



Clear Ballot

ClearVote 2.3

ClearDesign User Guide

ClearDesign User Guide

Clear Ballot Part Number: 100041-10020

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Clear Ballot Group
2 Oliver Street, Suite 200
Boston, MA 02109
857-250-4961
clearballot.com

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Preface

This section defines the purpose of this document.

About this document

This document describes how to use ClearDesign.

Scope of this document

This document contains the following chapters:

- Chapter 1. Getting Started
- Chapter 2. Election basics
- Chapter 3. Adding fonts and images
- Chapter 4. Fundamental election entities
- Chapter 5. Setup of advanced election types
- Chapter 6. Adding support for downstream products
- Chapter 7. Setting up and laying out ballots
- Chapter 8. Layout Preview
- Chapter 9. Managing languages, device messages, and audio
- Chapter 10. Proofing elections
- Chapter 11. Ballot proofing reports
- Chapter 12. Producing an election
- Chapter 13. Logs
- Appendix A. Supported data import formats
- Appendix B. Common attributes of entities
- Appendix C. Formatting toolbar: Ballot Text editor

Intended audience

This document is intended for election officials and election staff who are responsible for operations and maintenance before, during, and after an election. This document is also used by Clear Ballot personnel who 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*

Contact us

Clear Ballot Group welcomes your feedback on our documentation. Please send comments to Documentation@ClearBallot.com.

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

Chapter 1. Getting Started

1.1 Objectives

After reading this chapter, you should be able to:

- Log in and out of ClearDesign
- Change and recover your password
- View the product version and installed software
- Define the terms *model* and *entity*
- Navigate to the Administration Home page and use ClearDesign screen components
- Describe the basic concepts of ClearDesign administration

1.2 Advice to the reader

Clear Ballot advises the following:

- If you are a new user of ClearDesign, start by reading the *ClearDesign System Overview* and then read this chapter in its entirety.
- If you manage the ClearDesign system and users, also read the *ClearDesign Administration Guide*.
- If you are an experienced user of ClearDesign, skip this chapter.

1.3 Logging in

To log in to ClearDesign:

1. In the address field of the browser, enter the ClearDesign web address provided by your system administrator.

ClearDesign displays the Please sign in dialog (Figure 1-1).

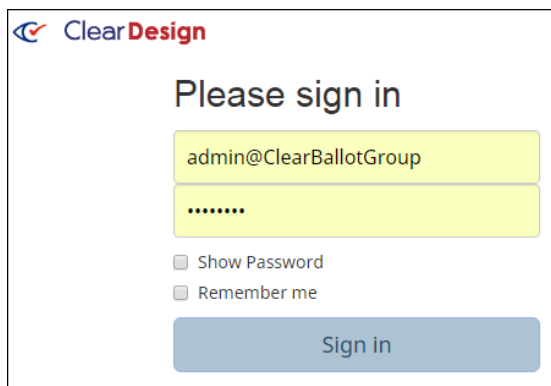


Figure 1-1. Please sign in dialog

2. In the Please sign in dialog, enter the username and password provided by your system administrator.
3. If desired, select the following options:
 - To view the password that you enter, select **Show Password**.
 - To request the browser to store your user name and password, select **Remember me**.
4. Click **Sign In** or press **Enter**.
5. The next step depends on whether you are logging in to ClearDesign for the first time:
 - If you have previously logged in to ClearDesign, you can skip the remainder of this topic.
 - If this is your first time logging in to ClearDesign, the Change Password dialog appears (Figure 1-2).

User: User 50@JoeS

Save Reset Cancel

Your password has expired. You must create a new password and then re-login.

New Password

Confirm Password

Show Password

Figure 1-2. Change password dialog

In the Change Password dialog, do the following:

- a. Enter a password in the **New Password** and **Confirm Password** fields.
- b. Optionally, to view what you type in these fields, select **Show Password**.

If your password does not meet the requirements set by your administrator, ClearDesign displays a message similar to Figure 1-3.

User: User 50@JoeS

Save Reset Cancel

[1 errors found]
Your password has expired. You must create a new password and then re-login.

New Password

Confirm Password

Show Password

Password must be at least 8 characters long and contain characters from at least 1 groups of characters [a-z], [A-Z], [0-9], [~!@#\$\$%^&*()_+=]

Figure 1-3. Message indicating that your password does not meet requirements

- c. Click **Save**.

ClearDesign saves your new password.

1.4 Changing a password

To change your password at any time:

1. Locate and click your username in the top right corner of the ClearDesign window.
2. Select **Change password** from the drop-down menu (Figure 1-4).

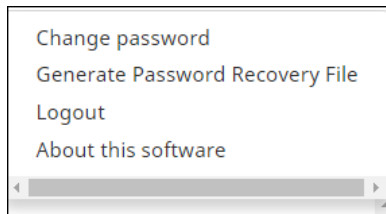


Figure 1-4. Change password drop-down menu selection

ClearDesign displays the Change Password dialog (Figure 1-5).

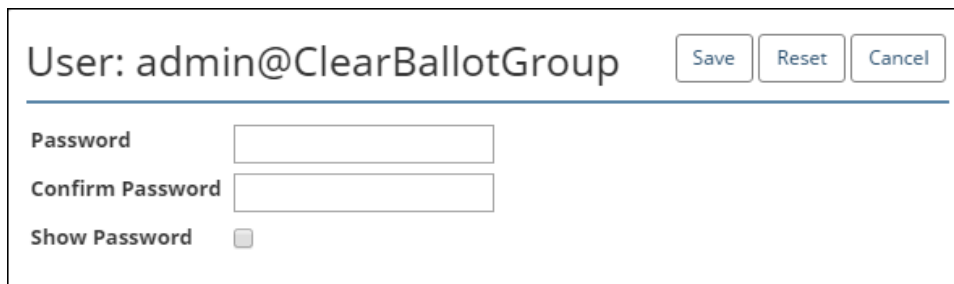
A screenshot of the "Change Password" dialog box. At the top, it displays "User: admin@ClearBallotGroup" and three buttons: "Save", "Reset", and "Cancel". Below this, there are three input fields: "Password", "Confirm Password", and "Show Password" (which is a checkbox). The "Show Password" checkbox is currently unchecked.

Figure 1-5. Change password dialog

3. Enter the new password in the **Password** and **Confirm Password** fields.
4. Optionally, select **Show Password** to view what you type in the **Password** and **Show Password** fields.
5. Click **Save**.

The new password is now in effect.

When you log in, ClearDesign also prompts you to select a new password if your current password has expired.

1.5 Logging back in after an inactivity timeout

ClearDesign times out after an amount of inactivity specified by the administrator. The default inactivity value is 30 minutes.

If ClearDesign logs you out due to inactivity, a dialog appears that allows you to log in again.

1.6 Setting up password recovery

The password-recovery capability enables you to reset your ClearDesign password if you forget it. This capability is enabled by default for users assigned an administrator role. This capability is also available if your administrator has enabled it for the role associated with your username.

To set up password recovery:

1. Locate and click your username in the top right corner of the ClearDesign window.
2. When the drop-down menu appears, select **Generate Password Recovery File** (Figure 1-6).

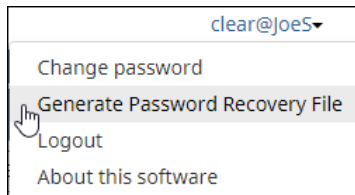


Figure 1-6. Generate Password Recovery—menu selection

3. When ClearDesign displays a prompt asking if you want to download the password recovery file, click **OK** (Figure 1-7).

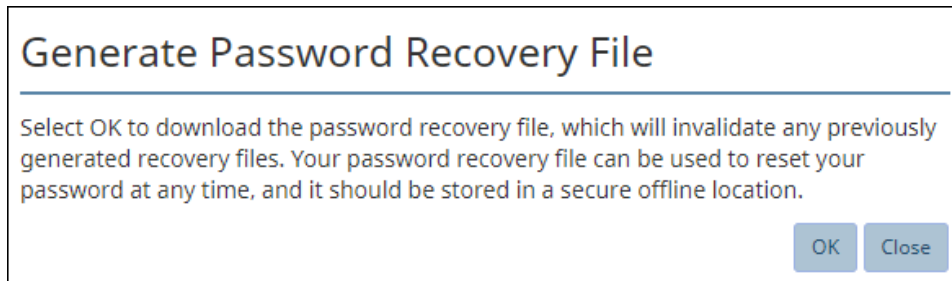


Figure 1-7. Generate Password Recovery—confirmation prompt

ClearDesign places the password recovery in your default Downloads folder and displays a confirmation prompt (Figure 1-8).

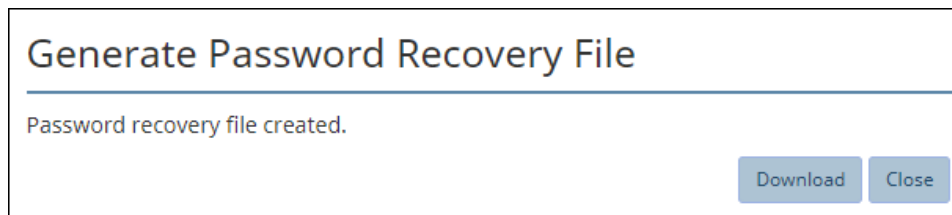


Figure 1-8. Password recovery file created—confirmation prompt

4. Click **Close** to dismiss the download-confirmation prompt.
5. Clear Ballot recommends that you move the password recovery file from your Downloads folder to a secure storage location, such as a USB drive.

1.7 Logging out

To log out of ClearDesign:

1. In the upper right corner of the ClearDesign window, click your username.
2. Select **Logout**.
3. Close the browser tab.

1.8 Viewing the product version and installed software

To view the product version and installed software:

1. In the upper right corner of the ClearDesign window, click your username.
2. Select **About** from the drop-down menu.

ClearDesign displays the About window.

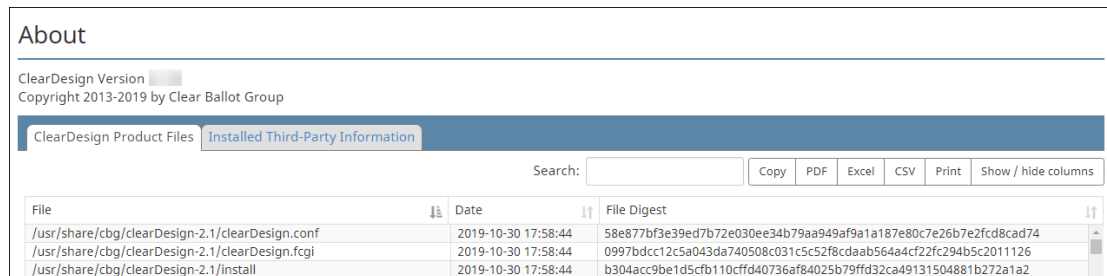


Figure 1-9. About window (partial screen)

The product version appears below the title of the About window.

The About window contains two tabs:

- ClearDesign Product Files—lists files created by Clear Ballot that make up the ClearDesign application
 - Third-Party Information—lists programs and utilities that are created by third parties and installed on the computer to support ClearDesign
3. If desired, do any of the following:
 - Select **Show / hide columns** to change what appears on the current tab.
 - Use the **Search** field to locate an item on the current tab.
 - Click **Copy** to write the content of the current tab to the clipboard.
 - Print the contents of the current tab.
 - Export the contents of the current tab to an Excel, PDF, or CSV file.
 4. When done, click the **Close** button at the bottom of the window.

1.9 Definitions: model and entity

ClearDesign uses a database structure to store information about individual elections and parts of elections. When using and reading about ClearDesign, be aware of the database terms *model* and *entity*.

In simple terms, a *model* refers to category of objects to which an individual *entity* belongs.

Example 1 : *Elections* is a model. An individual election, such as *ClearCounty General Election Demo*, is an entity. ClearDesign stores *attributes* or characteristics of an entity. Two attributes of an individual election entity are **Name** and **Election Date**.

Example 2: *Contests* is a model that represents races in an election. An election can contain one or multiple contest entities. An example of an individual contest entity is a race that has the **Name** attribute “Representative to the U.S. Congress” and the **Contest Type** attribute of Candidate.

1.10 Viewing the Administration Home page

ClearDesign displays the Administration Home page after you log in.

Figure 1-10 shows the Administration Home page and identifies common components that appear on ClearDesign screens.

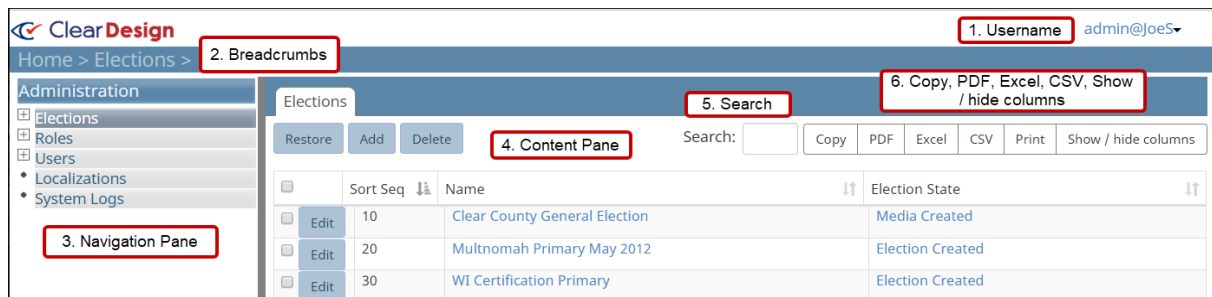


Figure 1-10. Administration Home page and screen components

The following list defines the components that appear on the Administration Home page and other screens of the ClearDesign application. In this list, the numbers identify the items highlighted in red in Figure 1-10.

1. Username

Click the arrow next to your user name to select the following from a drop-down list:

- **Change password** (See page 21.)
- **Password Recovery** (See page 22.)
- **Logout** (See page 23.)
- **About this software** (See page 23.)

2. Breadcrumbs

The Breadcrumbs show your current location and the path of screens to your current location. Screen names are separated by the > character. Click a screen name in the path to return to that screen.

3. Navigation pane

On the Administration Home page, ClearDesign displays the Administration menu in the navigation pane. On this menu, **Elections** is selected by default. The other selections that you see on the Administration menu depend on the permissions associated with the role assigned to your username.

If you are a ballot designer and not an administrator, you may not see and use the non-election settings on the Administration menu. However, you should learn the basic concepts of ClearDesign administration. To do so, read "Overview of ClearDesign administration" on the next page.

If you are an administrator, see the *ClearDesign Administration Guide* for details about the non-election settings available from the Administration menu.

4. Content pane

The Administration Home page displays the Elections view by default. This tab is the starting point for selecting an individual election to view and change its settings. The Elections view also contains buttons that enable you to **Restore**, **Add**, and **Delete** an election.

For details, see:

- "Election basics" on page 29
- "Fundamental election entities" on page 59

The Elections view is an example of a list view. A *list view* shows all entity instances of a given model in a table.

5. Search field

Use the **Search** field to find a specific item on the current screen. This field is useful when the current screen contains a large amount or many rows of data.

6. Copy, PDF, Excel, CSV, Print, and Show / hide columns buttons

The following buttons appear on ClearDesign list views containing tabular data.

Table 1-1. Buttons in the top right corner of a list view

Button	Description
Copy	Copies the contents the tab to the Windows Clipboard. You can then paste the content to an application such as Notepad.
PDF	Exports the contents of the tab to a PDF file placed in your browser-specified Downloads folder.
Excel	Exports the contents of the tab to an Excel file placed in your browser-specified Downloads folder.
CSV	Exports the contents of the tab to a comma-separated values file placed in your browser-specified Downloads folder.
Print	Displays the Print dialog for your default printer where you can select settings for printing the contents of the tab.
Show / hide columns	Displays a menu for selecting which columns appear on the tab. The currently selected columns appear highlighted.

1.11 Overview of ClearDesign administration

If you are an administrator, skip this section and see the *ClearDesign Administration Guide* for details about the tasks available from the Administration menu.

Table 1-2 provides an overview of administration concepts. The items in the Concept column of Table 1-2 correspond to the selections available from the Administration menu. If a non-administrator role is assigned to your username, you may not see all the selections of the Administration menu.

Table 1-2. Administrative concepts

Concept	Description
Customers	<p>A <i>customer</i> typically represents a jurisdiction, such as a county, where ClearDesign users create and edit ballots. ClearDesign is installed with one customer whose name is default.</p> <p>A jurisdiction can create customers for specific types of elections</p> <p>Example: Suppose that a jurisdiction holds school board-only elections. In this situation, an administrator can create a specific customer to give the ballot developers of school board elections their own standalone development area that is separate from the development area for other elections.</p>
Roles	<p>A <i>role</i> comprises a group of permissions. Each user is assigned a role that determines what functions he or she can perform. An administrator can enable or disable the permissions assigned to each role.</p> <p>For each customer, ClearDesign provides two default roles:</p> <ul style="list-style-type: none"> • Administrator—By default, the administrator role has all permissions enabled. A user assigned the administrator role can use all selections on the Administration menu. • Election clerk—By default, the election clerk role has administrative permissions disabled. A user assigned the election clerk role can select only the following from the Administration menu: <ul style="list-style-type: none"> ◦ Users (in view-only mode) ◦ System logs ◦ Elections
Users	<p>A <i>user</i> is a person who logs in to ClearDesign and performs tasks for designing ballots. Each ClearDesign customer has a group of users.</p> <p>Administrators can create and maintain users, assign roles to users, and set passwords.</p>

Table 1-2. Administrative concepts (continued)

Concept	Description
Localizations	<p>Localizations enable you to customize text embedded in the ClearDesign user interface. Most labels and messages can be localized. Jurisdictions can replace any localizable text string with their specific terminology or translation.</p> <p>Example: A <i>precinct</i> refers to a subdivision of a county, city, town, or ward for election purposes. Some jurisdictions use the term <i>Election District</i> instead of <i>Precinct</i>. The localization capability enables you to display the term preferred in your jurisdiction.</p> <p>The localization settings also contain the default text for write-ins.</p> <p>For localizations to appear in an election, your administrator must edit and change the localization settings before you create the election.</p>
System logs	<p>The system log is a table that records all non-election-specific activity. ClearDesign appends a record to the log when the following types of events occur:</p> <ul style="list-style-type: none"> • User access • Administrative exceptions for elections • Functional updates • Changes to the election database

Chapter 2. Election basics

2.1 Objectives

After reading this chapter, you should be able to:

- Navigate the Elections view and other list views of ClearDesign
- Describe the scenarios for creating elections and election templates
- Perform tasks on individual election entities, such as displaying the Info tab and adding, backing up, restoring, and deleting elections

2.2 Advice to the reader

Clear Ballot advises the following:

- If you are a new user of ClearDesign, read "Navigating the Elections view and other list views" on the next page.
All list views of ClearDesign operate in a similar manner. If you learn to navigate and use the Elections view successfully, you will be able to use all other list views of ClearDesign.
- All readers should become familiar with "Scenarios for creating elections in ClearDesign" on page 37. This topic is a key to understanding typical ClearDesign workflows and the tasks available for individual elections described in the remainder of this chapter.

2.3 How to reach the Elections view

The Elections view is the starting point for the tasks associated with individual elections, such as adding, restoring, deleting, and editing elections.

To reach the elections view, log in to ClearDesign as described on page 19.

After you log in successfully:

- ClearDesign displays the Administration Home page (Figure 1-10 on page 24).
- The Elections model appears selected (highlighted) on the Administration menu in navigation pane on the left.
- The Elections view appears in the content pane on the right. This view lists all available individual elections.

2.4 Navigating the Elections view and other list views

The Elections view is a list view. A list view shows all entity instances of a given model in a table.

Figure 2-1 shows the Elections view as an example of list view.

Sort Seq	Name	Election State
10	Clear County General Election	Election Created
20	City Council Election	Election Created
30	School Board Election	Election Created

Figure 2-1. Elections view

2.4.1 Selecting which columns appear in a list view

To set the columns to display:

1. Navigate to the list view where you want to change which columns appear.
2. Click **Show / hide columns**.

ClearDesign displays a drop-down list containing the available columns.

For example, Figure 2-2 shows the drop-down list that appears when you click **Show / hide columns** on the Elections view.

Sort Seq
Name
Short Name
Abbreviation
Import ID
Export ID
Last Edit By
Last Edit Time
Election Ballot Code
Election State
Version
Restore to default

Figure 2-2. Drop-down list—Show / hide columns on the Elections view

3. Select or deselect columns from the drop-down list.
To return to the default settings, click **Restore to default**.
4. Click outside the drop-down list to return to the list view.

2.4.2 Setting the default sort sequence of an entity in a list view

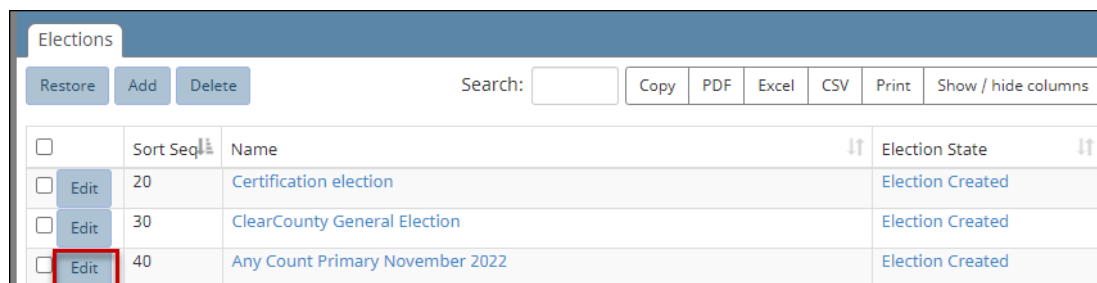
The sort sequence (**Sort Seq**) values control the default order in which entities appear in a list view. By default, ClearDesign creates sort sequence values starting with 10 in increments of 10 as you add entities to a list view. However, you can change the **Sort Seq** value of any entity to 1 or greater.

