than one of those ovals (an overvote or over-emphasis of that one choice), only one oval can be counted for the vote.

Where state law makes provisions for overvotes (over-emphasis) of a single choice, the vote is adjudicated as prescribed by the state. State law determines the oval that is "the vote" and the party that gets credit for the vote.

Any and all ovals that were filled in but were not counted in the vote total—those that did not get "the vote" because they fell lower in the hierarchy as determined by state law—are placed into the Least Confident Cross-Endorsed Double Votes section. This section provides elections officials with a view of how the votes were adjudicated and allocated and allows officials to review these decisions.

These ovals are sorted from least confident (lowest oval density) to most confident (highest oval density). Increasing the number of ovals displayed (by using the # Ovals field) adds more (more confident) ovals to the list. The ovals that are added when you increase the # Ovals shown have higher oval density.

2.3 Sharing web reports

All of the ClearCount web reports can be shared with the stakeholders in an election

To share data:

1. Log in to a CountStation as a report user (page 10).

2. From the Election column of the Election Index (page 11), select an election. The Dashboard (page 12) appears.

3. From the Dashboard or the Reports menu, select the report you want to share. The report opens in a new tab.

4. (Optional) To copy the page to the clipboard, click **Copy**. The copied text can be pasted into another application, such as Notepad.

5. (Optional) To save the data in comma-separated values (CSV) format:

    a. Click **CSV**. The Select Location dialog appears.

    b. Navigate to a location to save the file, enter the name of the file and click **Save**. The CSV file can be opened in Notepad or Microsoft Excel.

6. (Optional) To print the page:

    a. Click **Print Table**. The print view of the report appears in the browser window.

    b. Use your browser's print options (Page setup, Print preview, Print) to print the report, and then press the Esc key to return to the main report page.

Chapter 3. PDF reports

You can create customized election-specific reports as Adobe Acrobat PDF files. You can filter data, select columns to display, and sort the data to meet your reporting needs, and then print or save the file.

3.1 Generating PDF reports

To create a PDF report:

1. Log in to a CountStation as a report user (page 10). The Election Index (page 11) appears.

2. From the Election column, select the election you want to view. The Dashboard (page 12) appears.

3. Click the **Reports for *ElectionName*** drop-down menu on the Dashboard's title bar and select the **Generate PDF Report** option. The Generate PDF Report page (page 69) appears.

4. Modify the Structure parameters, the Labels parameters, and the Filters parameters as desired.

   Filtering selections can affect saved bookmarks.

5. (Optional) Click **Create Bookmark for this Report**. The ClearCount system saves the current report settings in a user- and browser-specific bookmark named Generate Report - *ElectionName*.

   For ease of reuse and to prevent overwriting, rename the bookmark file.

6. Click **Start Report**. The Server Background Jobs (page 44) page replaces the Generate PDF Report page. The report is topmost in the table and its job type (in the Job column) is *pdf_ report*.

7. When the Status column says *Completed* and the filename appears in the Final Result column, click the filename. The report replaces the Server Background Jobs (page 44) page.

   The report file resides on the CountServer until it is restarted. Print the file or save it to removable media, such as a USB drive.

8. Using browser commands, do the following:

   • (Optional) Click **Print** to print the report.

   • (Optional) Click **Save** to copy the PDF file to the local Downloads folder.

     The Bookmarks pane may not be visible when the saved PDF file is first opened. The sequence of actions that restores the Bookmarks pane depends upon the choice of browser and the version of Adobe Reader.

9. (Optional) Delete the job from the Server Background Jobs (page 44) page. It is automatically removed when the CountServer is restarted.

3.2 Generate PDF Report page

The Generate PDF Report page allows you to create customized reports that you can save as PDF files.

Figure 3-1. Generate PDF Report page

This page provides the following categories of setup options:

- **Structure**—Controls overall scope and visibility of subtotals.
- **Labels**—Control custom text in the headers and footers appearing on all pages of a report.

- **Filters**—Include or exclude specific precincts, districts, counter groups, contests, ScanStations, and boxes.

> **Note**:   A read access level or above is required to generate a PDF report.

If some precincts on the Precincts Web Report page are set as reporting, those precincts will always be included in the total number of precincts reported as displayed in the header and grand total sections of the election PDF reports, regardless of selected filters. For example, if your filter criteria include only report precincts in the first box, and the precinct set as reporting on the Precincts Web Report page as reporting does have any ballots in the first box, the precinct will still be counted as reporting in the header and grand total section.

Access

Select **Election Index> Dashboard> Reports> Election Reports> Generate PDF Report**.

Controls

Table 3-1. PDF controls

Name	Description
Structure	
Report Type	Basic scope of the report. One of: • Votes by Geography, Contests by Counter Group (page 75)—Generates a report whose default title is Statement of Votes Cast by Geography. • Votes by Contests, Geography by Choice (page 77)—Generates a report whose default title is Statement of Votes Cast by Contests, Geography by Choice. • Ballots by Geography (page 80)—Generates a report whose default title is Statement of Ballots Cast. • Votes by Box, Geography (page 78)—Generates a report whose default title is Statement of Votes Cast by Box, Geography.
Type of Geography	Geographical unit of the report. One of: • **Precincts**—Includes all items selected through Filters> Precinct. • **Districts**—Includes all items selected through Filters> District.

Table 3-1. PDF controls (continued)

Name	Description
Level of Detail	Granularity of the report. One of: • **Grand Total Only**—The default; provides aggregate totals without geographic totals. • **Detail and Grand Total**—Provides aggregate totals and geographic totals. • **Detail Only**—Provides geographic totals without aggregate totals.
Report Type Options	**The list of options that appear is determined by the Report Type selected.**
Sort Choices by their Order (not Vote total)	If checked, choices are listed in preferred choice order. The default is to show all choices ordered from largest to smallest number of votes.
Hide Counter Group Subtotals	If checked, counter group subtotals are hidden. The default is to show data for all items selected through Filters> Counter Group.
Hide Overvote and Undervote Counts	If checked, overvote and undervote counts are hidden. The default is to show all overvote and undervote data.
Hide Turnout	If checked, turnout is hidden. The default is to show turnout data in the main header and subheaders as appropriate for the report type.
Hide Precincts Reported in Header	If checked, hides *x precincts of y total reporting* in the main header. The default is to show the number of precincts reporting.
Show Precincts Reported by Contest	If checked, the report will give a breakdown of the number of precincts reporting at the contest level. This option is only available for the Statement of Votes Cast by Geography and the Statement of Votes Cast by Contests, Choice by Geography reports.
Hide Vote Percentages	If checked, vote percentages are hidden. The default is to show all vote percentage data.

Table 3-1. PDF controls (continued)

Name	Description
Redact Small Vote Subtotals	If checked, redaction of *precinct-level* totals occurs when fewer than 10 votes are cast for a candidate or choice. The value shown is (<10). If the Redact Small Vote Subtotals setting for the election on the Election Administration page is: • **Enabled**—The box is checked by default. • **Disabled**—The box is *not* checked by default. **Note**: Grand totals for precincts are *not* redacted. The Statement of Ballots Cast PDF report is also not affected by this option.
Hide warnings about uncounted ballots	If checked, suppresses the warning that appears in the report header about ballots that have not been counted yet. Example: Total Ballots Cast: 233 (includes some ballots not yet counted)
Show cross-endorsed party vote subtotals	If checked, shows vote subtotals by party for candidates who are endorsed by more than one party. **Note**: When this option is selected, the choice order of the report is set to preferred choice order rather than vote total order. This is the same as selecting the Sort choices by their order (not vote total) option, although that option's checkbox does not appear selected.
Show Party Subtotals	This field is only available when the 'Ballots by Geography' report is selected. This will add a breakdown of the ballot/cards cast by 'party'. This field is used when deriving Voter Group breakdowns in closed or semi-closed primary election.