Figure 2-1 shows an example of an Elections view where the election entities are sorted in ascending order according to the values in the **Sort Seq** column (10, 20, 30). Click the **Sort Seq** column header to toggle between ascending and descending order.

To change the **Sort Seq** of an entity from a list view:

1. Click the **Edit** button in the row corresponding to the desired entity.

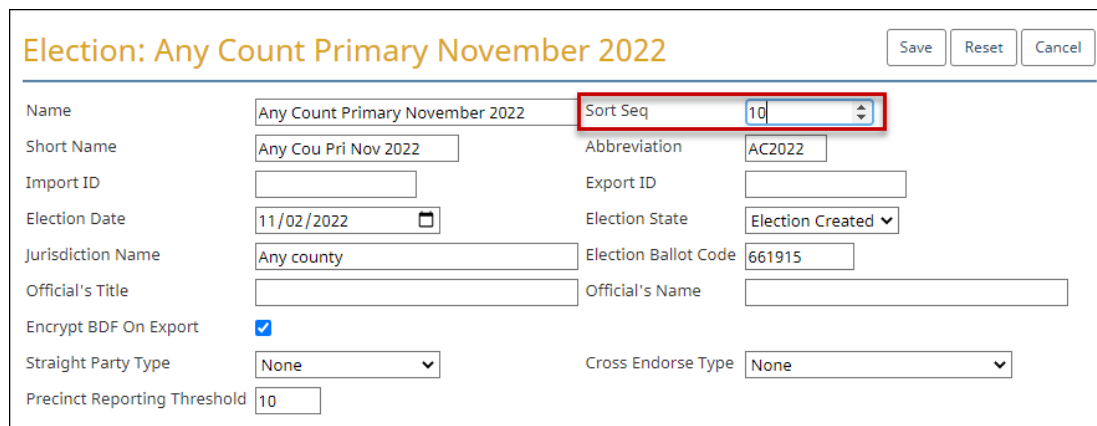
For example, suppose that you want to change the **Sort Seq** for the Any Count Primary on the Elections view (Figure 2-3). Click the **Edit** button in the corresponding row.



<input type="checkbox"/>	Sort Seq	Name	Election State
<input type="checkbox"/> Edit	20	Certification election	Election Created
<input type="checkbox"/> Edit	30	ClearCounty General Election	Election Created
<input type="checkbox"/> Edit	40	Any Count Primary November 2022	Election Created

Figure 2-3. Edit button for an individual election on the Election view

2. When ClearDesign displays the dialog for the entity, edit the value in the **Sort Seq** field and select **Save** (Figure 2-4).



Election: Any Count Primary November 2022 [Save] [Reset] [Cancel]

Name	Any Count Primary November 2022	Sort Seq	10
Short Name	Any Cou Pri Nov 2022	Abbreviation	AC2022
Import ID		Export ID	
Election Date	11/02/2022	Election State	Election Created
Jurisdiction Name	Any county	Election Ballot Code	661915
Official's Title		Official's Name	
Encrypt BDF On Export	<input checked="" type="checkbox"/>		
Straight Party Type	None	Cross Endorse Type	None
Precinct Reporting Threshold	10		

Figure 2-4. Election dialog—Changing the Sort Seq

ClearDesign redisplay the Elections view with the changed **Sort Seq** value.

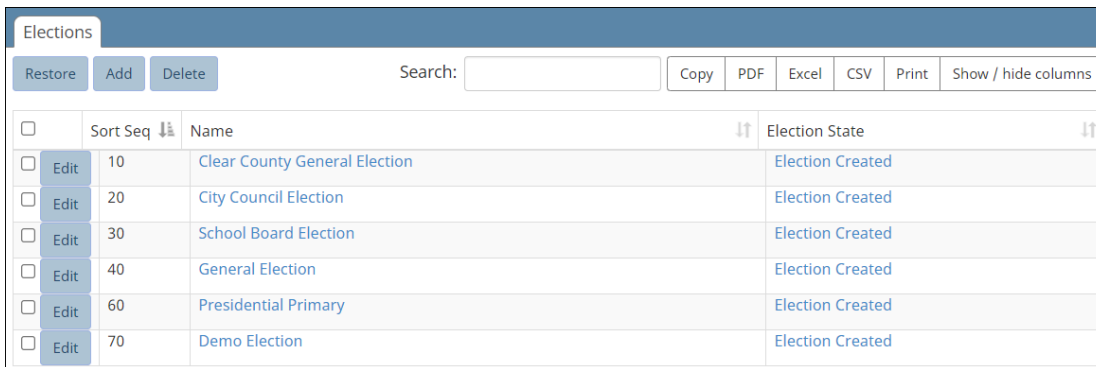
If you are a new user of ClearDesign, do not change values other than the **Sort Seq** until you read and become familiar with the information in the remainder of this chapter.

ClearDesign allows you to use the same **Sort Seq** number on more than one entity in a list view. However, Clear Ballot does not recommend this practice. Reusing the same sort sequence number can produce unintended results.

2.4.3 Sorting a list view by a specific column

By default, a list view is sorted according to the **Sort Seq** column.

To sort a list view by a column other than the **Sort Seq**, click the header cell of the desired column. For example, see the Election tab in Figure 2-5. This tab is currently sorted by default according to the **Sort Seq** column.

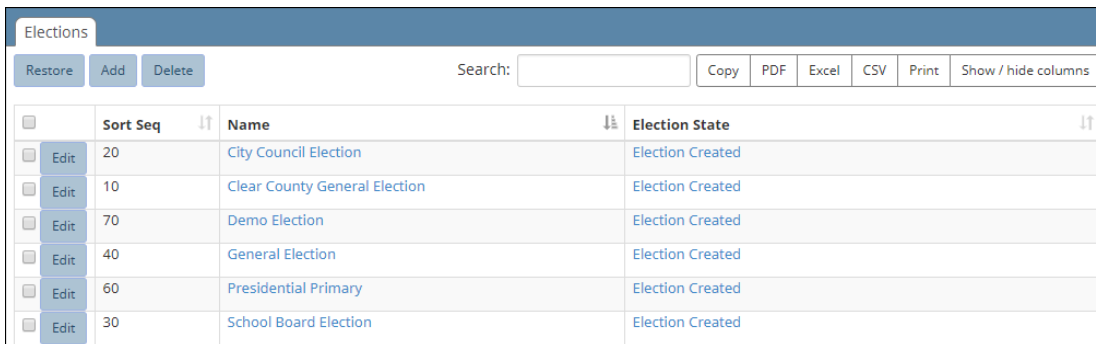


<input type="checkbox"/>	Sort Seq	Name	Election State
<input type="checkbox"/> Edit	10	Clear County General Election	Election Created
<input type="checkbox"/> Edit	20	City Council Election	Election Created
<input type="checkbox"/> Edit	30	School Board Election	Election Created
<input type="checkbox"/> Edit	40	General Election	Election Created
<input type="checkbox"/> Edit	60	Presidential Primary	Election Created
<input type="checkbox"/> Edit	70	Demo Election	Election Created

Figure 2-5. Election tab sorted by the Sort Seq column (default)

To sort the Election tab by the **Name** column, click the header cell.

ClearDesign sorts the column in ascending order (alphabetical order) by **Name** (Figure 2-6).



<input type="checkbox"/>	Sort Seq	Name	Election State
<input type="checkbox"/> Edit	20	City Council Election	Election Created
<input type="checkbox"/> Edit	10	Clear County General Election	Election Created
<input type="checkbox"/> Edit	70	Demo Election	Election Created
<input type="checkbox"/> Edit	40	General Election	Election Created
<input type="checkbox"/> Edit	60	Presidential Primary	Election Created
<input type="checkbox"/> Edit	30	School Board Election	Election Created

Figure 2-6. Election tab sorted by the Name column in ascending order

If you click the **Name** header cell again, ClearDesign sorts the list view in reverse alphabetical order by **Name**.

2.4.4 Copying a list view to the Windows clipboard

Copy a list view to the Windows clipboard when you want to paste it into an application to edit and format the contents.

To copy a list view to the clipboard:

1. Go to the list view that you want to copy.
2. Click the **Copy** button in the upper right of the contents pane.

ClearDesign displays a confirmation message.

Figure 2-7 shows a confirmation message after copying the Elections view to the clipboard.

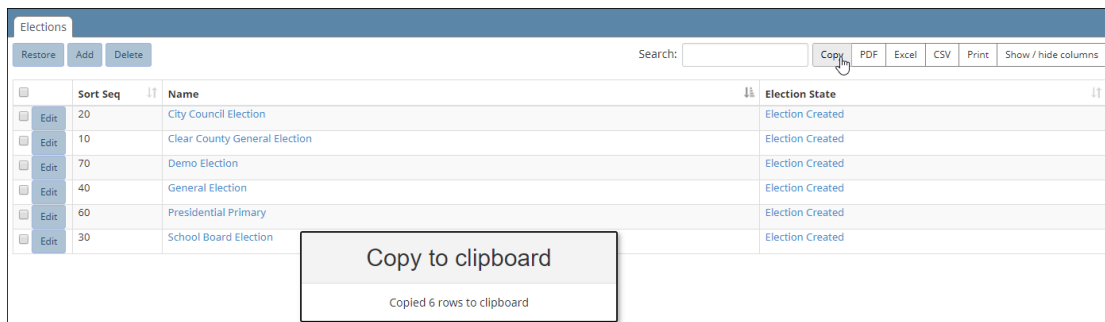


Figure 2-7. Confirmation message after clicking Copy on the Elections view

3. Open the desired application and select the **Paste** command from the application or enter **Ctrl-V**.

Figure 2-8 shows a Microsoft Word file after pasting the contents of the Elections view from the clipboard.

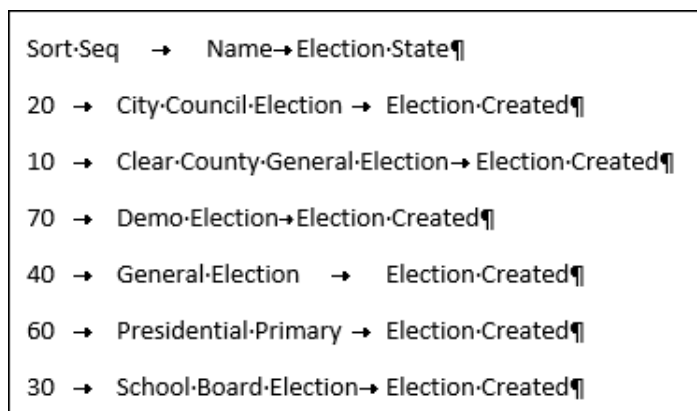


Figure 2-8. Microsoft Word after pasting a list view of an Elections view from the clipboard

4. Edit and format the application file as desired and save it.

2.4.5 Exporting a list view to a PDF, Excel, or CSV file

The steps for exporting the contents of a list view to a PDF, Excel, or CSV file are similar. The following example provides the steps for exporting the contents of the Elections view to a PDF file:

1. On the Elections view, click **PDF** in the upper right of the contents pane.

ClearDesign places the file in the downloads folder specified for your browser and displays a filename and icon in the status bar at the bottom of the browser window (Figure 2-9).

Usually, the path to the downloads folder is C:\Users*Your_User_Name*\Downloads.



Figure 2-9. Example: Icon and filename in the status bar of the browser when downloading a PDF file

2. To open the file in the application, click the filename in the status bar or navigate to the Downloads folder and click the filename.

Figure 2-10 shows an example of an Elections view exported to a PDF file.

Elections		
Sort Seq	Name	Election State
20	City Council Election	Election Created
10	Clear County General Election	Election Created
70	Demo Election	Election Created
40	General Election	Election Created
60	Presidential Primary	Election Created
30	School Board Election	Election Created

Figure 2-10. Example: an Elections view exported to a PDF file

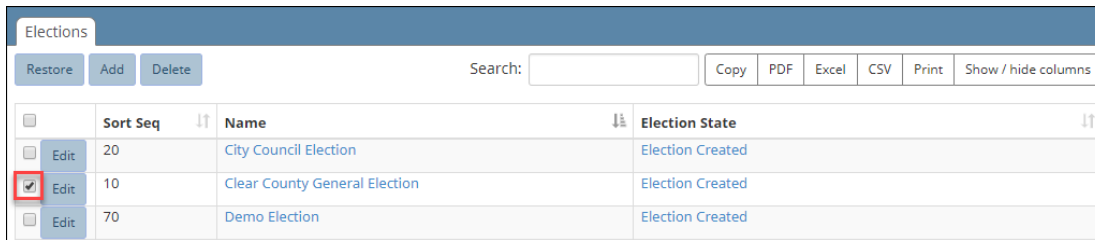
2.4.6 Selecting entities in a list view

This topic describes how to select entities in a list view. After selecting an entity, you can perform any of the actions available for that entity. Some actions operate on one entity at a time. Other actions can operate on multiple entities at the same time.

Selecting and deselecting individual entities in a list view

To select an individual entity in a list view, click the box in the first column of the row corresponding to the desired entity. A check appears to indicate that the entity is selected.

For example, Figure 2-11 shows an Elections view where a single election, Clear County General Election, is selected.



Elections			
Restore Add Delete		Search: <input type="text"/>	Copy PDF Excel CSV Print Show / hide columns
<input type="checkbox"/>	Sort Seq ↑↓	Name	Election State ↑↓
<input type="checkbox"/>	Edit 20	City Council Election	Election Created
<input checked="" type="checkbox"/>	Edit 10	Clear County General Election	Election Created
<input type="checkbox"/>	Edit 70	Demo Election	Election Created

Figure 2-11. Selecting a single entity in a list view

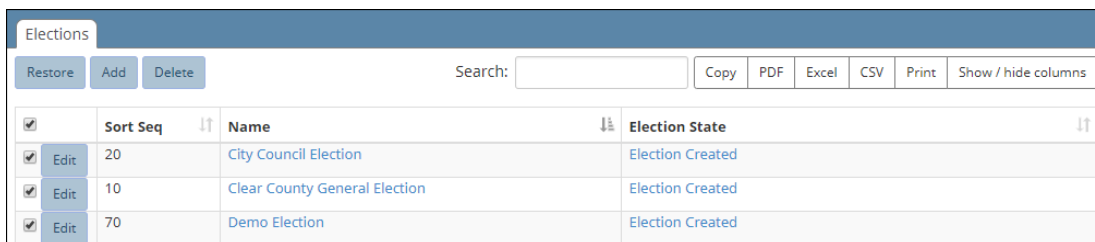
To select multiple entities, click additional boxes in the first column of the corresponding rows.

To deselect entities, click the boxes containing checks. The boxes become blank to indicate that the entities are no longer selected.

Selecting all entities in a list view

To select all entities in a list view, click the box in the first column of the header row. A check then appears in all rows of the list view.

Figure 2-12 shows an Elections view where all entities are selected.



Elections			
Restore Add Delete		Search: <input type="text"/>	Copy PDF Excel CSV Print Show / hide columns
<input checked="" type="checkbox"/>	Sort Seq ↑↓	Name	Election State ↑↓
<input checked="" type="checkbox"/>	Edit 20	City Council Election	Election Created
<input checked="" type="checkbox"/>	Edit 10	Clear County General Election	Election Created
<input checked="" type="checkbox"/>	Edit 70	Demo Election	Election Created

Figure 2-12. All entities of an Elections view selected

To deselect all entities, click the box in the first column of the header row. The checks no longer appear in all rows of the list view.

2.4.7 Election states

The Election State is a column that appear by default on the Elections view. The *election state* indicates the level of completion of the ballot-development process.

Available election states

Table 2-1 lists and describes the ClearDesign election states.

Table 2-1. Election State

Election State	Description
1. Election Created	(Default). All entities are editable.
2. Ballots Created	Any actions that can change ballots are unavailable.
3. Cards Created	Any actions that can change cards are unavailable.
4. Media Created	Any actions that can change media are unavailable.

Election states correspond to the typical ballot development process and are cumulative. The base election state is Election Created. You can edit any entity when the election is in this base state if the role assigned to your user name has the appropriate permissions.

Advancing the election state continues the restrictions from previous state and adds the restrictions of the current election state.

You can return to a previous election state if revisions are necessary.

You can import data to or export data from ClearDesign only while in the Election Created state. However, you can back up an election in any election state.

Setting the election state

You can update the election state in the following locations:

- When you edit an election, ClearDesign displays the Election dialog for the currently selected election. You can change the **Election State** field of this dialog.
See "Editing an election" on page 45.
- When you click **Print** from the Ballot Sets tab, ClearDesign displays the Print Card dialog. If you select (check) **Set Election State To Cards Created** and click **OK**, ClearDesign advances to that election state.
See "Printing cards" on page 164.
- When you select **Export BDF** on the Info tab of an election, ClearDesign displays the Export BDF dialog. If you select (check) **Set Election State To Media Created** and click **OK**, ClearDesign advances to that election state.
See "Exporting a ballot definition file (BDF or BDFx)" on page 232
- When you select **Export ADF** on the Info tab for an election, ClearDesign displays the Export ADF dialog. If you select (check) **Set Election State To Media Created** and click **OK**, ClearDesign advances to that election state.
See "Exporting an encrypted accessible definition file (ADFx)" on page 233.

2.5 Scenarios for creating elections in ClearDesign

This topic describes some scenarios for creating elections in ClearDesign from a high-level, conceptual point of view. Later topics describe the specific step-by-step tasks involved.

2.5.1 Creating a new election for the first time

There are two methods to create (add) a new election for the first time in ClearDesign.

Method 1: use a supported import file type

1. If a state authority provides an import file containing jurisdiction- and election-specific data, use this import file to add data to the first election that you create in ClearDesign.

See "Supported data import formats" on page 240.

2. Manually configure the ClearDesign settings that control ballot formatting and support for ClearCount, ClearCast, and ClearAccess.

Method 2: manually enter all data required for an election, including:

1. All jurisdiction-specific and election-specific data
2. The ClearDesign settings that control ballot formatting and support for ClearCount, ClearCast, and ClearAccess

2.5.2 Creating subsequent elections

To create subsequent elections, a jurisdiction can select one the following options:

- Repeat the steps in the previous topic ("Creating a new election for the first time" above)

or

- Create a template from the previous election

After creating a template, a jurisdiction can reuse the ClearDesign settings from the previous election. By creating an election from a template, a jurisdiction avoids the labor-intensive steps of reprogramming ballot formatting and support settings for other ClearVote products.

However, the process for creating a template requires significant setup as described in the next topic ("Creating an election template" below).

2.5.3 Creating an election template

To create an election template, back up the existing election that you want to use as the baseline for subsequent elections.

Clear Ballot recommends creating a template for each type of election.

Example: Suppose that the settings for general elections and primaries differ significantly in your jurisdiction. In this situation, create a general-election template and a primary-election template.

To create an election template:

1. Back up the election that you intend to use as a baseline for your template.
2. Restore the backed up baseline election and assign a name to distinguish it from any previous election.

Clear Ballot recommends using a name in the format:

X template

where *X* is the election type.

Example: General election template

3. If newly created election contains import data from a state authority that was used for a specific previous election, delete that data. Normally, delete the following fundamental election entities:
 - Voter Groups
 - District categories
 - Districts
 - Precincts
 - Splits
 - Contests
 - Candidates

If your jurisdiction does not use an import file, delete only the contests and candidates from the previous election.

4. Once you delete any data that was specific to a previous election, back up the template so that you can reuse it.
5. Restore the template and give it name specific to the election that you are setting up.
6. If your state provides an import file, import the file into the new election.
7. Double-check that all fundamental elections entities listed in step 3 were imported as intended.
8. Assign vote centers to any new splits imported into the election.
9. Review the ballot layout.
10. Depending on the contents of the new election, reassign, delete, and create headers as needed.

2.6 Displaying the Info tab

When you click the **Name** cell of an entity in a list view, ClearDesign displays the corresponding Info tab. The Info tab lists the current attributes (field values) of the entity.

For example, to display the Info tab for an individual election entity:

1. Select **Elections** from the Administration menu if it not already selected.
ClearDesign displays the Elections view in the contents pane on the right.
2. From the Elections view, click the **Name** cell for the desired election (Figure 2-13).

Elections			
Restore	Add	Delete	Search: <input type="text"/>
	Copy	PDF	Excel
	CSV	Print	Show / hide columns
<input type="checkbox"/>	Sort Seq	Name	Election State
<input type="checkbox"/>	10	Any Count Primary November 2022	Election Created
<input type="checkbox"/>	20	Certification election	Election Created
<input type="checkbox"/>	30	ClearCounty General Election	Election Created
<input type="checkbox"/>	50	SharedSecondCard	Election Created

Figure 2-13. Selecting an election

ClearDesign displays an Info tab similar to Figure 2-14.

Basic			
Name	ClearCounty General Election	Sort Seq	30
Short Name	Cle General Election	Abbreviation	Electi
Import ID		Export ID	
Last Edit By	joe@Christina	Last Edit Time	2021-04-12 14:32:05
Election Date	2021-11-02	Election State	Election Created
Jurisdiction Name	Clear County	Election Ballot Code	1206793
Official's Title		Official's Name	
Encrypt BDF On Export	True		
Straight Party Type	None	Cross Endorse Type	None
Precinct Reporting Threshold	10	Ballots Generated	False

Figure 2-14. Info tab for an election

Buttons available from the Info tab

Buttons on the Info tab of an entity enable you to perform allowed actions on that entity.

Example: The Info tab for an election entity contains the buttons listed in Table 2-2. Clear Ballot recommends that you become familiar with the topics in the remainder of this chapter before using these buttons.

Table 2-2. Buttons available on the Info tab of an election

Button	See
Import Data	"Importing data" on page 49
Export BDF	"Exporting a ballot definition file (BDF or BDFx)" on page 232
Export ADF	"Exporting an encrypted accessible definition file (ADFX)" on page 233
Backup	"Backing up an election" on page 43
Restore	"Restoring an election from a backup" on page 44
Edit	"Editing an election" on page 45

Additional tabs available from the Info tab

Many Info tabs of entities displays additional tabs of related entities.

Example: When you display the Info tab of an election entity, ClearDesign also displays the Languages, Voter Groups, District Categories, Election Districts, Contests, Headers, Ballot Sets, Vote Centers, Images, Fonts, and Logs tabs.

2.7 Adding an election

To add (create) an election:

1. From the **Administration** menu, select **Elections** if it is not already selected.
The **Elections** tab appears in the content pane on the right.
2. From the Elections view, click **Add**.

ClearDesign displays the Election dialog (Figure 2-15).

The screenshot shows the 'Election: Election 80' dialog box. It has a title bar with 'Save', 'Reset', and 'Cancel' buttons. The dialog contains the following fields:

- Name: Election 80
- Short Name: Election 80
- Import ID: (empty)
- Election Date: mm/dd/yyyy (with calendar icon)
- Jurisdiction Name: (empty)
- Official's Title: (empty)
- Import File: Choose File (No file chosen)
- Sort Seq: 80
- Abbreviation: Elec80
- Export ID: (empty)
- Election Ballot Code: 1641384
- Official's Name: (empty)
- Password: (empty)

Figure 2-15. Election dialog (Add mode)

3. If necessary, edit the following common attributes:

- **Name**
- **Sort Seq**
- **Short Name**
- **Import ID**
- **Abbreviation**
- **Export ID**

See "Common attributes of entities" on page 241.

ClearDesign does not automatically prevent you from creating more than one election with the same name. If you do so, both elections appear in the Elections view.

4. In **Election Date**, enter date in the format mm/dd/yyyy or click in the field to select a date from the calendar tool.

ClearDesign requires you to enter or select a valid **Election Date** or you cannot save the election. If you do not change the **Election Date** placeholder (mm/dd/yyyy) and click **Save**, ClearDesign displays the following message:

time data ' does not match format 'yyyy-mm-dd'

5. In **Jurisdiction Name**, enter the name of your election jurisdiction.

ClearDesign requires you to enter a **Jurisdiction Name** or you cannot save the election. If you do not specify a **Jurisdiction Name** and click **Save**, ClearDesign displays the following message under the **Jurisdiction Name** input field:

Field must not be empty

6. In **Election Ballot Code**, ClearDesign supplies an integer value from 1 to 2097151.

The **Election Ballot Code** is a system-supplied value that enables ClearVote products to distinguish the ballots in the current election from the ballots in other elections. Under normal circumstances, accept the system-supplied value.

The **Election Ballot Code** appears at the bottom of printed cards with the current precinct and card style. A dash appears following the precinct and card style followed by **EC:** and the **Election Ballot Code** as shown in Figure 2-16.

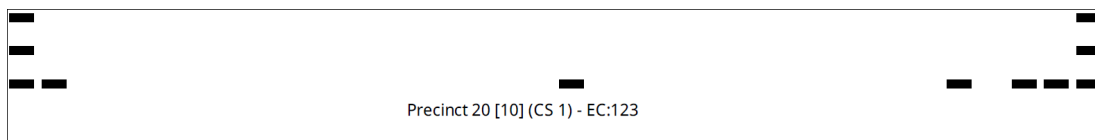


Figure 2-16. Example: Election Ballot Code at the bottom of a printed card, preceded by the precinct

ClearDesign requires a value in **Election Ballot Code** field. If the field is empty, you cannot save the election. If there is no value in **Election Ballot Code** field and you click **Save**, ClearDesign displays the following message:

Field must not be empty

7. (Optional) Clear Ballot recommends that you enter identifiers in the following fields:

- **Official's Title**
- **Official's Name**

8. (Optional) Import election data from a file.

You may import data when creating an election in the following situations:

- Some states provide import files containing jurisdiction-specific and election-specific data. Using an import file avoids a large amount of manual data entry.

See "Supported data import formats" on page 240.

- In some rare situations, you may be required to import data contained in a BDF for testing and verification.

To import data into the election:

- a. In **Import file**, click **Browse** to locate and select the desired file.
- b. Enter a **Password**, if required.

9. When you complete filling in the Election dialog, click **Save**.

ClearDesign displays a progress indicator as it creates the new election. When complete, the new election appears on the **Elections** view.

If have specified an encrypted BDFx import file and click **Save** without supplying the correct password, ClearDesign does not create the new election. Instead, ClearDesign displays the message shown in Figure 2-17.

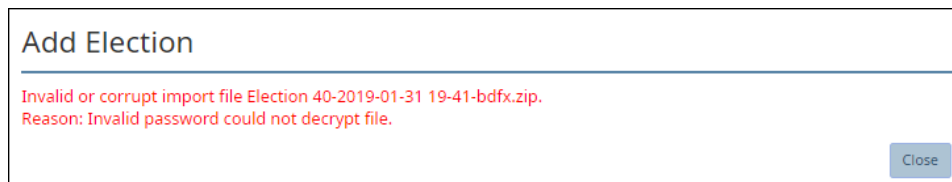


Figure 2-17. Error message: importing data from a BDFx and failing to supply a correct password

2.8 Backing up an election

This topic provides some guidelines for backing up an election and the backup procedure.

2.8.1 Guidelines for backing up elections

The following guidelines apply to backing up elections:

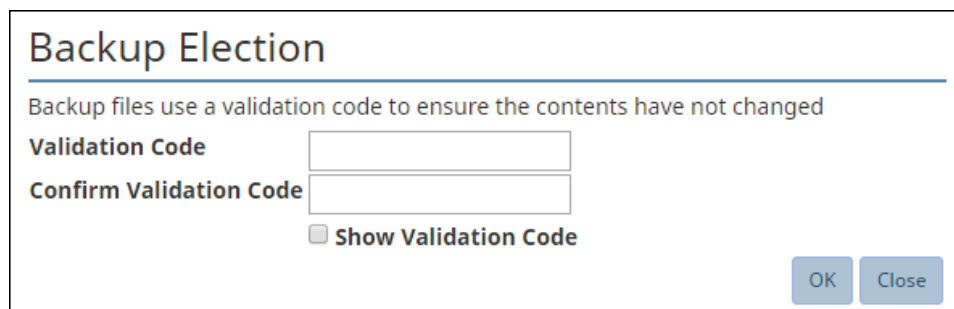
- ClearDesign allows you to back up and restore an election in any state.
- When you back up an election, all data is stored in CSV files that are collected in a single Zip file. ClearDesign uses a hash of each table stored in a configuration file to ensure that no data is modified.
- When you back up an election, you enter a **Validation Code** to supply when restoring the election.
- Clear Ballot recommends storing backup files in a dedicated folder.
- For the technical and security details of backing up and restoring elections, see *ClearDesign Administration Guide*.

2.8.2 Procedure for backing up an election

To back up an election:

1. From the Elections view, click the **Name** cell of the desired election.
2. From the Info tab, click **Backup**.

ClearDesign displays the Backup Election dialog (Figure 2-18).



The screenshot shows a dialog box titled "Backup Election". Below the title bar, there is a subtitle: "Backup files use a validation code to ensure the contents have not changed". The dialog contains two text input fields: "Validation Code" and "Confirm Validation Code". Below these fields is a checkbox labeled "Show Validation Code". At the bottom right of the dialog are two buttons: "OK" and "Close".

Figure 2-18. Backup Election dialog

3. (Optional) Select **Show Validation Code** to display the characters as you type them in **Validation Code** and **Confirm Validation Code**.
4. In **Validation Code** and **Confirm Validation Code**, enter the validation code provided by your system administrator.

5. Click **OK** to create the backup.

ClearDesign displays a status message while creating the backup.

When the backup is complete, ClearDesign displays the following message (Figure 2-19).



Figure 2-19. Backup complete message

6. Click **Close**.
7. To navigate to the location of the backup file, click the link that appears at the bottom of the screen.

The usual location is the Downloads folder in your Windows User folder. The filename format is:

ElectionName-yyyy-mm-dd hh-mm-backup.zip

2.9 Restoring an election from a backup

Before you restore an election from a backup Zip file, make sure that:

- The backup Zip file is available on your hard drive or USB drive.
- The backup filename ends in **-backup.zip**.
- You know the validation code or can get it from your system administrator.

To restore an election:

1. From the **Elections** tab, click **Restore**.

ClearDesign displays the Restore Election dialog (Figure 2-20).

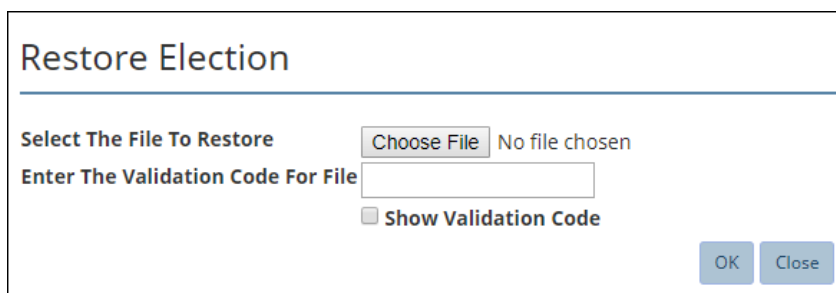


Figure 2-20. Restore Election dialog

2. Click **Choose File** and navigate to the location of the desired backup.
3. (Optional) Select (check) **Show Validation Code** to display the characters as you type them in **Enter The Validation Code For File**.

- In **Validation Code**, enter the code used to back up the election.
- Click **OK**.

ClearDesign displays a confirmation message (Figure 2-21).

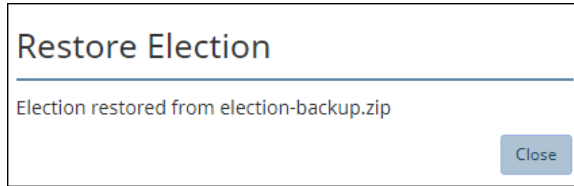


Figure 2-21. Confirmation message after restoring an election

Note: If you restore an election from a previous version of ClearDesign that did not require an Election Ballot Code, ClearDesign generates one while restoring the election. ClearDesign also issues a warning message to reprint any ballots and regenerate the BDF and ADF.

- Click **Close**.

The restored election appears on the Elections view in the order of the most recent sort.

- If the name of the restored election has the same name as another election, assign a unique name.

2.10 Editing an election

To edit settings for an existing election:

- From the **Elections** view, locate the election.
- Click the **Edit** button for the election.

ClearDesign displays the Election dialog (Figure 2-22).

Election: ClearCounty General Election			
Name	ClearCounty General Election	Sort Seq	30
Short Name	Cle General Election	Abbreviation	Electi
Import ID		Export ID	
Election Date	11/02/2021	Election State	Election Created
Jurisdiction Name	Clear County	Election Ballot Code	123
Official's Title		Official's Name	
Encrypt BDF On Export	<input checked="" type="checkbox"/>		
Straight Party Type	None	Cross Endorse Type	None
Precinct Reporting Threshold	10		

Figure 2-22. Election dialog (Edit mode)

3. If necessary, edit the following common attributes:

- **Name**
- **Sort Seq**
- **Short Name**
- **Import ID**
- **Abbreviation**
- **Export ID**

See "Common attributes of entities" on page 241.

For the **Name** of an election, use a maximum of 38 characters, including spaces, to ensure that ClearCast and ClearCount can import the BDF or BDFx file.

4. (If necessary) In **Election State**, select one of: Election Created, Ballots Created, Cards Created, or Media Created.

See "Election states" on page 35.

As you move through the process of setting up an election, the **Election State** becomes more restrictive. The **Election State** is a safeguard that prevents you from accidentally invalidating previous work. However, if a change is necessary, this field enables you to return the election to an earlier state where you can make the change.

After ClearDesign has created media, do not change the **Election State** to a value that is earlier than Media Created and then try to change the **Name** or **Election Date**. If you try to do so, ClearDesign displays a warning message similar to Figure 2-23.



Figure 2-23. Warning message when changing the Name field of an election will invalidate media.

If you proceed and change the **Name** or **Election Date**, ClearDesign replaces the existing media hash, which makes it impossible to update the election in ClearCount. In ClearCount, you must create a new election.

5. Modify the **Jurisdiction Name** if necessary.

6. Modify the **Election Ballot Code** only if necessary.

Ordinarily, you will not change the Election Ballot Code. However, you may edit this field so that the **Election Ballot Code** in the ADF and BDF matches the value on already-printed ballots that will be tabulated in the current election.

If you change the **Election Ballot Code** after generating media, regenerate and print the cards so that they contain the new value. If you change the **Election Ballot Code** and save the election, ClearDesign displays a warning message of the effects of doing so. For example, if you change the **Election Ballot Code** and save the election after printing cards, a warning message to reprint the cards.

If you change the **Election Ballot Code** for an election, also generate a new ADF and BDF files. Install the new BDF file on ClearCount and ClearCast. Install the new ADF file on ClearAccess.

7. (Optional) Clear Ballot recommends that you enter identifiers in the following fields:

- **Official's Title**
- **Official's Name**

8. (Optional) Deselect **Encrypt BDF on Export**.

By default, **Encrypt BDF on Export** is selected and ClearDesign exports an encrypted (BDFx) file where the filename end in **bdfx.zip**.

Encryption reduces the vulnerability of brute-force attacks on the file's password. ClearDesign uses the PDFKDF2 (Password-Based Key Derivation Function 2) encryption mechanism, which is part of the RSA Laboratory Public-Key Cryptography Standards (PKCS).

To produce an unencrypted BDF file, deselect the **Encrypt BDF on Export**. An unencrypted BDF filename ends in **bdf.zip**.

9. (Optional) Select the **Straight Party Type**.

The **Straight Party Type** field indicates how adjudication handles ambiguous cases where marks appear in a straight-party voting (SPV) contest *and* in the partisan contests controlled by the SPV contest. Table 2-3 lists the options for the **Straight Party Type** field.

Table 2-3. Options for the Straight Party Type field

Option	Description
None	(Default) If your jurisdiction does not use SPV, leave the default value of None.
Exclusive	An SPV-selected party choice applies only if all ovals of a partisan contest are entirely blank. Otherwise, only the marked ovals are counted, and SPV is not applied to that contest.

Table 2-3. Options for the Straight Party Type field (continued)

Option	Description
Exclusive One Touch	This option uses the same logic as Exclusive. An exception occurs when voting a straight-party ticket in ClearAccess and then selecting a choice associated with a different party. In this situation, all the straight-party choices become deselected and the choice associated with the different party remains selected. Normal vote-selection rules apply when the ClearAccess voter selects additional choices. For example, a voter receives a warning if he or she tries to overvote the contest.
Override	SPV overrides or ignores any existing marks in partisan contests
Combine	The SPV-selected party choice is applied to the contest. If there are less candidates for the select party than allowed choices, any marks for additional candidates are counted. If the marked candidates plus the candidates for the SPV-selected party will result in an overvote, only the SPV-selected candidates are counted.
Additive	The SPV-selected party choice is applied to the contest. Any marks for additional candidates are counted. If the marked candidates plus the candidates for the SPV-selected party will result in an overvote, the entire contest is considered as overvoted, and no votes are counted.

10. (Optional) In **Cross-Endorse Type**, select one of options listed in Table 2-4.

Table 2-4. Options for the Cross Endorse Type field

Option	Description
None (Default)	The None option disables cross-endorsing candidates in the election. If you select None, you can associate each candidate with only one Voter Group in the dialog for each respective candidate. See "Adding or editing candidates" on page 99.
On Ballot Once	A cross-endorsed candidate receives a single oval that is endorsed by all parties applicable to that candidate.
On Ballot for each Voter Group	A cross-endorsed candidate appears in a contest with unique ovals for each party that endorses the candidate.

11. (Optional) In **Precinct/Split Reporting Threshold**, enter the reporting threshold for use in tabulation.
Any number of ballots less than this value appear obscured in ClearCount reports to protect voter anonymity.
12. Click **Save**.

2.11 Importing data

This topic provides guidelines for importing and reimporting election data. This topic also describes the import procedure.

2.11.1 Guidelines for importing election data

The following guidelines apply to importing election data:

- ClearDesign supports importing external data other than headers.
- Some state authorities provide jurisdictions with import files that contain jurisdiction and election-specific information.
See "Supported data import formats" on page 240.
- During import, ClearDesign tests the data for required fields and formatting. If blue warning messages appear when importing data into ClearDesign, check with the provider of the import data to ensure that file contains the appropriate data and formatting.
- Import an election from a BDF or BDFx only for testing and data verification. Do not import from a BDF or BDFx to create a new election.

2.11.2 Guidelines for reimporting election data

The following guidelines apply to reimporting election data:

- When you reimport a data source, ClearDesign compares the imported entities to existing entities and does the following:
 - Adds new entities
 - Updates existing entities as needed
- ClearDesign never deletes entities during the import process.
- Because importing can result in unintended results, do so only with the guidance of Clear Ballot Technical Support.
- When you start to import new election data on top of an existing election, ClearDesign displays a warning. If you proceed, ClearDesign bundles the two elections into one.

2.11.3 Importing data into existing elections

Note: Before you import data into an existing election, contact Clear Ballot Technical Support.

To import data into an existing election:

1. Do one of the following:
 - Select the election under development.
 - Create an empty election.

ClearDesign displays the **Info** view for the election.

2. Click **Import Data**.

ClearDesign displays the Import Data Files dialog.

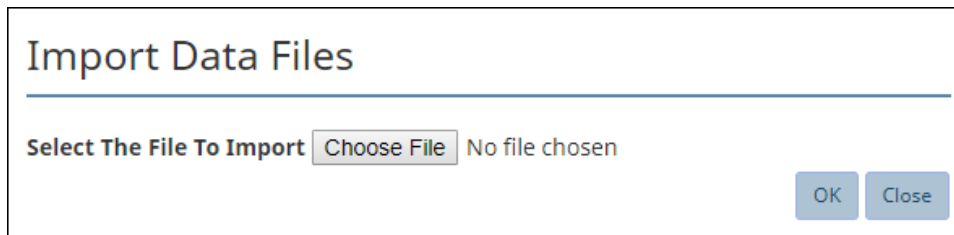


Figure 2-24. Import Data Files dialog

3. Click **Browse**.

The browser-specific File Upload dialog appears.

4. Locate and select the required data file.

5. Click **OK** to start importing data.

ClearDesign determines the format of the import file. See "Supported data import formats" on page 240.

A status bar displays progress and a confirmation message appears upon completion.

6. Click **Close**.

2.12 Deleting elections

Note: Before you delete an election, make sure to back it up. If you delete an election that you have not backed up, you cannot recover it. See "Procedure for backing up an election" on page 43.

To delete one or more elections:

1. From the **Elections** tab, select (check) the desired elections and click **Delete**.
2. When ClearDesign displays a confirmation message, click **OK** (Figure 2-25).

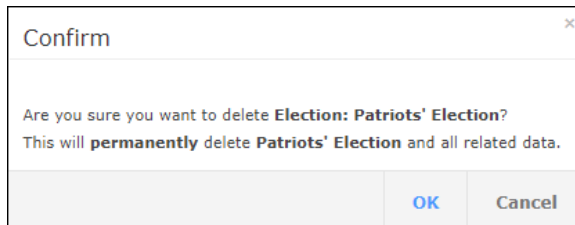


Figure 2-25. Example: confirmation message when deleting an election

ClearDesign deletes the elections and refreshes the screen.

Chapter 3. Adding fonts and images

3.1 Objectives

After reading this chapter, you should be able to add fonts and images to an election.

3.2 Managing fonts

This section describes font management.

If you are required to add a font to an election, Clear Ballot recommends that you do so at an early stage of election development after you have created or imported the election. Any font changes can affect ballot text and layout.

3.2.1 Font support for languages

ClearDesign provides fonts for the following languages:

- Chinese
- English
- Korean
- Spanish
- Vietnamese

For additional fonts to support languages other than those listed above, contact Clear Ballot Technical Support.

ClearVote products support up to 15 languages per election. In addition to the five languages previously listed, the following languages are also supported:

- Danish
- Dutch
- Flemish
- French
- German
- Italian
- Japanese
- Norwegian
- Portuguese
- Swedish

3.2.2 Supported character sets

ClearDesign supports Unicode and the non-Latin character set, but not right-to-left languages.

3.2.3 Installed font files

The following fonts are installed with ClearDesign:

- Noto-Sans-Ext.ttf supports the languages listed in Table 3-1.
- NotoSansCJKtc.ttf—Provides characters for the following languages:
 - Chinese
 - Japanese
 - Korean

Table 3-1. Fonts in Noto-Sans-Ext.ttf

Language	Fonts
Arabic	NotoKufiArabic, NotoNaskhArabic, NotoNastaliqUrdu
Armenian	NotoSansArmenian
Bengali	NotoSansBengali
Gujarati	NotoSansGujarati
Hindi	NotoSansDevanagari
Persian	NotoKufiArabic, NotoNaskhArabic, NotoNastaliqUrdu
Punjabi	NotoSansGurmukhi
Urdu	NotoNastaliqUrdu
Tagalog	NotoSansTagalog
Telugu	NotoSansTelugu

3.2.4 Displaying the Fonts view

To display the Fonts view, select one of these options:

- From the Election menu, click **Fonts**.
- From the Info View of an election, click the Fonts tab.

ClearDesign displays the Fonts view (Figure 3-1 on page 54).

Fonts	
<input type="button" value="Add"/>	<input type="button" value="Delete"/>
Search:	<input type="text"/>
<input type="button" value="Copy"/>	<input type="button" value="PDF"/>
<input type="button" value="Excel"/>	<input type="button" value="CSV"/>
<input type="button" value="Print"/>	<input type="button" value="Show / hide columns"/>
<input type="checkbox"/>	Sort Seq ↓↑ Name ↑↓
<input type="checkbox"/>	10 Inherit
<input type="checkbox"/>	20 Noto Sans
<input type="checkbox"/>	40 Noto Serif
<input type="checkbox"/>	60 Noto Mono

Figure 3-1. Fonts view (default columns shown)

Default fonts

The Fonts view displays the default fonts and any user-added fonts.