Table 3-1. PDF controls (continued)

Name	Description
Show Card Sequence Subtotals	This field is only available when the 'Ballots by Geography' report is selected. If checked, add a breakdown of the cards cast by 'card sequence'. If a ballot has multiple cards the first card is card sequence 1, the second is card sequence 2, etc. The report name will be changed from "Statement of Ballots cast" to "Statement of Cards cast" to reflect the card level of detail. This option introduces the concept of "Combined Party Card" and "Registrants without a Card" to the reports.
	The Combined Party Card will appear if in ClearDesign the ballot set option to "Merge similar cards" is selected in cases where two partisan ballots share the same card; normally a second card with only non-partisan measures on it.
Include Registrants Without a Card	This field is only available when the 'Ballots by Geography' report is selected and is only applicable to primaries. Jurisdictions which run closed primary elections where voters of one party can only vote on that party's ballot or the non-partisan ballot should keep this option unchecked. Semi-closed and open primary jurisdictions will want to check this option as it will include the voter registration totals for voters that belong to a party that does not have any cards in a particular split. These voters will display on a new line as "Registrants Without a Card" as a way of reflecting their ability to vote on other party ballots in this election. The line name can be modified in ClearDesign under the language's localization options.
	Again, jurisdictions that run true closed primaries will not want to check this box as it will inflate your valid registered voter count for the impact precincts or districts.
Show empty Vote Comparison columns	If checked, provides blank lines for transcribing comparison vote totals.
Page Format Options	
Page Size	Sets the overall dimensions and the orientation of the PDF file. Settings for standard outputs are provided, as well as a Custom setting.
Page Width	Overall page width in inches. Changing the default value forces the Page Size setting to Custom. Maximum width is 80 inches.
Page Height	Overall page height in inches. Changing the default value forces the Page Size setting to Custom. Maximum height is 68 inches.

Table 3-1. PDF controls (continued)

Name	Description
Labels	
Output PDF Name (optional)	User-defined name of the PDF file generated on the CountServer. The default is *ReportTitle_for_ElectionName*. (This local copy of the PDF file defaults to the same name.)
Report Title	User-defined title that appears on the first line at the top of every page of the report. The default name is determined by the option selected for Report Type.
Election Name	User-defined subtitle that appears on the second line at the top of every page of the report. The default name is a variation of the Dashboard title; the jurisdiction name is the leftmost element.
Report Comment (optional)	User-defined fixed-text comment that appears beneath the title and subtitle at the top of every page of the report. The default is no comment.
Hide Autogenerated Date and Time	The header on each PDF report page includes the date and time that the PDF report was created. Selecting this option removes the date and time from the report.
Date Comment (optional)	User-defined fixed-text comment that appears beneath the Page x of y counter and timestamp in the top right corner of every page of the report. The default is no comment.
Page Footer (optional)	User-defined fixed-text comment that appears at the bottom of every page of the report. Multiple lines are allowed. The default is no footer.
Filters	
Precinct	Extracts data for all precincts or for user-selected precincts. Precincts outside of the filter with their override status set to true will continue to impact precincts reporting total.
District	Extracts data for all districts or for user-selected districts.
Counter Group	Extracts data for all counter groups or for user-selected counter groups.
Contest	Extracts data for all contests or for user-selected contests.
ScanStation	Extracts data for all ScanStations or for user-selected ScanStations.
Box	Extracts data for all box IDs or for user-selected box IDs.
Buttons	

Table 3-1. PDF controls (continued)

Name	Description
Create Bookmark for this Report	Saves the report setup as a reusable user- and browser-specific bookmark under the generic name Generate Report - *ElectionName*. (The bookmark file is separate from the election database.) Report parameters are also recorded in the web activity log, which is described in the *ClearCount Election Administration Guide*.
Start Report	Launches the report as a job accessed through the Server Background Jobs (page 44) page.

3.3   Statement of Votes Cast by Geography PDF report

The Statement of Votes Cast by Geography PDF report presents data for votable choices in the contests of an election, by the geography of precinct or district. The example below presents data by precinct.

> **Note**: This report can be generated only when the Display Vote Totals option is enabled on the Election Administration page. Otherwise, you receive a message indicating that the display of vote totals is not allowed. See "Displaying vote totals" in the *ClearCount Election Administration Guide* for more information.

Statement of Votes Cast by Geography
Clear County, General Election, Nov 8, 2016
All Precincts, All Districts, All Counter Groups, All Scan Stations, All Contests
Total Ballots Cast: 27, Registered Voters: 222, Overall Turnout: 12.16%
5 precincts reported out of 5 total

Choice	Votes	Vote %	AB	ED	EV
All Precincts					
Madison City County Judge (Single Precinct and Write-in)) (Vote for 1)					
14 ballots (1 over voted ballots, 1 overvotes, 107 registered voters, turnout 13.08%)					
Marge Anser	5	38.46%	1	4	0
Taylor Chimneyswift	3	23.08%	0	3	0
Mal Arduck	2	15.38%	1	1	0
Perri Grinn	1	7.69%	0	1	0
Tony Nighthawk	1	7.69%	0	1	0
Pelik An	1	7.69%	1	0	0
Write-in	0	0.00%	0	0	0
Total	13	100.00%	3	10	0
Overvotes	1				
Undervotes	0				

Figure 3-2. Sample Statement of Votes Cast by Geography PDF report

In a contest that is endorsed by multiple voter groups, if a candidate is not assigned to a partisan voter group, vote totals for that candidate are reported with the first party associated with the contest.

Example: If a contest is endorsed by the Orange and Yellow parties, the votes for the nonpartisan candidates are attributed to the Orange party. If multiple party endorsements are required for a contest, the contest can be configured accordingly in the BDF. See the *ClearDesign User Guide* for more information.

If your election uses consolidated precincts, all ballots and cards associated with the consolidated precinct are reported together and are separate from the ballots and cards of the individual precincts. Selecting one of the individual precincts as a Precinct filter option does not include the consolidated precinct in the results. The consolidated precinct is a separate entity from the individual precincts within it.

Data

Table 3-2 defines fields that appear in the Statement of Votes Cast by Geography PDF report.

Table 3-2. Data—Statement of Votes Cast by Geography PDF report

Field	Description
Total ballots cast	The number of ballots cast when at least the first card of a ballot is voted.
Ballots	The number of ballots that contain overvotes for the contest.
Overvoted ballots	The number of ballots that contain overvotes for the contest.
Overvotes	The value of the vote rule (maximum number of votes) for the contest when that maximum is exceeded. Otherwise, the value is 0. This value conforms to the EAC definition. • *Example A*: If a contest has a maximum vote of one and three ovals are filled in, the overvote value is 1. • *Example B*: If a contest has a maximum vote of two and three ovals are filled in, the overvotes value is 2.
Undervotes	The number of undervotes for the contest (maximum number of votes minus the number of votes). This value conforms to the EAC definition.

Warning message for uncounted cards

A warning message appears in the Total Ballots Cast section of the header when there are still uncounted cards as shown in Figure 3-3 on page 77. The message can be suppressed by selecting the **Hide warnings about uncounted ballots** option on the Generate PDF Report page.

Figure 3-3. Warning message displayed in the Total Ballots Cast section of the header.

3.4   Statement of Votes Cast by Contests, Geography by Choice PDF report

The Statement of Votes Cast by Contests, Geography by Choice PDF report presents data for each counter group that votes in a contest, by the geography of precinct or district. The example below presents data by precinct.

Figure 3-4. Sample Statement of Votes Cast by Contests, Geography by Choice PDF report

This report can only be generated when the Display Vote Totals option is selected on the Election Administration page. Otherwise, you receive a message indicating that the display of vote totals is not allowed. See "Displaying vote totals" in the *ClearCount Election Administration Guide* for more information.

If your election uses consolidated precincts, all ballots and cards associated with the consolidated precinct are reported together and are separate from the ballots and cards of the individual precincts. Selecting one of the individual precincts as a Precinct filter option does not include the consolidated precinct in the results. The consolidated precinct is a separate entity from the individual precincts within it.

Data

Table 3-3 defines fields that appear in the Statement of Votes Cast by Contest, Geography by Choice PDF report.

Table 3-3. Data Statement of Votes Cast by Contest, Geography by Choice

Field	Description
Total ballots cast	The number of ballots cast when at least the first card of a ballot is voted
Ballots cast	The number of ballots cast in the counter group

3.5 Statement of Votes Cast by Box, Geography PDF report

The Statement of Votes Cast by Box, Geography PDF report presents data by box for votable choices in the contests of the election, by the geography of precinct or district. The example below presents data by precinct.

Figure 3-5. Sample Statement of Votes Cast by Box, Geography PDF report (with the "Show cross-endorsed Party Vote Subtotals" and the "Show empty Vote Comparison columns" options selected)

This report can only be generated when the Display Vote Totals option is selected on the Election Administration page. Otherwise, you receive a message indicating that the display of vote totals is not allowed. See "Displaying vote totals" in the *ClearCount Election Administration Guide* for more information.

In a contest that is endorsed by multiple voter groups, if a candidate is not assigned to a partisan voter group, vote totals for that candidate are reported with the first party associated with the contest. For example, if a contest is endorsed by the Orange and Yellow parties, the votes for the nonpartisan candidates are attributed to the Orange party. If multiple party endorsements are required for a contest, the contest can be configured accordingly in the BDF. See the *ClearDesign User Guide* for more information.

If your election uses consolidated precincts, all ballots and cards associated with the consolidated precinct are reported together and are separate from the ballots and cards of the individual precincts. Selecting one of the individual precincts as a Precinct filter option does not include the consolidated precinct in the results. The consolidated precinct is a separate entity from the individual precincts within it.

Data

Table 3-4 defines fields that appear in the Votes Cast by Box, Geography PDF report.

Table 3-4. Data Votes Cast by Box, Geography PDF report

Field	Description
Total ballots cast	The number of ballots cast in the election when at least the first card of a ballot is voted.
Ballots	The number of ballots cast in the contest.
Overvoted ballots	The number of ballots that contain overvotes for the contest.
Overvotes	The value of the vote rule (maximum number of votes) for the contest when that maximum is exceeded. Otherwise, the value is 0. This value conforms to the EAC definition. *Example A*: If a contest has a maximum vote of one and three ovals are filled in, the overvote value is 1. *Example B*: If a contest has a maximum vote of two and three ovals are filled in, the overvotes value is 2.
Undervotes	The number of undervotes for the contest (maximum number of votes minus the number of votes). This value conforms to the EAC definition.

Warning message in the Total Ballots Cast section

A warning message appears in the Total Ballots Cast section of the header when there are still uncounted cards. The message can be suppressed by selecting the **Hide warnings about uncounted ballots** option on the Generate PDF Report page.

Statement of Votes Cast by Geography   Page: 1 of 25
Clear County, General Election, November 7, 2017   2017-11-07
All Precincts, All Districts, All Counter Groups, All Scan Stations, All Contests   11:10:09
Total Ballots Cast: 233 (includes some ballots not yet counted) Registered Voters: 1740, Overall
Turnout: 13.39%
12 precincts reported out of 15 total

Figure 3-6. Total Ballots Cast warning message

3.6   Statement of Ballots Cast PDF report

The Statement of Ballots Cast PDF report presents participation data, by the geography of precinct or district. The example below presents data by precinct. This report does *not* include vote totals for choices.

			Statement of Ballots Cast	Page: 1 of 1
Clear County, General Election, Dec 03 2015	2017-03-30
All Precincts, All Districts, All Counter Groups, All Scan Stations, All Contests	12:29:54
Total Ballots Cast: 27, Registered Voters: 222, Overall Turnout: 12.16%	
5 precincts reported out of 5 total	

Counter Group	Ballots Cast	Reg. Voters	Turnout Pct.
All Precincts			
Absentee	3	222	1.35%
Election Day	24	222	10.81%
Early Voting	0	222	0.00%
Total	27	222	12.16%

Figure 3-7. Sample Statement of Ballots Cast PDF report

If your election uses consolidated precincts, all ballots and cards associated with the consolidated precinct are reported together and are separate from the ballots and cards of the individual precincts. Selecting one of the individual precincts as a Precinct filter option does not include the consolidated precinct in the results. The consolidated precinct is a separate entity from the individual precincts within it.

Data

Table 3-5 defines fields that appear in the Statement of Ballots Cast PDF report.

Table 3-5. Data Statement of Ballots Cast PDF report

Field	Description
Ballots Cast	The number of ballots cast when at least the first card of a ballot is voted.
Reg. Voters	The number of registered voters associated with the counter group.
Turnout Pct.	The percent turnout of voters divided by ballots cast.

Chapter 4. Exported reports

This chapter describes ClearCount reports that can be exported.

4.1   Cast Vote Record report

The exported Cast Vote Record (CVR) report for an election comprises the set of comma-separated values (CSV) files described in this section.

***Election_Name*.cvr.csv**—contains the record of which choices were selected on each card and includes RowNumber, BoxID, BoxPosition, BallotID, PrecinctID, BallotStyleID, PrecinctStyleName, ScanComputerName, Status, Remade, and Choice_X_ X:*<ContestName>*:*<VoteRule>*:*<ChoiceName>*:*<PartyName>* values.

Table 4-1 lists the contents of *Election_Name*.cvr.csv.

Table 4-1. Content of *Election_Name*.cv.csv

Column	Description
RowNumber	A unique sequential identifier for each row in the CVR
BoxID	A unique identifier for the box in the ClearCount election that contains the tabulated card
BoxPosition	A unique sequential identifier for each box in the CVR
BallotID	The unique identifier for each card, consisting of the box ID and the card's front image sequence number
PrecinctID	A unique number that identifies a single precinct
BallotStyleID	A unique number that identifies a card style
PrecinctStyleName	A name corresponding to (PrecinctID, BallotStyle)
ScanComputerName	The ScanStation computer name

Table 4-1. Content of Election_Name.cv.csv (continued)

Column	Description
Status	The current tabulation status of the card. Possible values are: • 0 = card was not resolved by the Card Resolutions tool (record is unmodified from the original scoring process) • 1 = card was resolved by the Card Resolutions tool • -2 = an election official determined that it is not a ballot based on the VISUAL examination • +1 = NOT REMADE and NOT votable; an election official VISUALLY determined that the image is only one piece of paper, but it is partially occluded (folded over, large bent corner, a work page in front of the real ballot, could not determine BallotStyleID/PrecinctID, could not FULLY vote a damaged ballot) • +2 = NOT REMADE and NOT votable; an election official VISUALLY determined that there are two or more pieces of paper within one image file
Remade	Records whether the Card Resolutions tool was used to adjudicate the card. Possible values include: • 0 = card was not resolved by the Card Resolutions tool (record is unmodified from the original scoring process) • 1 = card was resolved by the Card Resolutions tool • -2 = an election official determined that it is not a ballot based on the VISUAL examination • +1 = NOT REMADE and NOT votable; an election official VISUALLY determined that the image is only one piece of paper, but it is partially occluded (folded over, large bent corner, a work page in front of the real ballot, could not determine BallotStyleID/PrecinctID, could not FULLY vote a damaged ballot) • +2 = NOT REMADE and NOT votable; an election official VISUALLY determined that there are two or more pieces of paper within one image file
Choice	Contains one column for each possible choice. The header for each column is named *Choice_X_ X*:*<ContestName>*:*<VoteRule>*:*<ChoiceName>*:*<PartyName>*, where *X_X* equals *<ChoiceID>_<PartyID>* and *<ContestName>*, *<VoteRule>*, *<ChoiceName>* and *<PartyName>* originate in the BDF and can be seen in the other applicable CVR CSV files. The values for these columns are 1 (vote) or 0 (nonvote).

Election_Name.**choices.csv**—table that provides names for ChoiceIDs; includes ChoiceID, ContestID and ChoiceName values.

Election_Name.**contests.csv**—table that provides names for contest IDs; includes ContestID and ContestName values.

Election_Name.**parties.csv**—table that provides names for party IDs and includes PartyID and PartyName values.
Election_Name.**precincts.csv**—table that provides names for precinct IDs and card style IDs and includes PrecinctID, PrecinctName and BallotStyleID values.

Election_Name.**co.csv**—contains the record of which choices were selected on each card and includes the Election name and software version in the first row.

The second row onward contains the following values where the Colorado specified header value is written first followed by the Clear Ballot equivalent in <italics> for quick reference: where different CvrNumber *<RowNumber>*, BatchId *<BoxID>*, TabulatorNum, RecordId *<BoxPosition>*, ImprintedId *<BallotID>*, PrecinctPortion *<PrecinctID>*, BallotType *<PrecinctStyleName>*, (*<ContestName>*) (*_Vote for=<_VoteRule>*) *<CandidateName>* *<VoterGroupName>* column values.

Colorado counties use this format to report election results to the state. This format is similar in style to an export from Dominion election systems.

- **First row**—The Colorado CVR format displays the *<ElectionName>* and ClearCount *<VersionNumber>* as the first and second positions of the first row, respectively.

- **The first seven position (column) header information found in the fourth row of data**:

  ○ **CvrNumber**—The first position contains the internal <RowNumber> of the card.

  ○ **TabulatorNum**—The second position contains a "1" as the default output value. Dominion uses a tabulator number to identify which scanner was used to scan the batch of ballots. One physical scanner can have multiple tabulator numbers. The tabulator number differentiates Batch IDs between scanners. Clear Ballot uses header cards to identity each batch. Therefore, identifying scanners does not apply to ClearCount. This field must contain a positive integer.