The default fonts, which you cannot delete, include:

- Inherit
- Noto Sans
- Noto Serif
- Noto Mono

The Noto fonts support Latin character-set languages, Russian, and Vietnamese.

Selectable columns

Selectable columns include: Sort Seq, Name, Short Name, Abbreviation, Import ID, Last Edit By, Last Edit Time, and Code.

Action buttons available from the Fonts view

Table 3-2 lists the actions buttons available from the Fonts view.

Table 3-2. Actions buttons available from the Fonts view

Button	Description
Add	See "Adding a font to an election" on the next page.
Delete	To delete a user-added font: <ol style="list-style-type: none"> 1. Select the check box corresponding to the desired font. 2. Click Delete.

3.2.5 Adding a font to an election

To add a font to an election:

1. From the navigation pane, choose **Fonts**.

ClearDesign displays the Fonts view.

2. Click **Add**.

ClearDesign displays the Font dialog.

Figure 3-2. Font dialog

3. In **Name**, enter the user-defined name.

The font **Name** can contain only the characters a-z, A-Z, 0-9, -, or space.

If you leave the **Name** or **Font Family** fields blank, ClearDesign supplies the filename of the font that you selected when using the **Choose File** button.

Note: Once saved, the **Name** cannot be changed.

4. In **Font Family**, supply a name.

Use the **Font Family** field to define a hierarchical list of fonts from left to right. If the first font is unavailable, the browser tries the next font.

The following example shows a list for the **Font Family** field.

Example: "notosans, notosans-ext, notosans-ckj, sans-serif"

In this example, the browser does the following:

1. The browser tries to render the first font, notosans.
2. If notosans is unavailable, the browser tries to render the next font, notosans-ext.
3. The browser moves through the font list from left to right until it locates a font that can render the desired character.

If none of the fonts listed can render a particular character, the default Windows black border characters appear instead. In this situation, use an alternate font. Because ClearDesign's installed fonts support all necessary languages, you can use them in this situation.

For a list of fonts installed with ClearDesign, see "Managing fonts" on page 52.

5. In **Sort Seq**, enter the sorting index.
6. For **Font File**, click **Choose File** to navigate to and select a font file.
7. Click **Save**.

ClearDesign installs the font, and the user-defined name appears in the **Font Name** list in the Ballot Text editor across the election.

3.3 Managing images

You can upload image files, such as party logos, signature facsimiles, and filled vote target illustrations, and then add them to ballot headers. You cannot create or modify images within ClearDesign.

ClearDesign supports all standard image file formats. However, for best performance, Clear Ballot recommends using JPEG and PNG files. Because of their large size, bitmap (.bmp) files can slow performance.

3.3.1 Displaying the images view

To display the Images view, select one of the following options:

- From the Election menu, click Images.
- From the Info view of an election, click the Images tab.

Figure 3-3 shows an example of the Images view.

Images		
	Sort Seq	Name
Edit	10	sm-CB-Logo-Color-RGB.png
Edit	20	2018-12-13_11-03-33.png

Figure 3-3. Images view

Selectable columns

Selectable columns include: Sort Seq and Name.

Action buttons available from the Images tab

Table 3-3 on page 57 lists the action buttons available from the Images view.

Table 3-3. Action buttons available from the Images view

Button	Description
Add	See "Adding image files to an election" below.
Delete	To delete an image: <ol style="list-style-type: none"> 1. Select the check box in the row corresponding to the desired image. 2. Click Delete.

3.3.2 Adding image files to an election

To add an image file to an election:

1. From the Images view, click **Add**.

ClearDesign displays the Image dialog (Figure 3-4).

Figure 3-4. Image dialog

2. Do as follows:
 - a. Click **Browse**.
 - b. Navigate to the desired image on your computer and select it.

For optimal performance, Clear Ballot recommends using images in the 20 to 40 kB range. If you navigate to and select an image that is 100 kB or larger, ClearDesign issues the following warning message (Figure 3-5).

Figure 3-5. Warning message when uploading an image that is 100 kB or larger

- c. Click **Open**.

3. (Optional) In **Name**, modify the local filename.
4. (Optional) In **Sort Seq**, modify the sorting index.
5. Click **Save**.

Chapter 4. Fundamental election entities

4.1 Objectives

After reading this chapter, you should be able to describe, add, and manage fundamental election entities, which include:

- Voter Groups
- District categories
- Districts
- Precincts
- Splits
- Contests
- Candidates

You add and edit fundamental election entities after creating an election by entering data manually or by using a template. See "Scenarios for creating elections in ClearDesign" on page 37.

4.2 Fundamental election entities: definitions

This section defines fundamental election entities.

Clear Ballot recommends that you become familiar with these basic definitions before reading the details in the remainder of this chapter because the entities are related to one another.

Example: A contest entity, such as a race for president, is related to the individual candidate entities who represent the individuals running for that office.

This section lists the entity definitions in the order in which you set them up in a typical election workflow. This is the same order in which the remainder of this chapter presents these entities.

Voter group

Represents a political party.

Examples: Democrat, Republican, Libertarian

District category

A classification of geographic areas called districts. A district category enables a jurisdiction to assign distinct geographic areas to certain types of public offices.

Example: Suppose that a jurisdiction has the following divisions for various public offices:

- Three zoning board districts that each elect a zoning officer. *Zoning board* is the district category.
- Four school board districts that each elect two board members. *School board* is the district category.

- A mayor's race that covers the entire jurisdiction. *Jurisdiction wide* is the district category.

District

A geographic subdivision of a jurisdiction associated with a type of public office that represents the district.

Examples: First Congressional District, Second School Board District, and Third Zoning Board District

See also the previous definition *district category*.

Precinct

A precinct is generally the smallest regional division in a jurisdiction. A given district may be comprised of several precincts. A precinct is called an *election district* in some jurisdictions.

Split

Usually, a precinct is the smallest unit of organization for an election. In a *precinct split* or *split*, some voters in a precinct elect an official for a given office in one district, while other voters elect an official for the same office in another district.

Example: Suppose that a jurisdiction draws a boundary line for the 1st and 2nd School Board districts straight through the middle of precinct ABC. In this situation, the ballots are set up as follows:

- The voters on one side of the boundary line receive a ballot containing the candidate choices for the seat of the 1st School Board district.
- The voters on the other side of the boundary line receive a ballot containing the candidate choices for the seat of the 2nd School Board district.

In ClearDesign, each split is associated with a single precinct and only one district of each district category.

Contest

A contest entity represents a single votable decision in an election.

Examples: A race for president or a referendum question

Candidate

A candidate entity represents a single votable choice for a contest.

4.3 Voter groups

This topic describes how to manage voter groups.

4.3.1 Nonpartisan voter group

ClearDesign supplies a default voter group called Nonpartisan for each election that you create. By default, ClearDesign assigns the Nonpartisan voter group to any entity that lacks a partisan voter group affiliation.

ClearDesign does not allow you to delete the Nonpartisan voter group.

4.3.2 Displaying the Voter Groups view

To display the Voter Groups view of an election:

1. From the Elections view, click the name of the desired election.

ClearDesign displays the Info tab for the selected election.

2. From the Info tab, click the Voter Groups tab.

ClearDesign displays a Voter Groups view that is similar to Figure 4-1.

Voter Groups		Sort Seq	Name
<input type="checkbox"/>	Edit	10	Nonpartisan
<input type="checkbox"/>	Edit	20	Democrat
<input type="checkbox"/>	Edit	30	Republican

Figure 4-1. Voter Groups view (default columns shown)

Selectable columns

Selectable columns include: Sort Seq, Name, Short Name, Abbreviation, Import ID, Last Edit By, Last Edit Time, and Track Registration.

Click **Show / hide columns** to select which columns appear in this view.

Action buttons available from the Voter Groups view

Table 4-1 on page 62 lists the action buttons available from the Voter Groups view.

Table 4-1. Action buttons available from the Voter Groups view

Button	Description
Add	"Adding or editing a voter group" below.
Delete	<p>To delete voter groups:</p> <ol style="list-style-type: none"> 1. Select the check boxes in the rows corresponding to the voter groups that you want to delete. 2. Click Delete. <p>You cannot delete the default Nonpartisan voter group.</p>

4.3.3 Adding or editing a voter group

1. Select one of the following options:
 - To create a new voter group, click **Add** from the Voter Groups view.
 - To edit the settings of an existing voter group, click **Edit** in one of the following locations:
 - In the row corresponding to the desired voter group in the Voter Groups view
 - In the Info view of the desired voter group

ClearDesign displays the Basic tab of the Voter Group dialog (Figure 4-2).

The screenshot shows the 'Voter Group: Republican' dialog box. It has three tabs: 'Basic', 'Contests', and 'Registration'. The 'Basic' tab is active. The fields are as follows:

- Name: Republican
- Short Name: Republican
- Import ID: (empty)
- Track Registration:
- Sort Seq: 50
- Abbreviation: Republ
- Export ID: (empty)
- Endorse Contests:
- Ballot Text: English (selected), Record, TTS, Play, Stop, Delete, Source: tts, Republican

Figure 4-2. Voter Group dialog

2. If necessary, edit the following common attributes:
 - **Name**
 - **Sort Seq**
 - **Short Name**
 - **Import ID**
 - **Abbreviation**
 - **Export ID**

See "Common attributes of entities" on page 241.

Note: The voter group with the lowest **Sort Seq** becomes the default for all for unendorsed candidates in an election.

3. (Optional) Select (check) **Endorse Contests**.

By default, **Endorse Contests** is deselected.

If you select **Endorse Contests**, you can associate the voter group with contests. You select this field to identify contests within a political party in a primary election.

After you select **Endorse Contests**, the Contests tab appears, but remains empty until you add contests to the election and associate contests with the current voter group.

4. (Optional) Select (check) **Track Registration**.

By default, **Track Registration** is deselected.

If you select **Track Registration**, ClearCount can maintain a count of voter registration for the current voter group.

After you select **Track Registration**, the Registration tab appears, but remains until empty you add precincts and splits to the election.

5. (Optional) In the Ballot text editor, edit and format the text associated with the voter group.

Examples

The ballot text for a voter group is usually the name of a political party, such as "Democratic", "Republican", or "Libertarian".

Text entry and formatting in the Ballot text editor

Text entry and formatting options in the Ballot Text editor are similar those in word processing applications. For details, see "Formatting toolbar: Ballot Text editor" on page 243.

Inherited default formatting in the Ballot Text editor

Any formatting in the Ballot Text editor overrides any inherited formatting according to the following precedence:

1. The Ballot Text editor inherits formatting from the **Layout Style** field value specified for the first ballot set listed in the Ballot Sets view.
2. The Layout tab of the current entity overrides the formatting inherited from the **Layout Style** field of the first ballot set.
3. Any local formatting in the Ballot Text editor of the current entity overrides the formatting specified in the Layout tab of the current entity.

Language tabs in the Ballot Text editor

The Ballot text editor has one tab for each language in the election. By default, languages other than English inherit their formatting from the English tab. You can use the language tabs to customize the text and formatting according to language.

If you add languages to an election, Clear Ballot recommends that you do so after all English ballot text is stable. See "Adding languages and changing language settings" on page 206.

See Chapter 9, "Managing languages, device messages, and audio" on page 203.

6. Click **Save**.

If the change will delete registration counts, invalidate cards, and invalidate election media, ClearDesign displays a confirmation message. The following image shows an example (Figure 4-3).

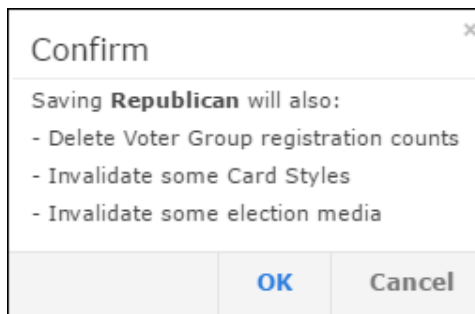


Figure 4-3. Confirmation message for changes to a voter group

7. Click **OK** to confirm the changes.

4.3.4 Displaying the Info tab for a voter group

To display the Info tab for an individual voter group, click the corresponding **Name** cell in the Voter Groups view.

Figure 4-4 shows an example of an Info tab for a voter group whose **Name** is Democratic.

The screenshot shows the 'Info' tab for a voter group. The navigation bar includes 'Info', 'Contests', 'Candidates', 'Voter Counts', and 'Logs'. An 'Edit' button is located below the navigation bar. The 'Basic' section contains the following fields:

Name	Democratic	Sort Seq	20
Short Name	Democratic	Abbreviation	Democr
Import ID	DEM	Export ID	
Last Edit By	admin@joeS	Last Edit Time	2018-10-25 14:10:33
Track Registration	True		

The 'Ballot Text' field is a text area containing 'Democratic'. The 'Contests' section displays a list of 15 contests, each with a link to its corresponding Info tab:

- United States President (Democr)
- Representative in Congress, 1st District (Democr)
- Representative in Congress, 3rd District (Democr)
- Representative in Congress, 5th District (Democr)
- Secretary of State (Democr)
- State Treasurer (Democr)
- Attorney General (Democr)
- State Senator, 14th District (Democr)
- State Senator, 17th District (Democr)
- State Senator, 18th District (Democr)
- State Senator, 21st District (Democr)
- State Senator, 22nd District (Democr)
- State Senator, 23rd District (Democr)
- State Senator, 25th District (Democr)
- State Representative, 27th District (Democr)
- State Representative, 31st District (Democr)
- State Representative, 33rd District (Democr)
- State Representative, 35th District (Democr)

Figure 4-4. Info tab of a voter group

Basic section of the Info tab of a voter group

Most fields in the Basic section of an Info tab of a voter group are common to all entities. See "Common attributes of entities" on page 241.

The only voter-group specific field that appears is **Track Registration**. The value of this field is True when you have configured ClearDesign to keep a count of voter registration for the current voter group.

The **Ballot Text** field displays a string associated with the voter group that is used as a label. For a voter group, this string is an identifier for a political party, such as "Democratic."

Contest section of the Info tab of a voter group

This section lists all contests endorsed by the voter group. This list appears when a voter group is configured to endorse contests, such as in a primary election. Each contest listed links to the corresponding Info tab for that entity.

Additional tabs available from the Info tab of a voter group

Table 4-2 lists the tabs available from the Info tab of each individual voter group.

Table 4-2. Tabs available from the Info tab of a voter group

Tab	Description
Contests	Displays a list of contests endorsed by the current voter group. See "Displaying a Contests view" on page 83.
Candidates	Displays a view of candidates affiliated with the current voter group. See "Displaying a Candidates view" on page 97.
Voter Counts	See "Managing voter counts" on page 77.
Logs	The tab lists all events in the change history of this voter group.

Edit button on the Info tab of voter group

Click **Edit** to display the Voter Group dialog. See "Adding or editing a voter group" on page 62.

4.4 District categories

This topic describes how to manage district categories.

4.4.1 The default Jurisdiction Wide district category

ClearDesign supplies a default district category called Jurisdiction Wide for each election that you create. ClearDesign provides this default to classify districts where voters in the entire jurisdiction decide a contest, such as a race for mayor. Also, small jurisdictions may not need more than one district category.

ClearDesign does not allow you to delete the Jurisdiction Wide district category.

4.4.2 Displaying the District Categories view

To display the District Categories view:

1. From the Administration menu, expand the **Elections** selection and click the name of the desired election to select it.

ClearDesign displays the Election menu in the left navigation pane and the Info tab for the selected election in the content pane.

2. From the Info tab of the election, click one of the following:
 - The District Categories tab that appears in the same row as the Info tab in the content pane.
 - The **District Categories** selection from the Election menu in the navigation pane.

ClearDesign displays a District Categories view that is similar to Figure 4-5.

District Categories		Districts	
<input type="button" value="Add"/>	<input type="button" value="Delete"/>	Search: <input type="text"/>	<input type="button" value="Copy"/> <input type="button" value="PDF"/> <input type="button" value="Excel"/> <input type="button" value="CSV"/> <input type="button" value="Print"/> <input type="button" value="Show / hide columns"/>
<input type="checkbox"/>	Sort Seq	Name	Districts Count
<input type="checkbox"/> Edit	10	Jurisdiction Wide	1
<input type="checkbox"/> Edit	20	County Judges	4
<input type="checkbox"/> Edit	30	Madison City Limits Proper	1
<input type="checkbox"/> Edit	40	Lakeside incorporation into Greater Madison City Proposal	1

Figure 4-5. District Categories view (default columns shown)

Selectable columns

Selectable columns include: Sort Seq, Name, Short Name, Abbreviation, Import ID, Export ID, Last Edit By, Last Edit Time, Log Count, Districts Count, Districts, Unassigned Splits Count, and Unassigned Splits.

Click **Show / hide columns** to select which columns appear in this view.

Action buttons available from the District Categories view

Table 4-3 lists the action buttons available from the District Categories view.

Table 4-3. Action buttons available from the District Categories view

Button	Description
Add	"Adding or editing a district category" on the next page.
Delete	<p>To delete district categories:</p> <ol style="list-style-type: none"> 1. Select the check boxes in the rows corresponding to the district categories that you want to delete. 2. Click Delete. <p>You cannot delete that default Jurisdiction Wide district category.</p>

Districts tab available from the District Categories view

The Districts tab that is available from the District Categories view displays a view of all districts contained in an election. See "Displaying a Districts view" on page 70.

4.4.3 Adding or editing a district category

1. Select one of the following options:
 - To create a new district category, click **Add** from the District Categories view.
 - To change settings of an existing district category, click **Edit** in one of the following locations:
 - In the row corresponding to the desired district category in the District Categories view
 - In the Info view of the desired district category

ClearDesign displays the District Category dialog (Figure 4-6).

The screenshot shows a dialog box titled "District Category: County Judges". At the top right are three buttons: "Save", "Reset", and "Cancel". Below the title bar, there are six input fields arranged in two columns. The left column contains "Name" (with "County Judges" entered and highlighted), "Short Name" (with "County Judges" entered), and "Import ID" (empty). The right column contains "Sort Seq" (with "20" entered), "Abbreviation" (with "Judges" entered), and "Export ID" (empty).

Figure 4-6. District Category dialog

2. If necessary, edit the following common attributes:
 - **Name**
 - **Sort Seq**
 - **Short Name**
 - **Import ID**
 - **Abbreviation**
 - **Export ID**

See "Common attributes of entities" on page 241.

3. Click **Save**.

4.4.4 Displaying the Info tab for a district category

To display the Info tab for an individual district category, click the corresponding **Name** cell in the District Categories view.

Figure 4-7 shows an example of an Info tab for a district category.

Figure 4-7. Info tab for a district category

Basic section of the Info tab of a district category

The fields in the Basic section of the Info tab of a district category are common to all entities. See "Common attributes of entities" on page 241.

Splits by Districts section of the Info tab of a district category

This section lists the districts within the current district category and the splits assigned to each district. For example, the Splits by District section in Figure 4-7 shows one district: Madison City Limits Proper (not greater area). This district contains a single split: 01-center (Madison City Area) 10. In this section, the names of districts and splits link to the Info tab for the corresponding entity.

Unassigned Splits section of the Info tab of a district category

This section lists any splits in the election that are not assigned to any district. The name of each split in this section links to the Info tab of the corresponding entity.

Additional tabs available from the Info tab of a district category

Table 4-4 lists the tabs that are available from each Info tab of a district category.

Table 4-4. Tabs available from the Info tab of a district category

Tab	Description
Districts	Displays a view of districts in the current district category. See "Displaying a Districts view" on the next page.
Splits	Displays a tab listing all splits for the current district category.
Logs	The tab lists all events in the change history of this district category.

Action buttons available from the Info tab of a district category

The Info tab for a district category contains two action buttons: **Add** and **Edit**. See "Adding or editing a district category" on page 68.

4.5 Districts

This topic describes how to manage districts.

4.5.1 The default Jurisdiction Wide district

ClearDesign supplies a default district called Jurisdiction Wide for each election that you create. ClearDesign assigns this default district to the Jurisdiction Wide district category. See "The default Jurisdiction Wide district category" on page 66.

4.5.2 Displaying a Districts view

ClearDesign provides two classes of Districts views:

- A Districts view of all districts in an election

To display this view:

1. From the Election menu, select **District Categories**.
2. When the District Categories tab appears, select the Districts tab

- A Districts view of only the districts in a specific district category

To display this view:

1. From the Election menu, select **District Categories**.
2. When the District Categories tab appears, click the **Name** cell of the desired district category.
3. When ClearDesign displays the Info tab the for the selected district category, click the Districts tab.

Figure 4-8 shows a Districts view that lists all districts in an election.

	Sort Seq	Name	District Category	Election Districts Count	Splits Count	Contests Count
<input type="checkbox"/> Edit	10	Jurisdiction Wide	Jurisdiction Wide	5	8	7
<input type="checkbox"/> Edit	10	Madison City Circuit Judge	County Judges	2	4	1
<input type="checkbox"/> Edit	20	Northern Clear County Judge	County Judges	2	2	1
<input type="checkbox"/> Edit	30	Southern Clear County Judge	County Judges	1	1	1

Figure 4-8. Districts tab showing all districts in an election

Selectable columns

Selectable columns include: Sort Seq, Name, Short Name, Abbreviation, Import ID, Last Edit By, Last Edit Time, District Category, Precincts Count, Precincts, Splits Count, Splits, Contests Count, and Contests.

Click **Show / hide columns** to select which columns appear in this view.