  ○ **BatchId**—The third position contains the *<BoxID>* of the card's associated box.

  ○ **RecordID**—The fourth position contains the *<BoxPosition>* value for the card.

  ○ **Imprinted I**D—The fifth position contains the TabulatorNum-*<BallotID>*-*<BoxPosition>* of the card separated by dashes.

  ○ **PrecinctPortion** –The sixth position contains the *<PrecinctID>* of the card.

  ○ **BallotType**—The seventh position contains the *<PrecinctStyleName>* of the card.

- **Information contained in the 8th position (column) onwards**:

  ◦ **Second through Fourth rows**—These rows contain information pertaining to the Contest, vote rule, candidate name and party starting in the 8th position for each row of data. There is no header information on these rows, but all information found in the same position (column) are related.

  ◦ **Second row**—Beginning in the 8th position, the (<ContestName>) (_Vote For=_x) is displayed for each candidate entry on a card. Additional positions contain other candidate entries on a card.

  ◦ **Third row**—Beginning in the 8th position, the <CandidateName> for each candidate in the election is listed and relates to the same position-entry information found in the 2nd and 4th rows.

  ◦ **Fourth row** - Beginning in the 8th position, the <VoterGroupName> for each candidate in the election is listed and relates to the same position-entry information found in the 2nd and 3rd rows.

  ◦ All row information which appears in the 5th row onward pertains to each individual card as defined by the header values listed above. Each row of information related to the column information is defined in rows two through four.

4.2 Exporting a cast vote record

The ClearCount system provides a zipped file that contains the cast vote record (CVR) file set as comma-separated values (CSV) files.

To export a cast vote record:

1. Log in to a CountStation as an administrator.

2. From the drop-down list next to your name in the upper right corner, select **Election Administration**.

   ClearCount displays the Election Administration page.

3. Locate the election with the CVR you want to export, click its **Actions** button and select **Export Cast Vote Record** from the drop-down list that appears.

   The Server Background Jobs (page 44) page appears in a new browser tab. The launched report is topmost in the table and its job type (in the Job column) is *cvr_export*.

4. Wait until the Status column says *Completed* and a file named *<Election_Name>.cvr.zip* appears in the Final Result column, and then click the filename to download and save it.

   You can then open the file set using a third-party application, such as Notepad or Microsoft Excel.

5. (Optional) Delete the job from the Server Background Jobs (page 44) page by clicking the button in the Actions column and selecting **Delete Job**.

   The file resides on the CountServer computer until it is deleted, or until the CountServer computer is restarted.

4.3   Write-in Contests Results report

The exported Write-in Contests Results report for an election comprises the following set of comma-separated values (CSV) files with the indicated data:

- **Party Endorsement**—The political party designation (always *nonpartisan* for write-in votes)
- **Precinct Name**—The name of the precinct
- **Precinct ExportID**—(Optional) Unique identifier for the precinct when exported
- **Precinct ImportID**—(Optional) Unique identifier for the precinct when imported
- **Contest Name**—Descriptive name of the contest (this is what appears in reports)
- **Contest Short Name**—An abbreviated name for the contest
- **Contest ID**—Unique identifier for the contest
- **Contest ExportID**—(Optional) Unique identifier for the contest when exported
- **Contest ImportID**—(Optional) Unique identifier for the contest when imported
- **Write-in Name**—The name of the write-in candidate
- **Votes**—The number of votes received by the write-in candidate

   The ClearCount system removes all duplicate write-in candidate assignments (when a unique write-in candidate name is assigned to more than one write-in choice zone for the same contest on the same card).

   The Write-in Contests Results report does not include candidate names (or the unassigned category) that have zero votes.

4.4   Exporting write-ins results

The ClearCount system provides the write-in results for an election as a CSV file.

To export a write-in results:

1. Log in to a CountStation as an administrator.

2. From the drop-down list next to your name in the upper right corner, select **Election Administration**. The Election Administration page appears.

3. Locate the election you want to export write-in results for, click its **Actions** button and select **Export Write-in Contests Results** from the drop-down list that appears. The Server Background Jobs (page 44) page appears in a new browser tab. The launched report is topmost in the table and its job type (in the Job column) is *writein_export*.

4. Wait until the Status column says *Completed* and a file named *Write-in Contests Results for <Election_Name>.csv* appears in the Final Result column, and then click the filename to download and save it. You can then open the CSV file set using a third-party application, such as Notepad or Microsoft Excel.

5. (Optional) Delete the job from the Server Background Jobs (page 44) page by clicking the button in the Actions column and selecting **Delete Job**.

   The CSV file resides on the CountServer computer until it is deleted, or until the CountServer computer is restarted.

4.5 Custom XSLT file

The ClearCount system lets you import an XSLT (extensible stylesheet language transformations) file and then export it in an XML, CSV, or TXT format.

To create the file:

1. Log in to a CountStation as an administrator.

2. From the drop-down list next to your name in the upper right corner, select **Election Administration**. The Election Administration page appears.

3. Locate the election you want to import an XSLT results file for, click its **Actions** button and select **Import Results XSLT File** from the drop-down list that appears.

4. The Import Results XSLT File dialog appears.

5. Click the **Choose File** button, navigate to the location of the XSLT file that you want to import, select it and click **Open**. Then click the **Import** button.

   Only a single XSLT file can reside in the ClearCount system at a time. When you import another XSLT file, the previous file is overwritten.

6. On the Election Administration page, click the election's **Actions** button and select **Export Custom Results Using XSLT File** from the drop-down list that appears.

7. The Server Background Jobs (page 44) page appears in a new browser tab. The launched report is topmost in the table and its job type (in the Job column) is *xslt_export*.

8. Wait until the Status column says *Completed* and a file named *Custom Results for <Election_ Name>.ext* appears in the Final Result column, and then click the filename to download and save it. You can then open the file set using a third-party application, such as Notepad or Microsoft Excel.

   The file has an XML, CSV, or TXT extension, depending upon its content.

9. (Optional) Delete the job from the Server Background Jobs (page 44) page by clicking the button in the Actions column and selecting **Delete Job**.

   The file resides on the CountServer computer until it is deleted, or until the CountServer computer is restarted.

4.6 XML results files

XML results files contain unfiltered, but structured, data extracted from a specific election database. (It is possible to generate periodic "snapshots" of election results, generally while scanning is paused, but not possible to generate filtered data.) The principle user of the schema description and output files is the programmer responsible for transforming any or all of the contained data into custom reports.

A read access level or above is required to generate the XML results file.

Note:	Depending upon the size of an election database, processing can take between several minutes and several hours.

4.6.1 Exporting XML results files

The XML results file can only be exported when the Display Vote Totals option is enabled on the Election Administration page. Otherwise, you receive a message indicating that the display of vote totals is not allowed. See "Displaying vote totals" in the *ClearCount Election Administration Guide* for more information.

To export an XML results file:

1. Log in to a CountStation as an administrator.

2. From the drop-down list next to your name in the upper right corner, select **Election Administration**. The Election Administration page appears.

3. Locate the election with the XML results you want to export, click its **Actions** button and select **Export XML Results** from the drop-down list that appears. The Server Background Jobs (page 44) page appears in a new browser tab. The launched report is topmost in the table and its job type (in the Job column) is *xml_export*.

4. Wait until the Status column says *Completed* and a file named *XML results for <electionName>.xml* appears in the Final Result column, and then click the filename to download and save it. You can then open the XML file set using a third-party application, such as Notepad or Microsoft Excel.

5. (Optional) Delete the job from the Server Background Jobs (page 44) page by clicking the button in the Actions column and selecting **Delete Job**.

    The XML file resides on the CountServer computer until it is deleted, or until the CountServer computer is restarted.

4.6.2 Election results schema

The Clear Ballot election results schema uses the following XML elements and simple types:

Elements

- "Candidate" on the next page
- "CandidateGroup" on page 91
- "Contest" on page 91
- "ContestGroup" on page 94
- "ContestGroupVotes" on page 95
- "ContestList" on page 95
- "District" on page 97
- "DistrictCategory" on page 98
- "DistrictCategoryMap" on page 99
- "DistrictMap" on page 100
- "Election" on page 100
- "ElectionDate" on page 103
- "Group" on page 104
- "GroupMap" on page 104
- "Jurisdiction" on page 105
- "JurisdictionMap" on page 106
- "Owner" on page 107
- "Party" on page 110
- "PartyMap" on page 111
- "Precinct" on page 111
- "PrecinctGroup" on page 114

- "ReportTime" on page 115
- "Votes" on page 115

Simple types

- "Alternateid" on page 116
- "ContestTypeCode" on page 116
- "GroupTypeCode" on page 117
- "NameDesc" on page 118
- "Percentage" on page 118
- "ResultsTypeCode" on page 118
- "VersionXML" on page 119
- "VoteGroupStatus" on page 119

4.6.2.1 Candidate

Element that provides information for a contest or retention/amendment choice.

Attributes

Table 4-2. Candidate attributes

Name	Type	Required	Description
id	xs:integer	Yes	Numeric identifier assigned by the tabulation system.
name	NameDesc (page 118)	Yes	Descriptive name for the candidate name or retention/amendment choice.
partyId	xs:integer	No	As defined for the id attribute of the Party (page 110) element. This attribute can be blank if a ballot item is not associated with a defined party.
votes	xs:integer	Yes	Total votes for the candidate in the contest.
pos	xs:float	No	Preferred order of appearance in reports. If not present, ChoiceOrder is not set in the BDF.
ImportID	xs:string	No	Unique identifier from source system, such as the state voter registration system. Corresponds to ChoiceImportID in the BDF.
ExportID	xs:string	No	Unique identifier for the destination system, such as a statewide results reporting system. Corresponds to ChoiceExportID in the BDF.

Subelements

Table 4-3. Candidate subelements

Element	Type	Occurs	Description
CandidateGroup (page 91)	xs:anyType	At least once	Provides election data for a specific candidate group.
Votes (page 115)	xs:integer (extension)	At least once	Provides candidate votes by precinct or precinct and group.

Referenced by

Contest (page 91)

Each candidate within a Contest element must have a unique identifier.

Definition

```
<xs:element name="Candidate">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="1" maxOccurs="unbounded" ref="CandidateGroupt" />
            <xs:element minOccurs="1" maxOccurs="unbounded" ref="Votes" />
        </xs:sequence>
        <xs:attribute name="id" use="required" type="xs:integer" />
        <xs:attribute name="name" use="required" type="NameDesc"/>
        <xs:attribute name="partyId" use="optional" type="xs:integer" />
        <xs:attribute name="votes" use="required" type="xs:integer" />
        <xs:attribute name="pos" use="optional" type="xs:float" />
        <xs:attribute name="ImportID" use="optional" type="xs:string" />
        <xs:attribute name="ExportID" use="optional" type="xs:string" />
    </xs:complexType>
</xs:element>
```

4.6.2.2 CandidateGroup

Element that provides election counter group subtotals for a specific candidate.

Attributes

Table 4-4. CandidateGroup attributes

Name	Type	Required	Description
groupId	xs:integer	Yes	As defined for the id attribute of the Group (page 104) element.
totalVotes	xs:integer	Yes	Total votes for the counter group for the candidate.

Referenced by

Candidate (page 89)

Definition

```
<xs:element name="CandidateGroup">
    <xs:complexType>
        <xs:attribute name="groupId" use="required" type="xs:integer" />
        <xs:attribute name="totalVotes" use="required" type="xs:integer"/>
    </xs:complexType>
</xs:element>
```

4.6.2.3 Contest

Element that provides information for a specific contest.

Attributes

Table 4-5. Contest attributes

Name	Type	Required	Description
id	xs:integer	Yes	Numeric identifier assigned by the tabulation system.
title	NameDesc (page 118)	Yes	Descriptive name of the contest.

Table 4-5. Contest attributes (continued)

Name	Type	Required	Description
type	ContestTypeCode (page 116)	No	Enumerated type, one of: C, Q, E, R, S, P, J.
districtId	xs:integer	No	Numeric identifier
partyId	xs:integer	No	Numeric identifier
voteFor	xs:integer	Yes	Number of votable candidates in the contest.
regVoters	xs:integer	Yes	If registered voter counts are present in the BDF, total number of registered voters (as of book closing).
ballotsCast	xs:integer	Yes	Number of ballots cast.
castPercentage	Percentage (page 118)	Yes	If registered voter counts are present in the BDF, calculated as: (ballotsCast/regVoters) * 100
writeinVotes	xs:integer	Yes	Number of write-in votes.
overVotes	xs:integer	Yes	Number of overvotes.
underVotes	xs:integer	Yes	Number of undervotes.
totalPrecincts	xs:integer	Yes	Total number of election-day precincts.
precinctsReported	xs:integer	Yes	Number of election-day precincts reporting as of file creation time.
pos	xs:float	No	Preferred order of appearance in reports. If not present, ContestOrder is not set in the BDF.
ImportID	xs:string	No	Unique identifier from source system, such as the state voter registration system. Corresponds to ContestImportID in the BDF.
ExportID	xs:string	No	Unique identifier for the destination system, such as a statewide results reporting system. Corresponds to ContestExportID in the BDF.

Subelements

Table 4-6. Contest subelements

Element	Type	Occurs	Description
Candidate (page 89)	xs:anyType	At least once	Provides information for a contest or retention/amendment choice.
ContestGroup (page 94)	xs:anyType	At least once	Provides election data for a specific ballot type for a contest.

Referenced by

ContestList (page 95)

Note: Each contest within a ContestList element must have a unique identifier.

Definition

```
<xs:element name="Contest">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="1" maxOccurs="unbounded" ref="Candidate" />
            <xs:element minOccurs="1" maxOccurs="unbounded" ref="ContestGroup" />
        </xs:sequence>
        <xs:attribute name="id" use="required" type="xs:integer" />
        <xs:attribute name="title" use="required" type="NameDesc"/>
        <xs:attribute name="type" use="optional" type="ContestTypeCode"/>
        <xs:attribute name="districtId" use="optional" type="xs:integer"/>
        <xs:attribute name="voteFor" use="required" type="xs:integer" />
        <xs:attribute name="regVoters" use="required" type="xs:integer" />
        <xs:attribute name="ballotsCast" use="required" type="xs:integer" />
        <xs:attribute name="castPercentage" use="required" type="Percentage" />
        <xs:attribute name="writeinVotes" use="required" type="xs:integer" />
        <xs:attribute name="overVotes" use="required" type="xs:integer" />
        <xs:attribute name="underVotes" use="required" type="xs:integer" />
        <xs:attribute name="totalPrecincts" use="required" type="xs:integer" />
        <xs:attribute name="precinctsReported" use="required" type="xs:integer" />
        <xs:attribute name="pos" use="optional" type="xs:float" />
        <xs:attribute name="ImportID" use="optional" type="xs:string" />
        <xs:attribute name="ExportID" use="optional" type="xs:string" />
    </xs:complexType>
</xs:element>
```

4.6.2.4 ContestGroup

Element that provides counter group subtotals for a contest.

Attributes

Table 4-7. CandidateGroup attributes

Name	Type	Required	Description
groupId	xs:integer	Yes	As defined for the id attribute of the Group (page 104) element.
ballotsCast	xs:integer	Yes	Number of ballots cast.
totalVotes	xs:integer	Yes	Total number of votes.
writeinVotes	xs:integer	Yes	Number of write-in votes.
overVotes	xs:integer	Yes	Number of overvotes.
underVotes	xs:integer	Yes	Number of undervotes.

Subelements

Table 4-8. CandidateGroup subelements

Element	Type	Occurs	Description
ContestGroupVotes (page 95)	xs:anyType	At least once	Provides election data for a ballot type for a contest in a specific precinct.

Referenced by

Contest (page 91)

Definition

```
<xs:element name="ContestGroup">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="1" maxOccurs="unbounded" ref="ContestGroupVotes"/>
        </xs:sequence>
        <xs:attribute name="groupId" use="required" type="xs:integer" />
        <xs:attribute name="ballotsCast" use="required" type="xs:integer"/>
        <xs:attribute name="totalVotes" use="required" type="xs:integer"/>
        <xs:attribute name="writeinVotes" use="required" type="xs:integer"/>
        <xs:attribute name="overVotes" use="required" type="xs:integer"/>
        <xs:attribute name="underVotes" use="required" type="xs:integer"/>
```

```
        </xs:complexType>
</xs:element>
```

4.6.2.5 ContestGroupVotes

Element that subtotals for a contest by precinct and counter group.

Attributes

Table 4-9. ContestGroupVotes attributes

Name	Type	Required	Description
refPrecinctId	xs:integer	Yes	As defined for the id attribute of the Precinct (page 111) element.
ballotsCast	xs:integer	Yes	Number of ballots cast.
totalVotes	xs:integer	Yes	Total number of votes.
writeinVotes	xs:integer	Yes	Number of write-in votes.
overVotes	xs:integer	Yes	Number of overvotes.
underVotes	xs:integer	Yes	Number of undervotes.