Delete button of a Districts view

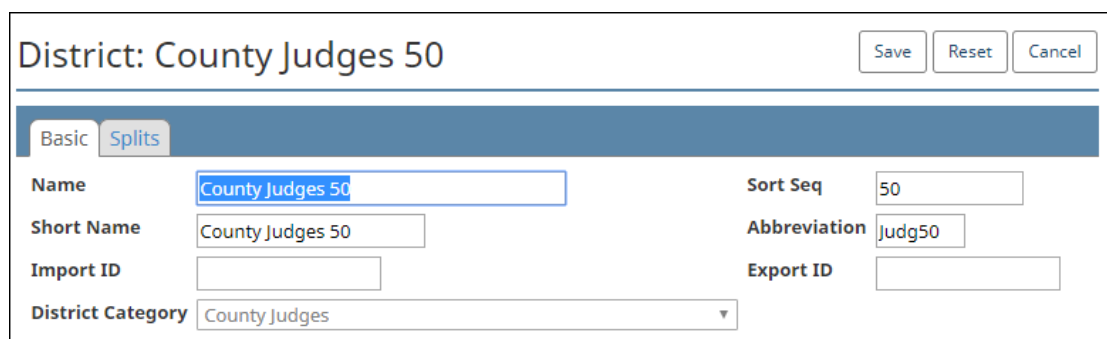
To delete a District from a Districts View, select the check boxes corresponding to the districts that you want to delete.

4.5.3 Adding or editing districts

To add a district to a district category or edit a district:

1. From the Election menu, select **District Categories**.
ClearDesign displays the Info tab for the district category.
2. Select one of the following options:
 - To add a district, click **Add District** on the Info tab for the desired district category.
 - To edit an existing district:
 - a. Click the Districts tab on the Info tab for the desired district category
 - b. On the Districts tab, click the **Edit** button in the row corresponding to the district that you want to edit.

ClearDesign displays the District dialog with the Basic tab selected (Figure 4-9).



District: County Judges 50

Save Reset Cancel

Basic Splits

Name County Judges 50

Short Name County Judges 50

Import ID

District Category County Judges

Sort Seq 50

Abbreviation Judg50

Export ID

Figure 4-9. District dialog, Basic tab

3. If necessary, edit the following common attributes:
 - Name
 - Short Name
 - Abbreviation
 - Sort Seq
 - Import ID
 - Export ID

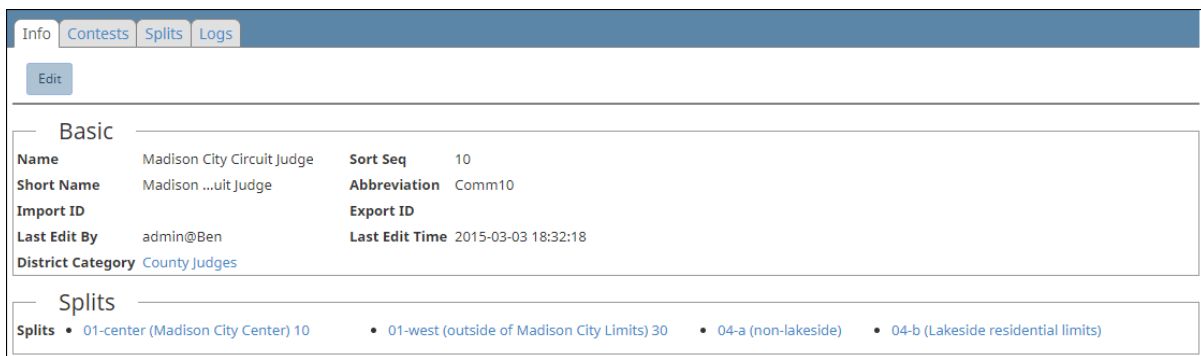
See "Common attributes of entities" on page 241.

- Short names for districts must be unique.
4. In **District Category**, select the required district category.
 5. Select the **Splits** view.
 6. Check all splits required for the district.
Splits can be added and chosen later.
 7. Click **Save**.

4.5.4 Displaying the Info tab for a district

To display the Info tab for a district, click the corresponding **Name** cell in the Districts view.

Figure 4-10 shows an example of an Info tab for a district.



Basic			
Name	Madison City Circuit Judge	Sort Seq	10
Short Name	Madison ...uit Judge	Abbreviation	Comm10
Import ID		Export ID	
Last Edit By	admin@Ben	Last Edit Time	2015-03-03 18:32:18
District Category	CountyJudges		

Splits			
Splits	• 01-center (Madison City Center) 10	• 01-west (outside of Madison City Limits) 30	• 04-a (non-lakeside) • 04-b (Lakeside residential limits)

Figure 4-10. Info tab for a District

Basic section of the Info tab of a district

Most fields in the Basic section of an Info tab of a voter group are common to all entities. See "Common attributes of entities" on page 241.

The only district-specific field that appears is **District Category**. This field identifies the district category to which the district belongs. This field links to the Info tab of the corresponding district category entity.

Splits section of the Info tab for a District

The Splits section lists the splits for the current district. The name of each split links to the Info tab of the corresponding entity.

Edit button on the Info tab of a district

Click **Edit** to display the District dialog. See Figure 4-10 on page 72.

Additional tabs available from the Info tab of a district

The Contest and Splits tabs list the contests and split entities associated with the current district.

The Log tabs lists all events in the change history of this contest.

4.6 Precincts

This topic describes how to manage precincts.

Note: Some jurisdictions use the term *election district* instead of *precinct*. The term that you see on ClearDesign screens depends the localization settings specified by your system administrator.

4.6.1 Displaying the Precincts view

To display the Precincts view:

1. From the Administration menu, expand the **Elections** selection and click the name of the desired election to select it.

ClearDesign displays the Election menu in the left navigation pane and the Info tab for the selected election in the content pane.

2. From the Info tab of the election, select one of the following:
 - The Precincts tab that appears in the same row as the Info tab in the content pane.
 - The **Precincts** selection available from the Election menu in the navigation pane.

ClearDesign displays a Precincts view that is similar to Figure 4-11 on page 73.

	Sort Seq	Name	Splits Count
<input type="checkbox"/> Edit	10	01 (Greater Madison City Area)	3
<input type="checkbox"/> Edit	20	02 (Southern Clear County)	1
<input type="checkbox"/> Edit	30	03 (Northern Clear County)	1
<input type="checkbox"/> Edit	40	04 (Lakeside Suburb and rural)	2
<input type="checkbox"/> Edit	50	05 (Eastern Clear County)	1

Figure 4-11. Precincts view

Selectable columns

Selectable columns include: Sort Seq, Name, Short Name, Abbreviation, Import ID, Last Edit By, Last Edit Time, Splits Count, Splits, Districts, Contests, Ballot Groups, Ballots.

Click **Show / hide columns** to select which columns appear in this view.

Action buttons available from the Precincts view

Table 4-5 lists the action buttons available from the Voter Groups view.

Table 4-5. Action buttons available from the Precincts view

Button	Description
Add	See "Adding or editing a precinct" below.
Delete	To delete precincts: <ol style="list-style-type: none"> 1. Select the check boxes in the rows corresponding to the precincts that you want to delete. 2. Click Delete.
Voter Count	See "Displaying voter counts" on page 77.
Import Voter Counts	See "Importing voter counts" on page 78.
Export Voter Counts	See "Exporting voter counts" on page 78.

4.6.2 Adding or editing a precinct

To add a precinct:

1. Select one of the following options:
 - To create a new precinct, click **Add** from the Precincts view.
 - To change the settings of an existing precinct, click **Edit** in one of the following locations:
 - In the row corresponding to the desired precinct in the Precincts view
 - In the Info view of the desired precinct

ClearDesign displays the Basic tab of the Precincts dialog (Figure 4-12).

The screenshot shows the 'Precinct: 05 (Eastern Clear County)' dialog box. At the top right are 'Save', 'Reset', and 'Cancel' buttons. Below the title bar are two tabs: 'Basic' (selected) and 'Districts'. The 'Basic' tab contains the following fields:

- Name:** 05 (Eastern Clear County)
- Sort Seq:** 50
- Short Name:** 05 (East...r County)
- Abbreviation:** County
- Import ID:** (empty text box)
- Export ID:** (empty text box)
- Precinct Type:** Standard (dropdown menu)
- Languages:** Spanish Vietnamese English US

Figure 4-12. Precincts dialog, Basic tab

2. If necessary, edit the following common attributes:

- **Name**
- **Sort Seq**
- **Short Name**
- **Import ID**
- **Abbreviation**
- **Export ID**

See "Common attributes of entities" on page 241.

3. In **Languages**, uncheck any languages that are not needed for this precinct.
4. In **Precinct Type**, select Standard or Consolidated.

The Standard **Precinct Type** is the default. Use Standard except in special cases.

The Consolidated **Precinct Type** reduces the number of printed ballot styles in specific situations by lumping a copy of all existing splits in other precincts into a new consolidated precinct. This arrangement enables printing of the ballots for the consolidated precinct "by style." The trade-off is the inability to report voter turnout by precinct.

Note: You cannot change the **Precinct Type** after saving the precinct settings.

Setup of consolidated precincts

When using consolidated precincts, assign them a unique ballot set to allow for ballots printed by style within the consolidated precinct rather than for each split.

ClearCount reports lump all consolidated ballots under the consolidated precinct. Therefore, the ballots cannot be filtered across geography.

The summary of voter turnout in ClearCount includes the consolidated precinct ballots in the total. At the precinct level, the consolidated precinct ballots will not appear because they lack geographical assignments.

5. For a standard precinct, select the **Districts** tab.

6. Select the districts for the precinct.

Figure 4-13. Precinct dialog, Districts tab

7. Click **Save**.

4.6.3 Displaying the Info tab for a precinct

To display the Info tab for an individual precinct, click the corresponding **Name** cell in the Precincts view.

Figure 4-14 on page 76 shows an example of an Info tab for a precinct. On this tab, the values of some fields link to the Info tab for the corresponding entity.

Figure 4-14. Info tab for a precinct

Basic section of the Info tab of a precinct

Most fields in the Basic section of an Info tab of a voter group are common to all entities. See "Common attributes of entities" on page 241.

The Info tab of a precinct also displays the following precinct-specific fields:

- Precinct Type is one of the following:
 - The Standard **Precinct Type** is the default. Use Standard except in special cases.
 - The Consolidated **Precinct Type** reduces the number of printed ballot styles in specific situations by lumping a copy of all existing splits in other precincts into a new consolidated precinct. This arrangement enables printing of the ballots for the consolidated precinct "by style." The trade-off is the inability to report voter turnout by precinct.
- Splits—lists the splits into which the current precinct is subdivided
- Languages—lists the languages in which ballots are available in the current precinct

Districts section of the Info tab of a precinct

This section lists the District Categories and the individual districts within these categories that are assigned to the current precinct.

Contests section of the Info of a precinct

This section lists all races available to voters in the current precinct.

Ballots section of the Info tab of precinct

This section lists the ballots available to votes in the current precinct.

4.6.4 Managing voter counts

This topic describes how to manage voter counts.

Also, see "Tracking registration counts by split" on page 83.

Displaying voter counts

To display voter counts, click **Voter Count** from the Precincts view.

ClearDesign displays the VoterCount dialog (Figure 4-15).

	Nonpartisan	Democratic	Republican	Libertarian
Precinct 1 10	500	499	365	20
Precinct 2 10	550	388	323	35
Precinct 3 10	489	358	361	50

Figure 4-15. Voter Count dialog

To clear voter counts, click **Clear All** and **Save**.

Importing voter counts

To import voter counts:

1. From the **Precincts** view, click **Import Voter Counts**.

ClearDesign displays the Import Voter Counts dialog.

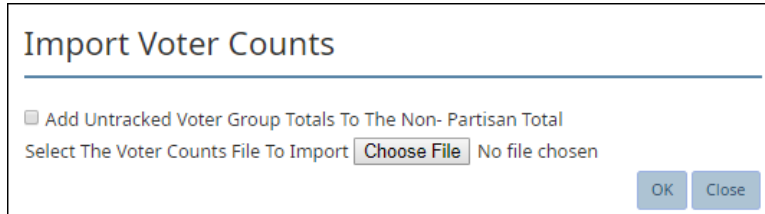


Figure 4-16. Import Voter Counts dialog

2. (Optional) Check **Add untracked Voter Group totals to the Nonpartisan total**.

Some jurisdictions have voter registration files that include voter registration for both major and minor parties. Only major parties normally get dedicated ballots in primary races, but the jurisdictions still have minor party voters registered as belonging to a partisan party. If minor parties are not expected to have a card, but the voters can vote in the election, Clear Ballot recommends checking this box to reflect their totals in the non-partisan voter group.

Voter groups that do not have their own card in a split will report their voter registration counts under the special "Registrants Without a Card" voter group.

3. In **Select The Voter Counts File To Import**, browse to and select the file.
4. Click **OK**.

Exporting voter counts

Precincts export voter counts for the following reasons:

- To update the voter registration file as a CSV file
- To convert data to the supported format so it can be reimported with different values

To export voter counts:

1. From the **Precincts** view, click **Export Voter Counts**.

ClearDesign displays the Export Voter Counts dialog (Figure 4-17).

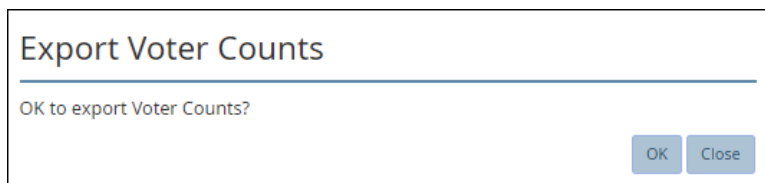


Figure 4-17. Export Voter Counts dialog

2. Click **OK**.

4.7 Splits

This topic describes how to manage splits, which are also called *precinct splits*.

4.7.1 Split identifiers

Split identifiers are relative ballot sequence numbers for ballot styles used within a precinct. ClearDesign performs the sequencing. Users can choose between displaying split names or relative numbers at the bottoms of ballot pages. Formats are:

- General elections: *PrecinctId.BallotStyleIdWithinPrecinct*
- Primary elections: *PrecinctId.PartyId.BallotStyleIdWithinPrecinct*

In a primary election, the total number of Party IDs is one more than the number of parties to allow for nonpartisan choices.

4.7.2 Displaying a Splits view

ClearDesign provide two classes of splits views:

- A view of all splits in an election

To display this view:

1. From the Administration menu, select the desired election.
2. From the Election menu or Elections view, select **Precincts**.
3. From the Precincts view, click the Splits tab.

- A view of the splits of an individual precinct

To display this view:

1. From the Precincts view, click the Name cell of the desired Precinct.
2. When the Info tab of the precinct appears, click the Splits tab.

Figure 4-18 shows a Splits view that lists all splits of a precinct. The Splits view of an election has a similar appearance but does not contain an **Add** button.

	Sort Seq	Name	Precinct	Districts Count	Contests Count	Ballot Groups Count
Edit	10	01-center (Madison City Center) 10	01 (Greater Madison City Area)	4	11	1
Edit	20	01-north (Northern Madison City Area) 20	01 (Greater Madison City Area)	3	9	1
Edit	30	01-west (outside of Madison City Limits) 30	01 (Greater Madison City Area)	3	9	1

Figure 4-18. Splits view of a precinct

Selectable columns

Selectable columns include: Sort Seq, Name, Short Name, Abbreviation, Import ID, Export ID, Last Edit By, Last Edit Time, Log Count, Precinct, Precinct Sort Seq, Districts Count, Districts, Contests Count, Contests, Ballot Groups Count, and Ballot Groups.

Click **Show / hide columns** to select which columns appear in this view.

4.7.3 Adding or editing splits

To add a split to a precinct or edit a split:

1. Select one of the following options:
 - To edit an existing split from the view of all splits in an election:
 1. From the Election menu, select **Precincts**.
 2. When the Precincts view appears, click the Splits tab.
ClearDesign displays a view of all available splits in the election.
 3. From the Splits view, click the **Edit** button in the row corresponding to the desired split.
 - To edit an existing split from the Splits view for an individual precinct:
 1. Display the Info tab for a precinct by expanding **Precincts** in the Election menu and clicking the name of an individual precinct or clicking the **Name** cell for an individual Precinct in the Precincts view.
 2. When the Info tab for the Precinct appears, click **Add Split**.

ClearDesign displays the Split dialog (Figure 4-19).

Split: 01-center (Madison City Center) 10

Save Reset Cancel

Basic District Registration

Name Sort Seq

Short Name Abbreviation

Import ID Export ID

Precinct

Languages Spanish Vietnamese English US

Figure 4-19. Split dialog

2. If necessary, edit the following common attributes:

- **Name**
- **Sort Seq**
- **Short Name**
- **Import ID**
- **Abbreviation**
- **Export ID**

See "Common attributes of entities" on page 241.

Note: Clear Ballot recommends a unique abbreviation for each split. If the abbreviations are not unique, ballot generation appends `_1`, `_2`, and so on to ballot IDs.

3. In **Precinct**, select the required precinct.
4. In **Languages**, uncheck languages that are not required.
5. Select the **District** tab.
6. Check all districts required for the split.
7. Click **Save**.

4.7.4 Displaying the Info tab of a split

To display the Info tab of a split, click the corresponding **Name** cell in the Splits view.

Figure 4-20 shows an example of an Info tab for a split. On this tab, the values of some fields (shown in blue) link to the Info tab for the corresponding entity.

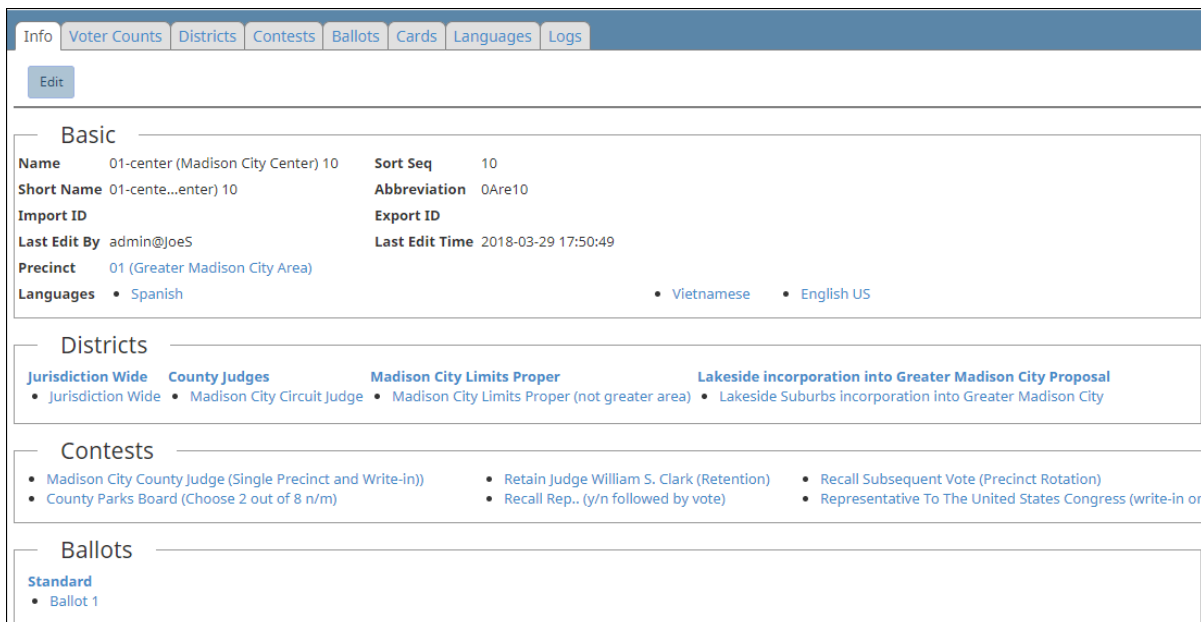


Figure 4-20. Info tab of a split

Basic section of the Info tab of a split

Most fields in the Basic section of the Info tab of a split are common to all entities. See "Common attributes of entities" on page 241.

The Basic section also displays some split-specific fields:

- Precinct—The name of the precinct that contains the current split
- Languages—The languages in which ballots are available in the split

Districts section of the Info tab of a split

This section lists the district categories and districts to which the split belongs.

Contests section of the Info tab of a split

This section lists the races that voters in the split can decide.

Ballots section of the Info tab of a split

This section lists the ballots that are available to voters in the split.

4.7.5 Associating splits with a language

You associate a split with a language to generate a ballot for that language for any applicable ballot sets for the split.

To associate splits with a language:

1. From the navigation pane, choose **Languages**.
The **Languages** view appears.
2. Locate the language you want to associate with splits.
3. Click the **Edit** button to the desired language.
ClearDesign displays the Languages dialog.
4. Select the **Splits** tab.
5. Select (check) each split that you want to associate with the language.
Unchecked splits are *not* associated with the language.
6. Click **Save**.

4.7.6 Tracking registration counts by split

To track registration counts by split:

1. From the navigation pane, choose **Precincts**.
ClearDesign displays the **Precincts** view (Figure 4-11 on page 73).
2. From the main pane, select the **Splits** tab.
3. Click the **Edit** button for the split.
ClearDesign displays the Split dialog (Figure 4-19 on page 80).
4. Select the **Registration** tab.

Note: Registration tracking must be enabled for the tab to be visible. If necessary, see "Adding or editing a voter group" on page 62 for instructions.

5. For any entity in the **Voter Group** column, increase or decrease the headcount in the **Registration Count** column.
6. Click **Save**.

Also, see "Managing voter counts" on page 77.

4.8 Contests

This topic describes how to manage contests.

4.8.1 Displaying a Contests view

ClearDesign displays two types of Contests views:

- A view of all contests in an election

To display this view, take one of the following actions:

- From the Election menu, click **Contests**.
or
- Follow these steps:
 1. From the Election view, click the **Name** cell for the desired election.
 2. When the Info tab for the desired election appears, click the Contest tab that appears between the Precincts and Headers tabs.

- A view of contests endorsed by a specific voter group

To display this view, do the following:

1. From the Election menu, select Voter Group.
2. When the Voter Group view appears, click the Name cell of the desired voter group.
3. When the Info tab of the desired voter group appears, click the Contests tab that appears next to the Info tab.

ClearDesign displays a Contests view that is similar to Figure 4-21.