Referenced by

ContestGroup (page 94)

Definition

```
<xs:element name="ContestGroupVotes">
    <xs:complexType>
        <xs:attribute name="refPrecinctId" use="required" type="xs:integer" />
        <xs:attribute name="ballotsCast" use="required" type="xs:integer"/>
        <xs:attribute name="totalVotes" use="required" type="xs:integer"/>
        <xs:attribute name="writeinVotes" use="required" type="xs:integer"/>
        <xs:attribute name="overVotes" use="required" type="xs:integer"/>
        <xs:attribute name="underVotes" use="required" type="xs:integer"/>
    </xs:complexType>
</xs:element>
```

4.6.2.6 ContestList

Element that provides the contests in an election.

Attributes

None

Subelements

Table 4-10. ContestList subelements

Element	Type	Occurs	Description
Contest (page 91)	xs:anyType	At least once	Provides information for a specific contest.

Referenced by

Election (page 100)

Definition

```
<xs:element name="ContestList">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="1" maxOccurs="unbounded" ref="Contest" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
```

4.6.2.7 District

Element that provides information for a specific district.

Attributes

Table 4-11. District attributes

Name	Type	Required	Description
id	xs:integer	Yes	Numeric identifier assigned by the tabulation system.
districtCategoryId	xs:integer		As defined for the id attribute of the DistrictCategory element.
abbrv	xs:integer	Yes	Short name for the district.
name	NameDesc (page 118)	Yes	Descriptive name for the district.
pos	xs:float	No	Preferred order of appearance in reports. If not present, then DistrictOrder is not set in the BDF.
ImportID	xs:string	No	Unique identifier from source system, such as the state voter registration system. Corresponds to DistrictImportID in the BDF.
ExportID	xs:string	No	Unique identifier for the destination system, such as a statewide results reporting system. Corresponds to DistrictExportID in the BDF.

Referenced by

DistrictMap (page 100)

Each district within a DistrictMap element must have a unique identifier.

Definition

```
<xs:element name="District">
    <xs:complexType>
        <xs:attribute name="id" use="required" type="xs:integer" />
        <xs:attribute name="districtCategoryId" use="required" type="xs:integer" />
        <xs:attribute name="abbrv" use="required" type="xs:NCName" />
        <xs:attribute name="name" use="required" type="NameDesc"/>
        <xs:attribute name="pos" use="optional" type="xs:float" />
        <xs:attribute name="ImportID" use="optional" type="xs:string" />
        <xs:attribute name="ExportID" use="optional" type="xs:string" />
    </xs:complexType>
</xs:element>
```

4.6.2.8 DistrictCategory

Element that provides information for a specific district category.

Attributes

Table 4-12. DistrictCategory attributes

Name	Type	Required	Description
id	xs:integer	Yes	Numeric identifier assigned by the tabulation system.
name	NameDesc (page 118)	Yes	Descriptive name for the district category.
pos	xs:float	No	Preferred order of appearance in reports. If not present, then DistrictCategoryOrder is not set in the BDF.
ImportID	xs:string	No	Unique identifier from source system, such as the state voter registration system. Corresponds to DistrictCategoryImportID in the BDF.
ExportID	xs:string	No	Unique identifier for the destination system, such as a statewide results reporting system. Corresponds to DistrictCategoryExportID in the BDF.

Referenced by

DistrictCategoryMap (page 99)

Each district category within a DistrictCategoryMap element must have a unique identifier.

Definition

```
<xs:element name="DistrictCategory">
    <xs:complexType>
        <xs:attribute name="id" use="required" type="xs:integer" />
        <xs:attribute name="name" use="required" type="NameDesc"/>
        <xs:attribute name="pos" use="optional" type="xs:float" />
        <xs:attribute name="ImportID" use="optional" type="xs:string" />
        <xs:attribute name="ExportID" use="optional" type="xs:string" />
    </xs:complexType>
</xs:element>
```

4.6.2.9 DistrictCategoryMap

Element that provides all district categories.

Attributes

None

Subelements

Table 4-13. DistrictCategoryMap subelements

Element	Type	Occurs	Description
DistrictCategory (page 98)	xs:anyType	At least once	Provides information for a specific district category.

Referenced by

Owner (page 107)

Definition

```
<xs:element name="DistrictCategoryMap">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="1" maxOccurs="unbounded" ref="DistrictCategory" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
```

4.6.2.10 DistrictMap

Element that provides all districts in an election.

Attributes

None

Subelements

Table 4-14. DistrictMap subelements

Element	Type	Occurs	Description
District (page 97)	xs:anyType	At least once	Provides information for a specific district.

Referenced by

Owner (page 107)

Definition

```
<xs:element name="DistrictMap">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="1" maxOccurs="unbounded" ref="District" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
```

4.6.2.11 Election

Element that provides top-level information for a specific election.

Attributes

Table 4-15. Election attributes

Name	Type	Required	Description
id	xs:integer	Yes	Numeric identifier assigned by the tabulation system.

Table 4-15. Election attributes (continued)

Name	Type	Required	Description
electionName	NameDesc (page 118)	Yes	Short name or code for the election.
electionTitle	NameDesc (page 118)	Yes	Descriptive name for the election.
resultsType	ResultsTypeCode (page 118)	Yes	P—Precinct-level results.
totalBallotsCast	xs:integer	Yes	Total number of ballots cast.
totalRegistration	xs:integer	Yes	Total number of registered voters (as of book closing).
totalCastPercentage	Percentage (page 118)	Yes	Calculation: (totalBallotsCast/totalRegistration) * 100.
totalPrecincts	xs:integer	Yes	Total number of election-day precincts.
precinctsReported	xs:integer	Yes	Number of election-day precincts reporting.
precinctsReported Percentage	Percentage (page 118)	Yes	Calculation: (precinctsReported/totalPrecincts) * 100
groupReporting	xs:boolean	Yes	1—Counter group subtotals.
absenteesCompleted	VoteGroupStatus (page 119)	Yes	Enumerated type, one of: N, P, Y.
earlyVotingCompleted	VoteGroupStatus (page 119)	Yes	Enumerated type, one of: N, P, Y.
precinctsCompleted	VoteGroupStatus (page 119)	Yes	Enumerated type, one of: N, P, Y.
provisionalsCompleted	VoteGroupStatus (page 119)	Yes	Enumerated type, one of: N, P, Y.

Subelements

Table 4-16. Election subelements

Element	Type	Occurs	Description
ContestList (page 95)	xs:anyType	Once	Provides the contests in an election.

Referenced by

Owner (page 107)

Definition

```
<xs:element name="Election">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="1" ref="ContestList" />
        </xs:sequence>
        <xs:attribute name="id" use="required" type="xs:integer" />
        <xs:attribute name="electionName" use="required" type="NameDesc"/>
        <xs:attribute name="electionTitle" use="required" type="NameDesc"/>
        <xs:attribute name="resultsType" use="required" type="ResultsTypeCode" />
        <xs:attribute name="totalBallotsCast" use="required" type="xs:integer" />
        <xs:attribute name="totalRegistration" use="required" type="xs:integer" />
        <xs:attribute name="totalCastPercentage" use="required" type="Percentage" />
        <xs:attribute name="totalPrecincts" use="required" type="xs:integer" />
        <xs:attribute name="precinctsReported" use="required" type="xs:integer" />
        <xs:attribute name="precinctsReportedPercentage" use="required" type="Percentage" />
        <xs:attribute name="groupReporting" use="required" type="xs:boolean" />
        <xs:attribute name="absenteesCompleted" use="required" type="VoteGroupStatus" />
        <xs:attribute name="earlyVotingCompleted" use="required" type="VoteGroupStatus" />
        <xs:attribute name="precinctsCompleted" use="required" type="VoteGroupStatus" />
        <xs:attribute name="provisionalsCompleted" use="required" type="VoteGroupStatus" />
    </xs:complexType>
</xs:element>
```

4.6.2.12 ElectionDate

Element that provides the election date.

Attributes

None

Referenced by

Owner (page 107)

Definition

```
<xs:element name="ElectionDate" type="xs:dateTime" />
```

4.6.2.13 Group

Element that provides a counter group.

Attributes

Table 4-17. Group attributes

Name	Type	Required	Description
id	xs:integer	Yes	Numeric identifier assigned to the group by the tabulation system.
groupType	GroupTypeCode (page 117)	Yes	Enumerated type, one of: AV,; ED, EV, OT, PV, TV.
name	NameDesc (page 118)	Yes	Descriptive name for the group.