	Sort Seq	Name	Contest Type	District	Voter Groups	Vote For	# Cand
<input checked="" type="checkbox"/> Edit	10	Madison City County Judge (Single Precinct and Write-in)	Candidate	Madison City Circuit Judge	Non-Partisan	1	8
<input type="checkbox"/> Edit	20	County Parks Board (Choose 2 out of 8 n/m)	Judges Initials	Jurisdiction Wide	Non-Partisan	2	8
<input type="checkbox"/> Edit	21	Northern Clear County Judge	Candidate	Northern Clear County Judge	Non-Partisan	1	5
<input type="checkbox"/> Edit	22	Southern Clear County Judge	Candidate	Southern Clear County Judge	Non-Partisan	1	4
<input type="checkbox"/> Edit	23	Eastern Clear County Judge	Candidate	Eastern Clear County Judge	Non-Partisan	1	3
<input type="checkbox"/> Edit	30	Retain Judge William S. Clark (Retention)	Retention	Madison City Limits Proper (not greater area)	Non-Partisan	1	2
<input type="checkbox"/> Edit	40	Recall Rep. (y/n followed by vote)	Recall	Jurisdiction Wide	Non-Partisan	1	2
<input type="checkbox"/> Edit	45	Recall Subsequent Vote (Precinct Rotation)	Candidate	Jurisdiction Wide	Non-Partisan	1	4
<input type="checkbox"/> Edit	50	Representative To The United States Congress (write-in only)	Candidate	Jurisdiction Wide	Non-Partisan	1	1
<input type="checkbox"/> Edit	60	U.S. Fed. Senator Vote (Single Vote - Precinct Rotation)	Candidate	Jurisdiction Wide	Non-Partisan	1	5
<input type="checkbox"/> Edit	70	President of the Unified States (cross-voting)	Candidate	Jurisdiction Wide	Non-Partisan	1	3

Figure 4-21. Contests view—all contest in an election (default columns shown)

Selectable columns

Selectable columns include: Sort Seq, Name, Short Name, Abbreviation, Import ID, Export ID, Last Edit By, Last Edit Time, Log Count, Contest Type, District, Voter Groups, Vote For, Contest Rotation, #Cand, Candidates, Pref Contest, Straight Party Contest, Recall Contest, Warn Overvote, Warn Undervote, and Warn Blank Vote.

Click **Show / hide columns** to select which columns appear in this view.

Actions buttons available from the Contests view

Table 4-6 lists the action buttons available from the Contests view.

Table 4-6. Action buttons available from the Contests view

Button	Description
Add	"Adding or editing contests" on the next page
Delete	To delete contests: <ol style="list-style-type: none"> 1. Select the check boxes of the contests that you want to delete. 2. Click Delete.

Candidates tab

See "Displaying a Candidates view" on page 97.

4.8.2 Adding or editing contests

Select one of the following options:

- To create a new contest, click **Add** from the Contests view.
- To edit the settings of an existing contest, click the **Edit** button in one of the following locations:
 - In the row corresponding to the desired contest in the Contests view
 - In the Info view of the desired contest

ClearDesign displays the Contest dialog with the Basic tab selected by default (Figure 4-22).

Contest: Madison City County Judge (Single Precinct and Write-in) [Save] [Reset] [Cancel]

Basic | Layout

Name: Sort Seq:

Short Name: Abbreviation:

Import ID:

Contest Type: Export ID:

District: Vote For: Auto Generate Write-ins:

Contest Rotation: Voter Groups: Non-Partisan Cyan Party

Recall Contest:

Warn Overvote: Warn Undervote: Warn Blank Vote:

Ballot Text:

Record TTS Play Stop Delete Source: tts

Madison City Clear County Judge
Vote for one

p

Figure 4-22. Contest dialog, Basic tab

Editing the Basic tab of a contest

To edit the basic tab of a contest:

1. If necessary, edit the following common attributes:
 - **Name**
 - **Sort Seq**
 - **Short Name**
 - **Import ID**
 - **Abbreviation**
 - **Export ID**

See "Common attributes of entities" on page 241.

The **Short Name** of a contest must be unique.

Controlling contests (Straight Voter Group or Primary Preference) must have lower **Sort Seq**

values than the contests they control. ClearDesign validates this requirement.

2. In **Contest Type**, choose from the selections listed in Table 4-7.

Table 4-7. Guidelines for selecting the Contest Type

Contest type	Purpose	Prerequisites
Candidate	(Default) A standard contest where a voter selects one or more candidates for an office depending on value of the Vote For field.	N/A
Question	A question or measure with only Yes and No choices. ClearDesign automatically adds the Yes and No choices as candidates.	N/A
Retention	Similar to a Question with Yes and No choices. ClearDesign automatically adds the Yes and No choices as candidates.	N/A
Recall	Similar to a Question with a Yes choice. ClearDesign automatically adds a single Yes choice as a candidate. You can manually add a No choice if it is appropriate for your jurisdiction.	N/A

Table 4-7. Guidelines for selecting the Contest Type (continued)

Contest type	Purpose	Prerequisites
Primary Preference	<p>This selection designates the controlling contest for a primary preference contest.</p> <p>For this Contest Type, the contests of multiple parties and Nonpartisan contests appear on a single ballot. The voter can choose which party's contests to vote for.</p> <p>ClearDesign automatically creates choices corresponding to each partisan voter group (political party) and the Nonpartisan voter group that can endorse candidates.</p> <p>After you create this contest, the Pref Contest drop-down appears on the Basic Contest tab when the Contest Type is Candidate.</p> <p>See "Guidelines for primary preference contests in ClearDesign" on page 104 and "Setting up primary preference contests" on page 105.</p>	<p>At least two voter groups that can endorse contests must exist in the election.</p> <p>ClearDesign does not support primary preference contests with cross-endorsed candidates.</p>
Straight Voter Group	<p>The controlling contest where a voter chooses a party for straight party voting. Votes will be assigned to choices on contests controlled by this contest according to the rules of the straight party type selected.</p> <p>After you create this contest, the Straight Party Contest drop-down appears on the Basic tab of each Candidate contest.</p> <p>See "Setting up straight party contests" on page 108.</p>	<p>The Straight Party Type must be set appropriately in the main Election Information tab.</p>

Table 4-7. Guidelines for selecting the Contest Type (continued)

Contest type	Purpose	Prerequisites
Judge's Initials	<p>Used if a box for judge initials is a required (or optional) feature on the ballot.</p> <p>The contest creates a single default choice with a line for the initials; more choices can be created.</p> <p>If judge initials are required, the default behavior is to reject the ballot if no judge initials are found on the ballot. The values of Warn Undervote and Warn Blank Vote must be Reject.</p> <p>If judge initials are optional, do not use Reject as the values of Warn Undervote and Warn Blank Vote. Use any other available value for these fields (Inherit, Warn, No).</p>	N/A

If you select a **Contest Type** of Primary Preference or Straight Voter Group, ClearDesign displays an additional tab that lists their controlled contests.

For straight party elections and open primaries, Clear Ballot recommends that jurisdictions edit device messages to suit their specific requirements and circumstances.

3. Fill in the fields of the Contests dialog that are listed in Table 4-8 on page 89.

The fields listed in this table that appear in the Contest dialog depend on the **Contest Type** that you selected.

Table 4-8. Contest-specific fields of the Contest dialog

Field	Description
Vote For	<p>Select the number of candidates that voters can choose according to the voting rules for the contest.</p> <p>Applies to Contest Type: Candidate and Judge's Initials.</p>
Autogenerate Write-ins	<p>Select if applicable. This option creates a number of write-in candidates equal to the vote rule when you save the contest. If you select this option before adding other candidates, the write-ins have lower sequence numbers and will appear on the ballot. You can change the sequence number of each write-in candidate individually.</p> <p>Applies to Contest Type: Candidate and Retention</p>
District	<p>Select the applicable district.</p> <p>Applies to Contest Type: Candidate, Question, Retention, Recall, Straight Party Contest.</p>
Voter Groups	<p>Select the political party applicable to the contest.</p> <p>Applies to Contest Type: Candidate, Question, Retention, Recall.</p>
Pref Contest	<p>Select No Primary Preference or select the name of the Primary Preference contest if you want primary preference rules to apply to the current contest.</p> <p>The Pref Contest field appears only if you have previously created a Primary Preference contest.</p>

4. Select a **Contest Rotation** value listed in Table 4-9

The **Contest Rotation** field applies to a **Contest Type** of Candidate. Different types of rotations groups have different requirements.

Regardless of the rotation type, the following requirements must be met to edit the **Contest Rotation** field values:

- The election must be in the Election Created state.
- At least one Voter Group must exist have **Endorse Contests** selected (checked).
By default, the Nonpartisan Voter Group that is created with the election has **Endorse Contests** selected.
- ClearDesign requires that one Voter Group must be assigned to the contest before rotation can take place.

By default, the Nonpartisan Voter Group is assigned to the contest.

Several rotation types depend on voter counts. The following criteria apply to rotation types that depend on voter groups:

- The applicable voter groups must have **Track Registration** selected (checked).
- The Voter Count dialog must contain values for the listed precincts. (See "Displaying voter counts" on page 77.)

Rotation Groups: To set Rotation Groups, enter an integer value in the **Rotation Group** field of the Candidate dialog when you add candidates. (See "Adding or editing candidates" on page 99.)

The following integer values apply to rotation order:

- -1—does not rotate.
- 0 or higher—rotates in a group.

Example: All candidates assigned an integer value of 0 rotate within a group; all candidates assigned an integer value of 1 rotate within a group; and so on.

Table 4-9. Selections for the Contest Rotation field

Value	Description
No Rotation	If you select No Rotation, the card and card style are equivalent.
Precinct Rotation	Precincts are sorted by their Sort Seq value. The rotation of candidates occurs every time a new precinct is selected when producing ballots. The candidates move by one position.
District Rotation	The list of candidates rotates on each district in the district category that is selected in the District Category field. The candidates move by one position.

Table 4-9. Selections for the Contest Rotation field (continued)

Value	Description
Voter Count Precinct Rotation	Precincts are sorted by their voter registration counts in descending order to determine the choice order. The rotation of candidates occurs every time a new precinct is selected when producing ballots.
Grouped Precinct Rotation	<p>Precincts are combined into groups based on the number of rotations needed and the voter registration counts of each precinct. This rotation method ensures that the name of each candidate will appear at the top of the list of candidates on an equal number of ballots.</p> <p>The following criteria apply to Group Precinct Rotation:</p> <ul style="list-style-type: none"> • The number of rotations needed for a contest is based on the number of candidates. • ClearDesign determines the base average of voter registrations per possible precinct group. • Precincts are added to a group only in sort-sequence order. • Each precinct is added to a group until the voter registration count is approximately equal within each grouping. • When a contest is cross-endorsed by two or more parties, ClearDesign uses the sum of the voter registration counts of all applicable parties.
Balanced Precinct Rotation	<p>Balanced precinct rotation differs from Grouped Precinct Rotation in that precincts may be added to groups out of sort sequence order.</p> <p>The following criteria apply to Balanced Precinct Rotation:</p> <ul style="list-style-type: none"> • The number of rotations needed for a contest is based on the number of candidates. • ClearDesign determines the base average of voter registrations per possible precinct group. • Precincts are added to groups out of sort-sequence order. • Each precinct is added to a group until the voter registration count is approximately equal within each grouping. • When a contest is cross-endorsed by two or more parties, ClearDesign uses the sum of the voter registration counts of all applicable parties.

5. Select values for the remaining fields of the Contest dialog as listed in Table 4-10.

Table 4-10. Additional contest-specific fields

Field	Description
Rotation District Category	Select Jurisdiction Wide or a particular district. For District Rotation, the list of candidates rotates on each district in the district category. Applies only when Contest Rotation = District Rotation.
Straight Party Contest	Select No Straight Voter Group or select the name of the Straight Voter Group contest if you want Straight Voter Group rules to apply to the current contest. The Straight Party Contest field appears only if you have selected a Straight Party Type for the election and have added a controlling contest. Applies to Contest Type : Candidate
Recall contest	Select No Recall or select a recall contest from the list. Applies to Contest Type : Candidate
Warn Undervote	Select one of: Inherit, Warn, No, or Reject
Warn Overvote	For a Contest Type of Judge's Initials, select Warn Undervote = Reject and Warn Blank Vote = Reject if judge initials are required for the ballot to be valid.
Warn Blank Vote	

6. (Optional) In the **Ballot Text** editor, edit and format the text associated with the contest.

Examples

- For a **Contest Type** of Candidate, the Ballot Text is the name of the office, such as "President of the U.S."
- For a Contest Type of Question, the Ballot Text can be a referendum decision, such as: Proposition 101: Shall the budget of the Parks Board be increased by \$2,000,000 to construct a fire-prevention facility?"

Text entry and formatting in the Ballot text editor

Text entry and formatting options in the Ballot Text editor are similar those in word processing applications. For details, see "Formatting toolbar: Ballot Text editor" on page 243.

Inherited default formatting in the Ballot Text editor

Any formatting in the ballot text editor overrides any inherited formatting according to the following precedence:

1. The Ballot Text editor inherits formatting from the **Layout Style** field value specified for the first ballot set listed in the ballot sets view.
2. The Layout tab of the current entity overrides the formatting inherited from the **Layout Style** field of the first ballot set.
3. Any local formatting in the Ballot text editor of the current entity overrides the formatting specified in the Layout tab of the current entity.

Language tabs in the Ballot Text editor

The Ballot text editor has one tab for each language in the election. By default, languages other than English inherit their formatting from the English tab. You can use the language tabs to customize the text and formatting according to language.

If you add languages to an election, Clear Ballot recommends that you do so after all English ballot text is stable. See "Adding languages and changing language settings" on page 206.

Editing the Layout tab of a contest

Before you use the Layout tab, make sure that you understand how the formatting of ballot text is inherited. See "Inherited default formatting in the Ballot Text editor" above.

To edit contest layouts:

1. Select the **Layout** tab (Figure 4-23).

The screenshot shows the 'Contest: US Senate' dialog box with the 'Layout' tab selected. The dialog has 'Save', 'Reset', and 'Cancel' buttons in the top right. Below the title bar, there are two tabs: 'Basic' and 'Layout'. The 'Layout' tab is active and contains several input fields and dropdown menus for configuring the ballot layout. At the top, there are three input fields: 'Num Columns' (set to 1), 'Candidate Columns' (set to 1), and 'Rows Per Candidate' (set to 1). Below these is a 'Default Style' section with two tabs: 'English' and 'Spanish'. The 'English' tab is active and shows a grid of settings for font, spacing, border, margin, padding, and language position. Each setting has a dropdown menu, many of which are set to 'Inherit'. The settings include: Font Name (Inherit), Size (Inherit), Justify (Inherit), Background Color (Inherit), Letter Spacing (Inherit), Line Spacing (Inherit), Option (Inherit), Text Color (Inherit), Border (Top, Left, Bottom, Right, Color), Margin (Top, Left, Bottom, Right, Color), Padding (Top, Left, Bottom, Right), and Language Position (Inherit, Separator).

Figure 4-23. Contest dialog, Layout tab

2. Configure contest-specific layout options as follows:
 - a. (Optional) In **Num Columns**, select the number of columns to span on the ballot.
 - b. (Optional) In **Candidate Columns**, select the number of columns for candidates or choices to span within the contest.

- c. (Optional) In **Candidate Rows**, select the amount of space to insert between candidates or choices.
3. Edit the Default Style section of Contest dialog.

The Default Style section has tabs where you can customize some settings according to the languages in the election.
4. When you complete editing the contest, click **Save**.

4.8.3 Displaying the Info tab for a contest

To display the Info tab for a contest, click the corresponding **Name** cell in the Contest view.

Figure 4-24 shows an example of an Info tab for a contest.

The screenshot displays the 'Info' tab for a contest. At the top, there is a navigation bar with tabs: Info, Candidates, Splits, Ballot Styles, Ballots, Card Styles, Cards, Card Style Contests, Candidate Voter Groups, and Logs. Below the navigation bar are 'Edit' and 'Add Candidate' buttons. The main content is divided into sections: 'Basic', 'Candidates', and 'Layout'.

Basic Section:

Name	US Senate	Sort Seq	10
Short Name	US Senate	Abbreviation	Senate
Import ID		Export ID	
Last Edit By	admin@Default	Last Edit Time	2020-10-09 09:25:54
Contest Type	Candidate	Vote For	1
District	Jurisdiction Wide	Voter Groups	• Nonpartisan
Contest Rotation	No Rotation	Auto Generate Write-ins	True
Warn Overvote	Inherit	Warn Undervote	Inherit
Warn Blank Vote	Inherit		

Ballot Text Section:

English Spanish

For US Senate
Vote for not more than 1

Candidates Section:

Candidates • Write-in • Leslie Wells • Will Hunting

Layout Section:

Num Columns 1 Candidate Columns 1 Rows Per Candidate 1

Default Style

English	Spanish									
Font Name	Inherit	Size	Inherit	Justify	Inherit	Background Color	Inherit			
Letter Spacing	Inherit	Line Spacing	Inherit	Option	Inherit	Text Color	Inherit			
Border	Top	Inherit	Left	Inherit	Bottom	Inherit	Right	Inherit	Color	Inherit
Margin	Top	Inherit	Left	Inherit	Bottom	Inherit	Right	Inherit	Color	Inherit
Padding	Top	Inherit	Left	Inherit	Bottom	Inherit	Right	Inherit		
Language	Position	Inherit	Separator	Inherit						

Figure 4-24. Info tab of a contest

Basic section of the Info tab for a contest

Most fields in the Basic section of an Info tab for a contest are common to all entities. See "Common attributes of entities" on page 241.

For an explanation of the contest-specific fields in the Basic section of the Info tab, see Table 4-7 on page 86 and Table 4-8 on page 89.

The Ballot text field in the Basic section contains a string that identifies the public office that the contest will decide. The Ballot text field contains a tab for each language supported in the election.

Candidates section of the Info tab for a contest

This section lists the candidates that are running for office in the current contest.

Layout section of the Info tab for a contest

For more information, see "Editing the Layout tab of a contest" on page 93.

Additional tabs available from the Info tab for a contest

Table 4-11 lists the additional tab that are available from the Info tab for a contest.

Table 4-11. Additional tabs available from the Info tab for a contest

Tab	Description
Candidates	See "Displaying a Candidates view" on page 97.
Splits	See "Displaying a Splits view" on page 79.
Ballot Styles	See "Displaying the Ballot Styles view" on page 175
Ballots	"Displaying the Ballots view" on page 176
Card Styles	"Displaying the Card Styles view" on page 180
Cards	See "Displaying the Cards view" on page 182
Card Style Contests	This tab lists all the cards for the contest and the location of the contest on the card.
Candidate Voter Groups	This tab lists all candidates in an election and the voter group (political party) associated with each candidate.
Log	The tab lists all events in the change history of this contest.

Action buttons available from the Info tab for a contest

Table 4-12 lists the action buttons that are available from the Info tab for a contest.

Table 4-12. Action buttons available from the Info tab for a contest

Button	Description
Edit	See "Adding or editing contests" on page 85.
Add Candidate	See "Adding or editing candidates" on page 99.

4.8.4 Endorsing contests by voter group

When working with primary elections, it is often important to associate contests with one or more voter groups. Associating a contest with more than one voter group is called *multi-party contest endorsement*.

In open primaries, where all contests appear on the same ballot, a jurisdiction may want to endorse contests belonging to a particular voter group so that the contests are affected by a corresponding header.

For example, suppose that a jurisdiction wants the following arrangement on a ballot:

- Column 1— Democratic contests
- Column 2—Republican contests
- Column 3—Nonpartisan contests

In this situation, the jurisdiction imports the contests into ClearDesign in a mixed sequence. To obtain the desired column arrangement, the jurisdiction can endorse the contests by their respective voter groups.

When applying a contest header endorsed by a particular voter group across all these contests, only the contests belonging to a particular voter group move into the corresponding header's column. Thus, a jurisdiction can sort mixed voter-group endorsed contests into different columns by using this method.

In closed primaries, a jurisdiction may want each voter group to have a separate ballot. If the option **Separate Voter Group Ballots** is selected on the ballot set, the contests for a partisan voter group appears on the ballot corresponding to that voter group and not on other ballots.

Note: Nonpartisan endorsed contests appear on all ballots. Use nonpartisan endorsed contests for measures that are not partisan-specific.

If a larger political party allows members of a smaller political party to vote on a ballot measure, the voter groups for both parties must endorse the contest. The major party must appear first in the voter-group sequence order. ClearCount reports only by the first endorsement on a given contest. Therefore, it is important for the larger party to have a lower sort sequence. Otherwise, the contest results get reported under the smaller party's results.

To endorse contests by voter group:

1. Ensure the required contests are created.
2. From the navigation pane, choose **Voter Groups**.
The Voter Groups view appears.
3. Click the **Edit** button for the voter group.
The Voter Group dialog appears.

4. Ensure **Endorse Contests** is clicked **On**.
5. Select the **Contests** tab (Figure 4-25).

Figure 4-25. Voter Group dialog—Contests tab

6. Select all contests required for the voter group.
7. Click **Save**.

Alternatively, the nonpartisan voter group or one or more partisan voter groups can endorse a contest. To set the endorsements on a contest:

1. Go to the Contests view, locate the desired contest, and click the Edit button.
See "Displaying a Contests view" on page 83.
2. When the dialog for the desired Contest appears, select (check) the desired options in the **Voter Groups** field and click **Save**.

If a desired option does not appear in the **Voter Groups** field, edit the corresponding voter group to allow contest endorsements. You can then select that voter group as shown in Figure 4-25 or edit the contest.

If a contest is endorsed by multiple voter groups and contains non-partisan candidates, only the first party's endorsement will be applied to the candidates for the sake of reporting or determining straight party vote applicability. If multiple party endorsements for the sake of straight party voting or reporting are required, the non-partisan candidates must be endorsed specifically by all required parties.

4.9 Candidates

This topic describes how to manage candidates.