Referenced by

GroupMap (page 104)

Definition

```
<xs:element name="Group">
    <xs:complexType>
        <xs:attribute name="id" use="required" type="xs:integer" />
        <xs:attribute name="groupType" use="required" type="GroupTypeCode" />
        <xs:attribute name="name" use="required" type="NameDesc />
    </xs:complexType>
</xs:element>
```

4.6.2.14 GroupMap

Element that provides all counter groups.

Attributes

None

Subelements

Table 4-18. GroupMap subelements

Element	Type	Occurs	Description
Group (page 104)	xs:anyType	At least once	Provides a specific ballot type.

Referenced by

Owner (page 107)

Definition

```
<xs:element name="GroupMap">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="1" maxOccurs="unbounded" ref="Group" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
```

4.6.2.15 Jurisdiction

Element that provides vote and precinct information for a specific jurisdiction.

Attributes

Table 4-19. Jurisdiction attributes

Name	Type	Required	Description
title	NameDesc (page 118)	Yes	Name (or code) for the state or county.
typeId	xs:integer	Yes	1—State 2—County
totalBallotsCast	xs:integer	Yes	Total number of ballots cast.
totalRegistration	xs:integer	Yes	Total number of registered voters (as of book closing).
totalCastPercentage	Percentage (page 118)	Yes	Calculation: (totalBallotsCast/totalRegistration) * 100
totalPrecincts	xs:integer	Yes	Total number of election-day precincts.

Table 4-19. Jurisdiction attributes (continued)

Name	Type	Required	Description
precinctsReported	xs:integer	Yes	Number of election-day precincts reporting.
precinctsReportedPercentage	Percentage (page 118)	Yes	Calculation: (precinctsReported/totalPrecincts) * 100

Subelements

Table 4-20. Jurisdiction subelements

Element	Type	Occurs	Description
Precinct (page 111)	xs:anyType	At least once	Provides information for a specific precinct in a jurisdiction.

Referenced by

JurisdictionMap (page 106)

Definition

```
<xs:element name="Jurisdiction">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="1" maxOccurs="unbounded" ref="Precinct" />
        </xs:sequence>
        <xs:attribute name="title" use="required" type="NameDesc" />
        <xs:attribute name="typeId" use="required" type="xs:integer" />
        <xs:attribute name="totalBallotsCast" use="required" type="xs:integer" />
        <xs:attribute name="totalRegistration" use="required" type="xs:integer" />
        <xs:attribute name="totalCastPercentage" use="required" type="Percentage" />
        <xs:attribute name="totalPrecincts" use="required" type="xs:integer" />
        <xs:attribute name="precinctsReported" use="required" type="xs:integer" />
        <xs:attribute name="precinctsReportedPercentage" use="required" type="Percentage" />
    </xs:complexType>
</xs:element>
```

4.6.2.16 JurisdictionMap

Element that provides the number of jurisdictions reporting.

Attributes

Table 4-21. JurisdictionMap attributes

Name	Type	Required	Description
totalJurisdictions	xs:integer	Yes	Number of jurisdictions to report on. If: 1—County
reportingJurisdictions	xs:integer	Yes	Number of jurisdictions reporting. If: 1—County
percentReported	Percentage (page 118)	Yes	Calculation: (reportingJurisdiction/totalJurisdictions) * 100

Subelements

Table 4-22. JurisdictionMap subelements

Element	Type	Occurs	Description
Jurisdiction (page 105)	xs:anyType	At least once	Provides vote and precinct information for a specific jurisdiction.

Referenced by

Owner (page 107)

Definition

```
<xs:element name="JurisdictionMap">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="1" maxOccurs="unbounded" ref="Jurisdiction" />
        </xs:sequence>
        <xs:attribute name="totalJurisdictions" use="required" type="xs:integer" />
        <xs:attribute name="reportingJurisdictions" use="required" type="xs:integer" />
        <xs:attribute name="percentReported" use="required" type="Percentage" />
    </xs:complexType>
</xs:element>
```

4.6.2.17 Owner

Element that provides identifying information for the XML results file.

Attributes

Table 4-23. Owner attributes

Name	Type	Required	Description
name	xs:string	Yes	Vendor name and version number of the application that generates the results.
xmlversion	VersionXML (page 119)	Yes	XML version (3.0-P).

Subelements

Table 4-24. Owner subelements

Element	Type	Occurs	Description
ElectionDate (page 103)	xs:dateTime	Once	Provides the election date.
ReportTime (page 115)	xs:dateTime	Once	Provides the report generation timestamp.
JurisdictionMap (page 106)	xs:anyType	Once	Provides vote and precinct information for a specific jurisdiction.
GroupMap (page 104)	xs:anyType	Once	Provides all ballot types.
PartyMap (page 111)	xs:anyType	Once	Provides all parties in an election.
Election (page 100)	xs:anyType	Once	Provides top-level information for a specific election.

Referenced by

(root element)

Definition

<xs:element name="Owner">

       <xs:complexType>
       <xs:sequence>
    <xs:element minOccurs="1" ref="ElectionDate" />
      <xs:element minOccurs="1" ref="ReportTime" />
      <xs:element minOccurs="1" ref="JurisdictionMap" />
      <xs:element minOccurs="1" ref="GroupMap" />
      <xs:element minOccurs="1" ref="PartyMa" />
      <xs:element minOccurs="1" ref="Election" />

```
        </xs:sequence>
        <xs:attribute name="name" use="required" type="xs:string" />
            <xs:simpleType>
                <xs:restriction base="xs:string">
                    <xs:minLength value="1" />
                </xs:restriction>
            </xs:simpleType>
        </xs:attribute>
        <xs:attribute name="xmlversion" use="required" type="VersionXML"/>
    </xs:complexType>
</xs:element>
```

4.6.2.18 Party

Element that provides information for a specific party.

Attributes

Table 4-25. Party attributes

Name	Type	Required	Description
id	xs:integer	Yes	Numeric identifier assigned by the tabulation system. If: 0—The "party" is a contest party ID in a general election.
abbrv	xs:NCName	Yes	Short name for the party.
name	NameDesc (page 118)	Yes	Descriptive name for the party.
pos	xs:float	No	Preferred order of appearance in reports. If not present, then PartyOrder is not set in the BDF.
ImportID	xs:string	No	Unique identifier from source system, such as the state voter registration system. Corresponds to PartyImportID in the BDF.
ExportID	xs:string	No	Unique identifier for the destination system, such as a statewide results reporting system. Corresponds to PartyExportID in the BDF.

Referenced by

PartyMap (page 111)

> **Note**:   Each party within a PartyMap element must have a unique identifier.

Definition

```
<xs:element name="Party">
    <xs:complexType>
        <xs:attribute name="id" use="required" type="xs:integer" />
        <xs:attribute name="abbrv" use="required" type="xs:NCName" />
        <xs:attribute name="name" use="required" type="NameDesc"/>

        <xs:attribute name="pos" use="optional" type="xs:float" />
        <xs:attribute name="ImportID" use="optional" type="xs:string" />
```

```
        <xs:attribute name="ExportID" use="optional" type="xs:string" />
    </xs:complexType>
</xs:element>
```

4.6.2.19 PartyMap

Element that provides all parties in an election.

Attributes

None

Subelements

Table 4-26. PartyMap subelements

Element	Type	Occurs	Description
Party (page 110)	xs:anyType	At least once	Provides information for a specific party.

Referenced by

Owner (page 107)

Definition

```
<xs:element name="PartyMap">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="1" maxOccurs="unbounded" ref="Party" />
        </xs:sequence>
    </xs:complexType>
</xs:element>
```

4.6.2.20 Precinct

Element that provides information for a specific precinct in a jurisdiction.

Attributes

Table 4-27. Precinct attributes

Name	Type	Required	Description
id	xs:integer	Yes	Numeric identifier assigned to the precinct by the tabulation system.
ballotsCast	xs:integer	Yes	Total number of ballots cast.
regVoters	xs:integer	Yes	If registered voter counts are present in the BDF, total number of registered voters (as of book closing).
castPercentage	Percentage (page 118)	Yes	If registered voter counts are present in the BDF, calculated as: (ballotsCast/regVoters) * 100
counted	xs:boolean	Yes	If IsReporting is set properly in the BDF votergroups table: 0—Election-Day precinct not reported. 1—Election-Day precinct reported.
name	NameDesc (page 118)	Yes	Descriptive name for the precinct.
pos	xs:float	No	Preferred order of appearance in reports. If not present, PrecinctOrder is not set in the BDF.
ImportID	xs:string	No	Unique identifier from source system, such as the state voter registration system. Corresponds to PrecinctImportID in the BDF.
ExportID	xs:string	No	Unique identifier for the destination system, such as a statewide results reporting system. Corresponds to PrecinctExportID in the BDF.

Subelements

Table 4-28. Precinct subelements

Element	Type	Occurs	Description
PrecinctParty (page 113)	xs:anyType	No	Provides Voter Group subtotals for a specific precinct.
PrecinctGroup (page 114)	xs:anyType	At least once	Provides counter group subtotals for a specific precinct.

Referenced by

Jurisdiction (page 105)

Each precinct within a Jurisdiction element must have a unique identifier.

Definition

```
<xs:element name="Precinct">
    <xs:complexType>
        <xs:sequence>
            <xs:element maxOccurs="unbounded" ref="PrecinctGroup" />
            <xs:element minOccurs="1" maxOccurs="unbounded" ref="PrecinctGroup" />
        </xs:sequence>
        <xs:attribute name="id" use="required" type="xs:integer" />
        <xs:attribute name="ballotsCast" use="required" type="xs:integer" />
        <xs:attribute name="castPercentage" use="required" type="Percentage" />
        <xs:attribute name="counted" use="required" type="xs:boolean" />
        <xs:attribute name="regVoters" use="required" type="xs:integer" />
        <xs:attribute name="name" use="required" type="NameDesc" />
        <xs:attribute name="pos" use="optional" type="xs:float" />
        <xs:attribute name="ImportID" use="optional" type="xs:string" />
        <xs:attribute name="ExportID" use="optional" type="xs:string" />
    </xs:complexType>
</xs:element>
```

4.6.2.21 PrecinctParty

Element that provides Voter Group subtotals for a precinct.

Attributes

Table 4-29. PrecinctParty attributes

Name	Type	Required?	Description
partyId	xs:integer	Yes	As defined for the id attribute of the Group element.
regVoters	xs:integer	Yes	Number of ballots cast.
ballotsCast	xs:integer	No	Number of ballots cast by party.
castPercentage	Percentage	No	Number of ballots cast divided by registered voters.

Referenced by

Precinct (page 111)

Definition

```
<xs:element name="PrecinctParty">
    <xs:complexType>
        <xs:attribute name="partyId" use="required" type="xs:integer" />
        <xs:attribute name="regVoters" use="required" type="xs:integer" />
        <xs:attribute name="ballotsCast" use="required" type="xs:integer" />
        <xs:attribute name="castPercentage" use="required" type="Percentage" />
    </xs:complexType>
</xs:element>
```

4.6.2.22 PrecinctGroup

Element that provides counter group subtotals for a precinct.

Attributes

Table 4-30. PrecinctGroup attributes

Element	Type	Occurs	Description
groupId	xs:integer	Yes	As defined for the id attribute of the Group (page 104) element.
ballotsCast	xs:integer	Yes	Number of ballots cast.

Referenced by

Precinct (page 111)

Definition

```
<xs:element name="PrecinctGroup">
    <xs:complexType>
        <xs:attribute name="groupId" use="required" type="xs:integer" />
        <xs:attribute name="ballotsCast" use="required" type="xs:integer" />
            <xs:simpleType>
                <xs:restriction base="xs:integer">
                    <xs:minInclusive value="0">
                    </xs:minInclusive>
                </xs:restriction>
            </xs:simpleType>
        </xs:attribute>
    </xs:complexType>
</xs:element>
```

4.6.2.23 ReportTime

Element that provides the report generation timestamp.

Attributes

None

Referenced by

Owner (page 107)

Definition

<xs:element name="ReportTime" type="xs:dateTime" />

4.6.2.24 Votes

Provides votes by precinct or precinct and group.

Attributes

Table 4-31. Votes attributes

Name	Type	Required	Description
refPrecinctId	xs:integer	Yes	As defined for the id attribute of the Pecinct (page 111) element.
groupId	xs:integer	Yes	As defined for the id attribute of the Group (page 104) element.

Referenced by

Candidate (page 89)

Definition

<xs:element name="Votes">
    <xs:complexType>
        <xs:simpleContent>
            <xs:extension base="xs:integer">
                <xs:attribute name="refPrecinctId" use="required" type="xs:integer" />
                <xs:attribute name="groupId" use="required" type="xs:integer" />
            </xs:extension>
        </xs:simpleContent>
    </xs:complexType>
</xs:element>

4.6.2.25 Alternateid

Simple type used for secondary identifiers.

Value

String of 0–22 characters

Definition

```
<xs:simpleType name="Alternateid">
    <xs:restriction base="xs:string">
        <xs:minLength value="0" />
        <xs:maxLength value="22" />
    </xs:restriction>
</xs:simpleType>
```

4.6.2.26 ContestTypeCode

Simple type used for contest type codes.

Values

Enumeration:

Table 4-32. ContestTypeCode values

Type	Description
C	Normal contest with candidates
Q	Question contest (such as, amendment)
E	A question contest about retention (such as, judge)
R	Recall contest (Do you want to recall [Candidate]?)
S	Straight-party selection contest
P	Party preference contest (sometimes called *pick-a-party*)
J	Judge initials contest

Definition

```
        <xs:simpleType name="ContestTypeCode">
    <xs:restriction base="xs:NMTOKEN">
        <xs:enumeration value="C"/>
        <xs:enumeration value="Q"/>
```

```
            <xs:enumeration value="E"/>
            <xs:enumeration value="R"/>
            <xs:enumeration value="S"/>
            <xs:enumeration value="P"/>
            <xs:enumeration value="J"/>
        </xs:restriction>
</xs:simpleType>
```

4.6.2.27 GroupTypeCode

Simple type used for ballot type codes.

Values

Below is an enumeration example:

Table 4-33. GroupTypeCode values

Type	Description
AV	Absentee
ED	Election Day
EV	Early voting
OT	Other (overseas, unscanned, and so on)
PV	Provisional
TV	Total votes

Definition

```
        <xs:simpleType name="GroupTypeCode">
    <xs:restriction base="xs:NMTOKEN">
            <xs:enumeration value="AV"/>
            <xs:enumeration value="ED"/>
            <xs:enumeration value="EV"/>
            <xs:enumeration value="OT"/>
            <xs:enumeration value="PV"/>
            <xs:enumeration value="TV"/>
        </xs:restriction>
</xs:simpleType>
```

4.6.2.28 NameDesc

Simple type used for names of elements and attributes.

Value

String of 0–75 characters

Definition

```
<xs:simpleType name="NameDesc">
    <xs:restriction base="xs:string">
        <xs:minLength value="0" />
        <xs:maxLength value="75" />
    </xs:restriction>
</xs:simpleType>
```

4.6.2.29 Percentage

Simple type used for calculated percentages.

Value

Floating number

Definition

```
<xs:simpleType name="Percentage">
    <xs:restriction base="xs:float">
        <xs:minInclusive value="0.0" />
    </xs:restriction>
</xs:simpleType>
```

4.6.2.30 ResultsTypeCode

Simple type used for denoting precinct-level election results.

Value

Enumeration:

Table 4-34. ResultsTypeCode value

Type	Description
P	30-day precinct-level results.

Restriction

None

Definition

```
<xs:simpleType name="ResultsTypeCode">
    <xs:restriction base="xs:NMTOKEN">
        <xs:enumeration value="P"/>
    </xs:restriction>
</xs:simpleType>
```

4.6.2.31 VersionXML

Simple type used for XML version.

Value

Enumeration:

Table 4-35. VersionXML value

Type	Description
3.0-P	Precinct Results Version 3.0-P effective July 2015

Definition

```
<xs:simpleType name="VersionXML">
    <xs:restriction base="xs:NMTOKEN">
        <xs:enumeration value="3.0-P"/>
    </xs:restriction>
</xs:simpleType>
```

4.6.2.32 VoteGroupStatus

Simple type used for the tabulation of voting groups.

Values

Enumeration:

Table 4-36. VoteGroupStatus values

Type	Description
N	Not processed

Table 4-36. VoteGroupStatus values (continued)

Type	Description
P	Processing
Y	Completed

Definition

```
<xs:simpleType name="VoteGroupStatus">
    <xs:restriction base="xs:NMTOKEN">
        <xs:enumeration value="N" />
        <xs:enumeration value="P" />
        <xs:enumeration value="Y" />
    </xs:restriction>
</xs:simpleType>
```