4.9.1 Displaying a Candidates view

ClearDesign provides three types of Candidates views:

- A view of all candidates in an election

To display this view:

1. From the Election menu, select **Contests**.
2. Click the Candidates tab next to the Contest tab in the content pane.

- A view of the candidates in a specific contest

To display this view:

1. From the Election menu, select **Contests**.
2. When the Contests view appear, click the **Name** cell for the desired contest.
3. When the Info tab for the select contest appears, click the Candidate tab that appears next to the Info tab in the content pane.

- A view of candidates affiliated with a specific voter group

To display this view:

1. From the Elections menu, select **Voter Groups**.
2. When the Voter Groups view appears, click the **Name** cell for the desired voter group.
3. When the Info tab for the selected voter group appears, click the Candidates tab that appears between the Contest and Voter Counts tabs.

Figure 4-26 shows an example of a view of all candidates in an election.

	Sort Seq	Name	Contest Type	District	Voter Group	Vote For	# Cand
Edit	5	Straight Voting	Straight Voter Group	Jurisdiction Wide	Non-Partisan	1	4
Edit	10	County Parks Board (Choose 2 out of 8 s/m)	Candidate	Jurisdiction Wide	Non-Partisan	2	8
Edit	20	Madison City County Judge (Single Precinct and Write-in)	Candidate	Madison City Circuit Judge	Non-Partisan	1	7
Edit	21	Northern Clear County Judge	Candidate	Northern Clear County Judge	Non-Partisan	1	5

Figure 4-26. Candidates view—all candidates in an election (default columns shown)

Selectable columns

Selectable columns include: Sort Seq, Name, Short Name, Abbreviation, Import ID, Export ID, Last Edit By, Last Edit Time, Log Count, Contest Type, District, VoterGroups, Vote For, Contest Rotation, #Cand, Candidates and Pref Contest.

Click **Show / hide columns** to select which columns appear in this view.

Action buttons available from a Candidates view

Table 4-13 lists the buttons available from a Candidates view.

If the **Contest Type** is Recall, ClearDesign automatically creates a **Yes** choice.

2. If necessary, edit the following common attributes:
 - **Name**
 - **Sort Seq**
 - **Short Name**
 - **Import ID**
 - **Abbreviation**
 - **Export ID**

See "Common attributes of entities" on page 241.

3. Edit the candidate-specific fields listed in Table 4-14.

Table 4-14. Candidate-specific fields

Field	Description
Contest	Select Straight Voting or a specific contest.
Candidate Type	Select one of the following: <ul style="list-style-type: none"> • Candidate is a votable choice related to the oval that appears beside it. • Write-in is where a voter can write a choice. • Label is used for informational purposes.
Voter Groups	Select a voter group. If Candidate Type is Write-in, the endorsement must be nonpartisan. ClearDesign does not allow partisan endorsement of write-in candidates. Specify the Ballot Order . If the candidate is cross-endorsed, click Add and enter the required values in Voter Groups and Ballot Order once for each additional cross-endorsement.
Rotation Group	Enter an integer value for rotation order. The following integer values apply to rotation order: <ul style="list-style-type: none"> • -1—does not rotate. • 0 or higher—rotates in a group. <p><i>Example:</i> All candidates assigned an integer value of 0 rotate within a group; all candidates assigned an integer value of 1 rotate within a group; and so on.</p> This field is tied to the Contest Rotation field on the Contest dialog. (See "Adding or editing contests" on page 85 for more information). If Contest Rotation = No Rotation, this field is not enabled and any integer values entered will not affect rotation.

4. (Optional) In the Ballot Text editor, enter and format text associated with the candidate.

Examples

The ballot text associated with a candidate is his or her name. For example, in the 2016 U.S. president, the ballot text for the Democratic candidate was "Hillary Clinton". The ballot text for the Republican candidate was "Donald Trump".

Text entry and formatting in the Ballot text editor

Text entry and formatting options in the Ballot Text editor are similar those in word processing applications. For details, see "Formatting toolbar: Ballot Text editor" on page 243.

Inherited default formatting in the Ballot Text editor

Any formatting in the Ballot Text editor overrides any inherited formatting according to the following precedence:

1. The Ballot Text editor inherits formatting from the **Layout Style** field value specified for the first ballot set listed in the Ballot Sets view.
2. The Layout tab of the current entity overrides the formatting inherited from the **Layout Style** field of the first ballot set.
3. Any local formatting in the Ballot Text editor of the current entity overrides the formatting specified in the Layout tab of the current entity.

Language tabs in the Ballot Text editor

The Ballot text editor has one tab for each language in the election. By default, languages other than English inherit their formatting from the English tab. You can use the language tabs to customize the text and formatting according to language.

If you add languages to an election, Clear Ballot recommends that you do so after all English ballot text is stable. See "Adding languages and changing language settings" on page 206.

See "Adding languages and changing language settings" on page 206.

5. Click **Save**.

4.9.3 Displaying the Info tab for a candidate

To display the Info tab for a candidate, click the corresponding Name cell in the Candidates view.

Figure 4-28 shows an example of an Info tab for a candidate.

The screenshot displays the 'Info' tab for a candidate. At the top, there is a navigation bar with tabs for 'Info', 'Candidate Voter Groups', 'Card Style Candidates', and 'Logs'. Below this is an 'Edit' button. The main content area is titled 'Basic' and contains the following fields:

Name	Juan Garcia	Sort Seq	10
Short Name	Juan Garcia	Abbreviation	Garcia
Import ID		Export ID	
Last Edit By	admin@JoeS	Last Edit Time	2018-01-25 08:38:38
Contest	Madison City County Judge (Single Precinct and Write-in)		
Voter Groups	Voter Group Cyan Party	Ballot Order	10
Ballot Text	<div style="display: flex; justify-content: space-around;"> Spanish Vietnamese English US </div> <p>Juan Garcia</p>		

Figure 4-28. Info tab for a candidate

Basic section of the Info tab for a candidate

Most fields in the Basic section of an Info tab of a candidate are common to all entities. See "Common attributes of entities" on page 241.

The Basic section also contains some candidate-specific fields. See Table 4-14 on page 100.

The Ballot Text field of the Basic section contains the name of the candidate as it appears on the ballots. This field contains a tab for each supported language in the election.

Edit button

See "Adding or editing candidates" on page 99.

Chapter 5. Setup of advanced election types

5.1 Objectives

This topic describes the tasks associated with advanced election types. Advanced election types include general elections that support straight party voting and the various types of primaries. You set up advanced election types after entering the basics for an election as described in "Scenarios for creating elections in ClearDesign" on page 37.

After reading this chapter, you should be able to:

- Describe the various type of elections: general election, primary election, and the various types of primary elections
- Describe the differences between setting up general elections and primaries
- Set up the following:
 - A general election that supports straight party contests
 - Open and closed primaries
 - Primary preference contests

5.2 General elections, primary elections, and classification of primaries

This topic defines the terms general and primary election. This topic also describes the classification of primaries according to voter eligibility. It is helpful to understand these terms and their applicability to your jurisdiction when performing advanced election-setup tasks.

general election

A general election allows voters to choose among candidates for a slate of public offices. General elections occur at local, state, and federal levels, and typically occur at regular intervals. (In some situations, special elections may occur at irregular times to elect a replacement for a seat vacated by death, resignation, or removal from office.)

primary election

A primary election narrows the field of candidates or determines the nominees of political parties for public offices that will run in a general election. A primary election occurs some time before a general election.

In general, primary elections are of two types:

- In a partisan primary, voters select a candidate to be a political party's nominee for a given office in the general election.

- Nonpartisan primaries narrow the field of candidates for nonpartisan offices before a general election.

The rules for participating in a primary can vary by jurisdiction, political party, and political office. The methods for determining the results of a primary can also vary according to jurisdiction.

Table 5-1 classifies primaries in terms of voting eligibility.

Table 5-1. Classification of primaries according to voter eligibility

Primary type	Description
Open	A voter is not required to affiliate with a political party or can declare a party affiliation on the day of the primary, even if the voter previously affiliated with a different party.
Closed	A voter must declare an affiliation with a political party and receives a ballot containing only candidates from the affiliated party and any nonpartisan contests. Voters who do not affiliate with a political party usually receive a ballot containing only nonpartisan contests.
Semi-closed	Previously unaffiliated voters can cast a ballot in the partisan primary of their choice. Voters who previously affiliated with a political party can vote only in that party's primary.
Top-two	All candidates appear on the same primary ballot. The top two candidates who receive the most votes for an office, regardless of party, advance to the general election. As the result of the top-two primary, two candidates from the same party can face off for the same office in a general election.

5.3 Guidelines for primary preference contests in ClearDesign

This topic provides some guidelines for primary preference contests based on the type of primary.

Open primaries

If your jurisdiction runs an open primary, Clear Ballot recommends setting up a primary preference contest to guard against cross-voting between political parties. (For implementation details and an example, see the next section "Setting up primary preference contests" on the next page.) *Cross-voting* occurs when a voter marks ovals for multiple parties in a primary race. Most jurisdictions disallow cross-voting and disqualify the entire ballot when it contains any cross-voted contests.

Closed or semi-closed primaries

If your jurisdiction runs closed or semi-closed primaries, follow these guidelines:

- When you set up the ballot set, select the **Separate Voter Group Ballots** check box.
ClearDesign generates a ballot for each voter group that includes contests endorsed by the voter group and any nonpartisan contests. The generated ballots include a ballot for the Nonpartisan voter group that unaffiliated voters receive.
- When you set up each voter group, select **Endorse Contests**.

Top-two primaries

The setup for a two-two primary is similar to a general election. All candidates of all parties appear as choices for a given contest. No special setup is necessary for top-two primaries.

5.4 Setting up primary preference contests

The primary preference functionality allows a jurisdiction to include the candidates of multiple parties for the same political offices on a single ballot for a primary election.

A primary preference contest entity links to partisan contests and controls them. First, you set up the primary preference contest and then link to it from the individual partisan contests. To set up the links, select the name of the primary preference contest in the **Pref Contest** fields of the individual partisan contests. ClearDesign then populates the controlling primary preference contest with the names of the controlled contests.

When casting a vote in a primary preference contest, a voter must specify a political party. Only choices for the selected party get counted. Choices for any other party are ignored. If the voter does not select a party for the primary preference contest, ClearCount or ClearCast detects a cross-voted ballot, rejects it as invalid, and indicates that it requires a review.

For example, suppose that a jurisdiction holds a primary election that includes races for the following political offices:

- President of the United States
- U.S. Senate

To set up this primary preference example, follow these guidelines:

1. Create an election from scratch or from a template.
See "Scenarios for creating elections in ClearDesign" on page 37.
For this example, suppose that the **Name** of the election is March 2019 Primary Preference.
2. Edit the fundamental election entities according to the requirements of your jurisdiction and the guidelines provided in the remainder of this procedure.
See "Fundamental election entities" on page 59.

3. To meet the requirements for a primary preference election, make sure that you have defined at least two voter groups and that you have selected the **Endorse Contests** check box in the Voter Group dialogs.

See "Adding or editing a voter group" on page 62.

For this example, the election contains the following voter groups:

- Nonpartisan—The required default voter group that ClearDesign automatically creates.
 - Republican
 - Democratic
4. Set up the controlling contest for the primary preference election.

The controlling contest links the partisan contests for the same office.

To set up the controlling contest for this example:

- a. From the Contests view, click **Add**.
See "Adding or editing contests" on page 85.
- b. When ClearDesign displays the Contest dialog, assign a meaningful **Name**, such as: Primary Preference Controlling Contest.
- c. Fill in the common attributes and other fields of the Contest dialog to meet your requirements.
- d. In the **Contest Type**, select the value Primary Preference.
The Party Controlled Contests tab appears but remains unpopulated until you add the contests controlled by the Primary Preference Controlling Contest.
- e. Click **Save**.

5. Set up a partisan contest associated with each voter group for each political office in the election.

(If you import data in a supported format when you create the election, you do not have to complete the manual setup described in the remainder of this step.)

To follow through with the example described earlier in this topic, suppose that a primary preference election includes races for President of the United States and the U.S. Senate. In this situation, set up two contests for President and two contests for U.S. Senate. The result will be the following contests:

- President of the President of the U.S.-Republican
- President of the President of the U.S.-Democratic
- U.S. Senate-Republican
- U.S. Senate-Democratic

For example, to set up the contest for president associated with the Democratic voter group:

- a. From the Contests View, click **Add**.
See "Adding or editing contests" on page 85.
- b. When ClearDesign displays the Contest dialog, assign a **Name** to identify the contest associated with a voter group such as: President of the U.S-Democratic.
- c. Fill in the common attributes and other fields to meet your requirements.
- d. In **Pref Contest**, select the name of the controlling contest.
In this example, select Primary Preference Controlling Contest.
- e. Select the voter group to associate with this contest.
In this case, select Democratic. This selection includes the contest on the Democratic partisan ballot and associates the contest with the headers for the Democratic party.
- f. Add the candidates to the contest.
See "Adding or editing candidates" on page 99.

To set up the remaining contests, use the previous steps as a guideline.

After you set up the controlling contest, partisan contests, and candidates associated with the contests, go to the Contest view and click the **Name** cell of the controlling contest Primary Preference Controlling Contest. When ClearDesign displays the Info tab for the Primary Preference Controlling Contest, the Primary Party Controlled Contests section shows the associated partisan contests as shown in Figure 5-1.



Figure 5-1. Example: Primary Party Controlled Contest section of an Info tab for a controlling contest

If you click the **Edit** button on the Info tab of a contest, ClearDesign displays the Contest dialog. On the Contest dialog, click the Primary Party Controlled Contests tab to edit the associated partisan contests. Figure 5-2 shows an example.

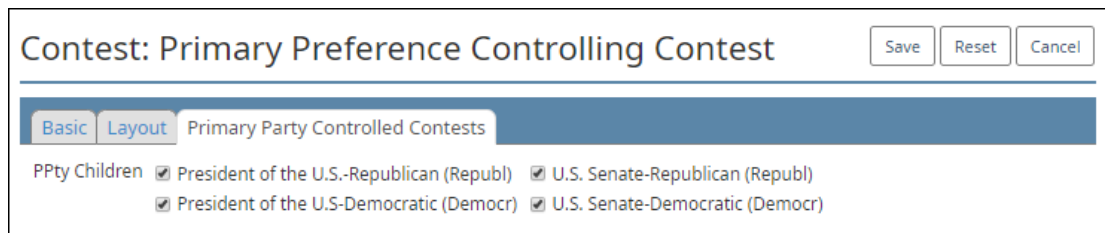


Figure 5-2. Example: Primary Party Controlled Contests tab of the Contests dialog.

5.5 Setting up straight party contests

This topic defines straight party voting, describes its characteristics, and provides guidelines for setting up straight party contests.

What is straight party voting?

Straight party voting is the practice of allowing a voter to select all candidates endorsed by a specific voter group (political party) in an election. Depending on the requirements of the jurisdiction, a voter may be able to override the choices endorsed by a voter group for individual contests. Straight party contests are used for general elections.

Characteristics of straight party contests: dynamic and conditional

A straight party contest is dynamic because it gets automatically populated with the choices based on voter group options associated with a particular ballot style.

A straight party contest is also considered conditional:

- If a given ballot style does not contain candidates endorsed by a particular voter group, that voter group does not appear on the ballot style. However, that voter group appears on other ballot styles associated with that voter group.
- If no valid partisan voter groups appear on a given ballot, the straight party contest also does not appear on that ballot style because there are no options to select.

Guidelines for setting up straight party contests

Follow these guidelines to set up straight party contests:

1. Create an election from scratch or from a template.
See "Scenarios for creating elections in ClearDesign" on page 37.
2. Open the Election dialog and set the values for the following fields:
 - For **Straight Party Type**, select one of the available selections applicable to your jurisdiction.
See Table 2-3 on page 47.
 - In **Cross-Endorse Type**, make sure to select the option that aligns with the requirements of your jurisdiction.
See Table 2-4 on page 48.
3. Edit the fundamental election entities according to the requirements of your jurisdiction and the guidelines provided in the remainder of this procedure.
See "Fundamental election entities" on page 59.

4. Set up a controlling contest.

To set up a controlling contest:

- a. From the Contests view, click **Add**.
See "Adding or editing contests" on page 85.
- b. When ClearDesign displays the Contests dialog, assign a meaningful name such as: SP Controlling Contest.
- c. Fill in the common attributes and other fields to meet your requirements.
- d. In **Contest Type**, select Straight Voter Group.
The Straight Party Controlled Contests tab appears but remains unpopulated until you add the contests associated with the SP Controlling Contest.
- e. Click **Save**.
- f. In **Voter Groups**, select Nonpartisan.
- g. Click **Save**.

5. Set up the contests for each political office in the election.

To add an individual contest:

- a. From the Contests view, click **Add**.
- b. When ClearDesign displays the Contest dialog, assign a meaningful name to identify the contest.
- c. Edit the common attributes to meet your requirements.
- d. In **Contest Type**, select Candidate.
- e. In **Voter Groups**, select Nonpartisan
- f. In **Straight Party Contest**, select the name of the controlling contest.
- g. Click **Save**.

6. For the contest representing each political office in the election, add a candidate endorsed by each voter group participating in that contest.

See "Adding or editing candidates" on page 99.

After you set up the controlling contest, the contests for each office, and the candidates for each contest, go to the Contests view and click the **Name** cell of the controlling contest. When ClearDesign displays the Info tab for the controlling contest, the Straight Party Controlled Contests section lists the individual contests as shown in Figure 5-3 on page 110.

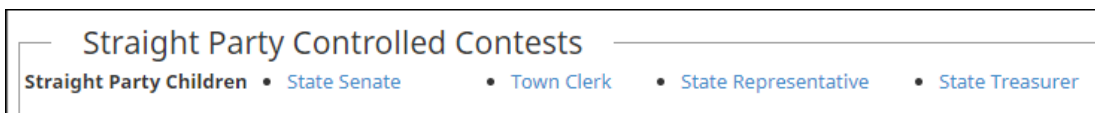


Figure 5-3. Straight Party Controlled Contests section of Info tab of a controlling contest

If you click the **Edit** button on the Info tab of a controlling contest, ClearDesign displays the Contests dialog. On the Contests dialog, click the Straight Party Controlled Contests tab to edit the associated individual contests. Figure 5-4 shows an example.

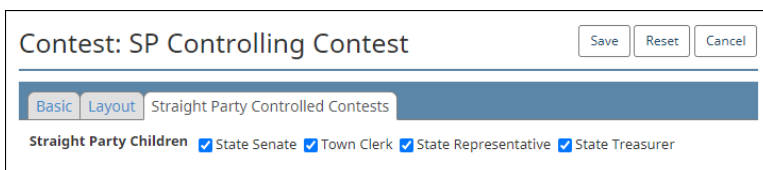


Figure 5-4. Example: Straight Party Controlled Contests tab of the Contests dialog

Conditions that invalidate cards for Straight Party contests

Certain changes affecting straight party contests invalidate some existing card layouts. When you try to save any of the following changes, ClearDesign issues a confirmation message and requires you to click **OK** to continue:

- Adding, changing, or removing a party on a controlling contest
- Changing any of the following on an individual straight party contest:
 - Adding a candidate
 - Changing the party affiliation (voter group) of a candidate
 - Changing the controlling contest (updating the **Straight Party Contest** field)

Chapter 6. Adding support for downstream products

6.1 Objectives

This chapter describes ClearDesign entities that support downstream products in the ClearVote family. *Downstream products* include ClearAccess, ClearCast, and ClearCount.

After reading this chapter, you should be able to:

- Define and manage vote center categories, vote centers, and device types
- Describe the following relationships:
 - Vote centers and device types
 - Device types and ClearCount, ClearCast, and ClearAccess
- Define and manage counter groups and explain their relationship to ClearCount

6.2 Definitions of entities that support downstream products

This topic defines vote center categories, vote centers, and device types.

Vote center category

A *vote center category* entity is a classification of the types of venues where voters cast ballots. Two typical vote center categories are:

- Early voting—A location where voters can cast ballots during a state-designated number of days before election day
- Election day—A location where voters can cast ballots during designated hours on election day

Vote center

A *vote center* entity represents a physical location, such as a school, firehouse, or municipal building, where voters cast ballots and the ballots are processed. The precincts allowed at a vote center entity in ClearDesign mirror the physical organization of voters and election workers for an election.

Vote centers can be associated with all splits or with specific splits in an election. ClearCast and ClearAccess must be associated with a specific vote center. ClearCast and ClearAccess are restricted to accepting or producing ballots only for the associated splits of the vote center.

Examples:

- A central-count vote center for handling absentee and mail-in ballots can receive and process ballots from voters who live in all precincts.
- A precinct-based, election-day vote center admits only voters from specified precinct splits.

Device types and devices

Vote center entities are associated with device types. There are two device types:

- Paper scanner

The ballot definition file (BDF), created by ClearDesign and uploaded to the paper-tabulation products ClearCount and ClearCast, supports the paper scanner device type.

Associating a vote center with a paper scanner enables ClearCast to select this vote center.

- Accessible marker

The accessible definition file (ADF) file, created by ClearDesign and uploaded to ClearAccess, supports the accessible marker device type.

Associating a vote center with the accessible marker allows ClearAccess to select this vote center during election setup on a given machine.

By default, ClearDesign creates one paper scanner and one accessible marker device type for each election. Both device types are unconfigured.

Counter groups

A *counter group* identifies a group of voters by code for reporting purposes. The names, IDs, and number of counter groups can vary by jurisdiction.

Examples:

- Election Day (ED)
- Provisional (PR)
- Absentee (AB)
- Early voting (EV)

Various ClearCount reports can display or filter vote totals by counter group. See the *ClearCount Reporting Guide*.

6.3 Displaying the Vote Center Categories view

To display the Vote Center Categories view, click the corresponding menu selection from the Election menu.

Figure 6-1 on page 113 shows an example of a Vote Center Categories view. This view shows two categories: Election Day and Early Voting. ClearDesign automatically creates the Election Day vote center category by default for each election.

Sort Seq	Name	Vote Centers Count	Device Types Count	Counter Groups Count
10	Election Day	5	1	3
20	Early Voting	5	1	3

Figure 6-1. Vote Center Categories view (default columns shown)

Selectable columns

Selectable columns include: Sort Seq, Name, Short Name, Abbreviation, Import ID, Export ID, Last Edit By, Last Edit Time, Vote Centers, Vote Centers Count, Device Types, Device Types Count, Counter Groups, Counter Groups Count, Print Zero Count, and Print Result Count.

Click **Show / hide columns** to select which columns appear in this view.

Action buttons available from the Vote Center Categories view

Table 6-1 lists the action buttons available from the Vote Center Categories view.

Table 6-1. Action buttons available from the Vote Center Categories view

Button	Description
Add	See "Adding or editing a vote center category" on the next page.
Delete	To delete a vote center category: <ol style="list-style-type: none"> 1. Select the check boxes in the rows corresponding to the vote centers that you want to delete. 2. Click Delete.

Additional tabs available from the Vote Center Categories view

Table 6-2 list the additional tabs available from the Vote Center Categories view.

Table 6-2. Additional tabs available from the Vote Center Categories view

Tab	Description
Vote Centers	Displays a view of all vote centers in an election. See "Displaying a Vote Centers view" on page 117.
Device Types	Displays a view of all device types in an election. See "Displaying the Device Types view" on page 120.
Counter Groups	Displays a view of all counter groups in an election. See "Displaying the Counter Groups view" on page 127.

6.3.1 Adding or editing a vote center category

To add or edit a vote center category:

1. From the Election menu, select **Vote Center Categories**.
2. When the Vote Center Categories view appears, do one of the following:
 - To edit an existing vote center category, follow one of these paths:
 - Path 1:*
 - a. From the Vote Center Categories view, click the desired **Name** cell.
 - b. When the Info tab for the select vote center category appears, click **Edit**.
 - Path 2:*

From the Vote Center Categories view, click the **Edit** button in the row corresponding to the desired vote center.
 - To create a new vote center category, click **Add** in the Vote Center Categories view.

The Vote Center Category dialog appears (Figure 6-2).

Figure 6-2. Vote Center Category dialog

3. If necessary, edit the following common attributes:
 - **Name**
 - **Sort Seq**
 - **Short Name**
 - **Import ID**
 - **Abbreviation**
 - **Export ID**

See "Common attributes of entities" on page 241.

- Edit the fields specific to vote center categories described in Table 6-3.

Table 6-3. Fields specific to vote center categories

Field	Description
Auto Create Vote Centers	Select this check box to create a vote center automatically for any precinct that does not already have a vote center associated with it. Each vote center category is treated independently. If a precinct is used by a vote center in a different vote center category, but not by the one being currently autogenerated, it still generates a vote center.
Devices	By default, ClearDesign provides one device for each vote center. You can edit the Device Type and Ballot Set values associated with this device, but you cannot delete it. To add devices, do the following: <ol style="list-style-type: none"> Click Add to append a row. In Device Type, select one of: Paper Scanner or Accessible Marker. In Ballot Set, select All or the name of a specific ballot set.
Counter Groups	Select the appropriate check boxes to associate counter groups with the current vote center category.
Print Zero Count	The number of reports printed as the ClearCast unit boots. The reports should zero out all candidates and contests to show that no vote has been cast.
Print Result Count	The number of reports printed when the polls close.

- Click **Save**.

Multiple ballot sets and vote center categories

If your election has multiple ballot sets, make sure to set the **Ballot Set** values in each Vote Center Category dialog correctly. You can create multiple instances of a **Device Type** to cover multiple ballot sets if you want to include more than one (but not all) ballot sets. Figure 6-3 on page 116 shows an example. In this example, the **Device Type** Accessible Marker is associated with Ballot Set 20 and Ballot Set 30.

Ballot sets not included in any vote center category are unavailable in ClearAccess for the **Device Type** Accessible Marker or ClearCast for the **Device Type** Paper Scanner.

Vote Center Category: Election Day Save Reset Cancel

Name 🔑 Sort Seq

Short Name Abbreviation

Import ID Export ID

Auto Create Vote Centers

Devices

Device Type	Ballot Set
<input type="button" value="Delete"/> Accessible Marker	<input type="text" value="Ballot Set 20"/>
<input type="button" value="Delete"/> Accessible Marker	<input type="text" value="Ballot Set 30"/>
<input type="button" value="Delete"/> Paper Scanner	<input type="text" value="All"/>

Counter Groups Election Day Early Voting Absentee

Print Zero Count Print Result Count

Figure 6-3. Example: multiple ballot sets associated with Device Type Accessible Marker

6.3.2 Displaying the Info tab for a vote center category

To display the Info tab for a vote center category, click the corresponding Name cell in the Vote Center Categories view.

Figure 6-4 shows an example of an Info tab for a vote center category.

Info **Vote Centers** Counter Groups Device Types Ballot Sets Logs

Edit Add Vote Center

Name Election Day **Sort Seq** 10

Short Name Election Day **Abbreviation** <ED>

Import ID **Export ID**

Last Edit By admin@Natasha **Last Edit Time** 2020-06-18 14:24:02

Auto Create Vote Centers

Devices **Device Type** Paper Scanner **Ballot Set** All

Counter Groups • Election Day • Early Voting • Absentee

Print Zero Count 1 **Print Result Count** 1

Figure 6-4. Info tab for a Vote Center Category

Fields on the Info tab for a vote center category

Most fields on the Info tab for a vote center category are common to all entities. See "Common attributes of entities" on page 241.

The **Auto Create Vote Centers, Devices, and Counter Groups** fields are specific to vote center categories. See Table 6-3 on page 115.

Action buttons available from the Info tab of a vote center category

Table 6-4 lists the action buttons available from the Info tab of a vote center category.

Table 6-4. Action buttons available from the Info tab for a vote center category

Button	Description
Edit	"Adding or editing a vote center category" on page 114.
Add Vote Center	See "Adding or editing vote centers" on the next page.

6.4 Displaying a Vote Centers view

ClearDesign provides two types of Vote Centers views:

- A view of all vote centers in an election

To display this view:

- Display the Vote Center Categories view.
- Click the Vote Centers tab.

- A view of all vote centers in a specific vote center category

To display this type of view:

- Display the Vote Center Categories view.
- From the Vote Center Categories view, click the **Name** cell of a vote center category.
- When ClearDesign displays the Info tab for the desired vote center category, click the Vote Centers tab.

When you create a new election from scratch, no vote centers are present. ClearDesign requires you to add one vote center before you can generate election media.

Figure 6-5 show example of a view of all vote centers in an election.

Vote Center Categories | Vote Centers | Device Types | Counter Groups									
Delete		Search: <input type="text"/>		Copy	PDF	Excel	CSV	Print	Show / hide columns
<input type="checkbox"/>	Sort Seq	Name	Vote Center Category	Precincts Count					
<input type="checkbox"/> Edit	10	Precinct 1	Early Voting	1					
<input type="checkbox"/> Edit	10	Precinct 1	Election Day	1					
<input type="checkbox"/> Edit	20	Precinct 2	Early Voting	1					

Figure 6-5. Vote Centers view (default columns shown)

Selectable columns

Selectable columns include: Sort Seq, Name, Short Name, Abbreviation, Import ID, Last Edit By, Last Edit Time, and Vote Center Category.

Action buttons available from the Vote Centers view

Table 6-5 lists the action buttons available from the Vote Centers view.

Table 6-5. Action buttons available from a Vote Centers view

Button	Description
Add	The Add button is available only from the view of all vote centers in a specific vote center category. See "Adding or editing vote centers" below.
Delete	To delete a vote center: <ol style="list-style-type: none"> 1. Select the check boxes in the rows corresponding to the vote centers that you want to delete. 2. Click Delete.

6.4.1 Adding or editing vote centers

When you create a new election from scratch, no vote centers are present. ClearDesign requires you to add one vote center before you can generate election media.

To add a vote center to a vote center category:

1. Do one of the following:
 - To edit an existing vote center:
 - a. From a Vote Centers view, click the Name cell of the desired vote center.
 - b. When ClearDesign displays the Info tab for the vote center, click **Edit**.

- To add a new vote center:
 - a. Display the Vote Center categories view.
 - b. From the Vote Center categories view, click the Name cell for the desired vote center.
 - c. When ClearDesign displays the Info tab for the selected vote center, click **Add Vote Center**.

ClearDesign displays the Vote Center dialog (Figure 6-6).

Figure 6-6. Vote Center dialog

2. If necessary, edit the following common attributes:
 - **Name**
 - **Sort Seq**
 - **Short Name**
 - **Import ID**
 - **Abbreviation**
 - **Export ID**

See "Common attributes of entities" on page 241.

3. Specify the **Number of Devices**.
See "The number of devices associated with each vote center" on the next page.
4. In the Precincts section, select All Precincts or select the check boxes for each individual precinct that you want to add to the current vote center.

6.4.2 The number of devices associated with each vote center

The Vote Center dialog of ClearDesign enables you to specify the number of devices configured for each vote center in an election.

Why ClearDesign stores the numbers of devices associated with each vote center

Jurisdictions import elections defined in ClearDesign into ClearCount. When jurisdictions import election results into ClearCount, they must reconcile the number of devices programmed for an election with the number of devices specified for each vote center.

This arrangement ensures that a jurisdiction has not lost a USB drive containing data from a given scanner or failed to load the data.

Tracking of accessible markers is optional. A jurisdiction that tracks additional markers can print a report showing the number of devices sent to each location.

Storing the number of paper scanners in the BDF

When you export an election to a BDF, ClearDesign stores the number of paper scanners for each vote center in the votecenters.csv file of the BDF. The field is called **NumPaperScanners**.

Paper scanners are equivalent to ClearCast units. Jurisdictions use the number of scanners value to confirm that they have accounted for all USB drives before certifying an election. If the number of ClearCast units or USB drives changes after the initial rollout of an election, update the number of paper scanners and export a new BDF. Then merge the BDF into ClearCount election to update the record of the expected number of paper scanners.

Specifying the number of accessible markers

Although you can specify the number of Accessible Markers in ClearDesign, the BDF does not currently store this value.

6.5 Device types

By default, ClearDesign creates one paper scanner and one accessible marker device type for each election. Both device types are unconfigured.

This section describes how to configure and manage the paper scanner and accessible marker device types.

6.5.1 Displaying the Device Types view

To display the Device types view:

1. From the Election menu, select **Vote Center Categories**.
2. From the Vote Center Categories view, select the Device Types tab.

Figure 6-7 shows the Device Types view with the default paper scanner and accessible marker device types.

Vote Center Categories | Vote Centers | Device Types | Counter Groups															
Search: <input type="text"/>										Copy	PDF	Excel	CSV	Print	Show / hide columns
	Sort Seq	Name	Device Class	Media Date	Media Version	Media Copy	Media Hash	Encryption Key ID	Election Key ID						
Edit	10	Paper Scanner	Paper Scanner	2020-12-01 08:28:47	14	6	19ae5d5daa7e4bb21b6fcae1bda74cedfb589e8122e66229121fb6b14cb08182	9345cc9a	605579c2						
Edit	20	Accessible Marker	Accessible Marker					55550a97	not set						

Figure 6-7. Device Types view (default columns shown)

Selectable columns

Selectable columns include: Sort Seq, Name, Short Name, Abbreviation, Import ID, Last Edit By, Last Edit Time, Device Class, Warn Overvote, Warn Undervote, Warn Blankvote, Warn Crossover, Warn Partyover, Warn Prefover, Warn Blankcard, Warn StraightParty, Print Override, Sound On, Print Ovals Only, Offset X, Offset Y, Media Date, Media Version, Media Copy, Media Hash, Encryption Key ID, and Election Key ID.

Media fields for a device type

ClearDesign stores the status of a device type in four system-generated fields listed in Table 6-6. These fields remain blank until you export the election to a BDF.

Table 6-6. Media fields for a device type

Field	Description
Media Date	Date and time of the export.
Media Version	Version identifier, starting with 1. This number only increments with the next download if the data in the election has changed. (This includes changes to items such as ballots styles, card layouts, contests, or candidates.)
Media Copy	Number that increments with each download of the media file, regardless of whether the data in the election has changed.
Media Hash	Changes when any of the following are modified: <ul style="list-style-type: none"> Election identity (name or date) Card IDs or positioning <p>Use the Media Hash to verify the integrity of the BDF and ADF files. Both the ADF and BDF store the Media Hash in the config.json file.</p>

6.5.2 Configuring a paper scanner device type

The paper scanner device type refers to ClearCount and ClearCast. To configure a paper scanner device type:

1. From the **Device Type** view, click **Edit** in the row corresponding to a paper scanner.

The Device Type dialog appears (Figure 6-8).

Device Type: Paper Scanner		Save	Reset	Cancel
Name	Paper Scanner	Sort Seq	10	
Short Name	Paper Scanner	Abbreviation	Scanne	
Import ID		Export ID		
Device Class	Paper Scanner	Show Passwords	<input type="checkbox"/>	
Election Password	.....	Confirm Election Password	.....
Pollworker Password	.....	Confirm Pollworker Password	.....
Encryption Key ID	9345cc9a	Reset Encryption Key	<input type="checkbox"/>	
Election Key ID	605579c2	Reset Election Key	<input type="checkbox"/>	
Warn Overvote	<input type="checkbox"/>	Warn Straight Voter Group Overvote	<input type="checkbox"/>	
Warn Undervote	<input type="checkbox"/>	Warn Primary Preference Overvote	<input type="checkbox"/>	
Warn Blank Vote	<input type="checkbox"/>	Print Override	<input type="checkbox"/>	
Warn Blank Card	<input type="checkbox"/>	Cancel Timeout	30	
Inactivity Timeout	120			

Figure 6-8. Device Type dialog, paper scanner selected

2. If necessary, edit the following common attributes:
 - Name
 - Short Name
 - Abbreviation
 - Sort Seq
 - Import ID
 - Export ID

See "Common attributes of entities" on page 241.

3. Edit the fields listed in Table 6-7.

Table 6-7. Fields for the Paper Scanner Device Type

Field	Optional, Req., Read only	Description
Device Class	Read only	Paper Scanner
Show Passwords	Optional	When selected, passwords appear in the Device Type dialog as you type them.
Election Password, Confirm Election Password	Required	The election password for ClearCount and ClearCast.
Pollworker Password, Confirm Pollworker Password	Required	The poll worker password for ClearCast.
Encryption Key ID	Read only	The value of the last 4 digits of the sha256 hash of the encryption key in hex format. This allows you to identify the encryption key in use.
Reset Encryption Key	Optional	Select this check box to change the encryption key used for encrypting the BDFx file.
Election Key ID	Read only	The value of the last 4 digits of the sha256 hash of the election key in hex format. This allows you to identify the election key in use.
Reset Election Key	Optional	Select this check box to change the election key used for authentication of the BDFx file.
<p>The following Warn messages apply to ClearCast. When you select the check box associated with a given type of warning, ClearCast issues a warning when the applicable event occurs.</p> <p>You can also set warnings on individual contests. See "Adding or editing contests" on page 85.</p>		
Warn Overvote	Optional	Issue a warning upon detecting an over vote
Warn Undervote	Optional	Issue a warning upon detecting an under vote

Table 6-7. Fields for the Paper Scanner Device Type (continued)

Field	Optional, Req., Read only	Description
Warn Blank Card	Optional	Issue a warning upon detecting a blank card. You can enable the blank card warning only on the Device Type dialog. You cannot set this value for an individual contest.
Warn Straight Voter Group Overvote	Optional	Issue a warning upon detecting an over vote for a straight party contest
Warn Primary Preference Overvote	Optional	Issue a warning upon detecting an over vote for a primary preference contest
Print Override	Optional	This field is not currently operational. It is reserved for future use.
Inactivity Timeout	Optional	This field is not currently operational; it is reserved for future use.
Cancel Timeout	Optional	This field is not currently operational; it is reserved for future use.

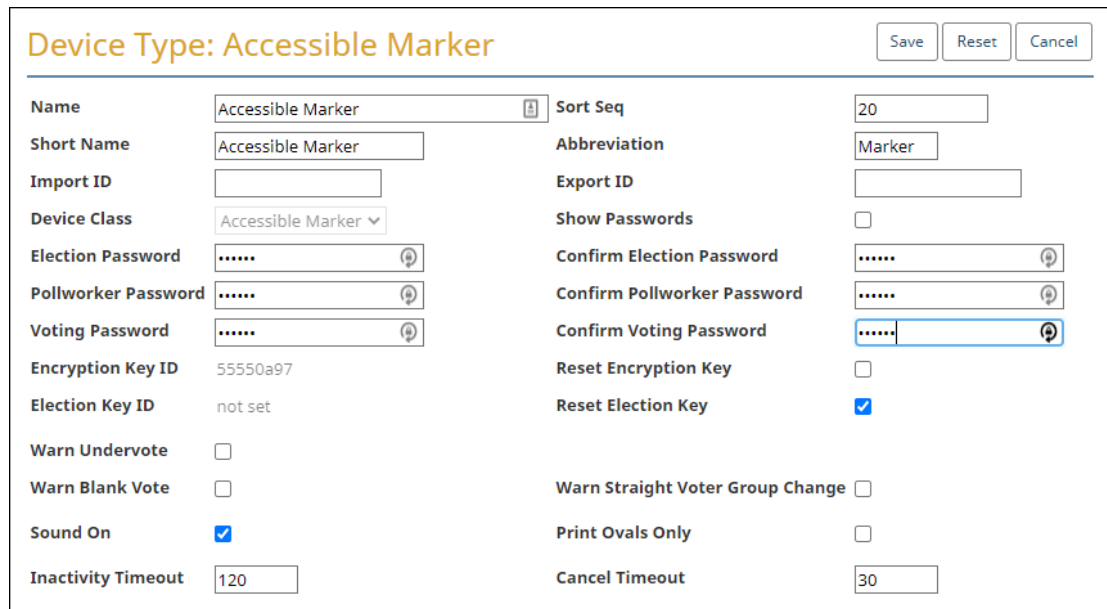
4. Click **Save**.

6.5.3 Configuring the accessible marker device type

An accessible marker type refers to ClearAccess. To configure the accessible marker device type for a vote center:

1. From the **Device Type** view, click **Edit** in the row corresponding to an accessible marker.

The Device Type dialog appears (Figure 6-9).



Device Type: Accessible Marker		Save	Reset	Cancel
Name	Accessible Marker	Sort Seq	20	
Short Name	Accessible Marker	Abbreviation	Marker	
Import ID		Export ID		
Device Class	Accessible Marker	Show Passwords	<input type="checkbox"/>	
Election Password	.....	Confirm Election Password	.....
Pollworker Password	.....	Confirm Pollworker Password	.....
Voting Password	.....	Confirm Voting Password	.....
Encryption Key ID	55550a97	Reset Encryption Key	<input type="checkbox"/>	
Election Key ID	not set	Reset Election Key	<input checked="" type="checkbox"/>	
Warn Undervote	<input type="checkbox"/>	Warn Straight Voter Group Change	<input type="checkbox"/>	
Warn Blank Vote	<input type="checkbox"/>	Print Ovals Only	<input type="checkbox"/>	
Sound On	<input checked="" type="checkbox"/>	Cancel Timeout	30	
Inactivity Timeout	120			

Figure 6-9. Device Type: Accessible Marker dialog

2. If necessary, edit the following common attributes:
 - Name
 - Short Name
 - Abbreviation
 - Sort Seq
 - Import ID
 - Export ID

See "Common attributes of entities" on page 241.

3. Edit the fields listed in Table 6-8.

Table 6-8. Fields for the Accessible Marker Device Type

Field	Optional, Req., Read only	Description
Device Class	Read only	Accessible Marker
Show Passwords	Optional	When selected, passwords appear in the Device Type dialog as you type them.
Election Password, Confirm Election Password	Required	The election code used in ClearAccess to load the election ADFx.
Pollworker Password, Confirm Pollworker Password	Required	The poll worker code for ClearAccess.
Voting Password, Confirm Voting Password	Required	The voter code for the ClearAccess election.
Encryption Key ID	Read only	The value of the last 4 digits of the sha256 hash of the encryption key in hex format. This allows you to identify the encryption key in use.
Reset Encryption Key	Optional	Select this check box to change the encryption key used for encrypting the ADFx file.
Election Key ID	Read only	The value of the last 4 digits of the sha256 hash of the election key in hex format. This allows you to identify the election key in use.
Reset Election Key	Optional	Select this check box to change the election key used for authentication of the ADFx file.
Warn Under Vote	Optional	Issue a warning upon detecting an undervoted contest
Warn Blank Vote	Optional	Issue a warning upon detecting an unvoted contest If Warn Blankvote and Warn Undervote are both checked, Warn Blankvote is used for <i>vote for 1</i> contests.
Warn Straight Voter Group Change	Optional	Issue a warning upon detecting an over vote for a straight party contest

Table 6-8. Fields for the Accessible Marker Device Type (continued)

Field	Optional, Req., Read only	Description
Sound On	Optional	Enables audible sound
Print Ovals Only	Optional	This field is not currently operational; it is reserved for future use.
Inactivity Timeout	Optional	After this amount of inactivity on the ClearAccess unit, a pop-up window appears. This window asks if the voter wants to continue.
Cancel Timeout	Optional	ClearAccess logs the voter out after this amount of inactivity following an Inactivity Timeout message.

4. Click **Save**.

6.6 Displaying the Counter Groups view

To display the Counter Groups view:

1. From the Election menu, select **Vote Center Categories**.
2. From the Vote Center Categories view, select the Device Types tab.

Figure 6-10 shows an example of a Counter Groups view.

Sort Seq	Name	Sets Precincts Reporting
10	Election Day	True
20	Early Voting	False
30	Absentee	False

Figure 6-10. Counter Groups view

Selectable columns

Selectable columns include: Name, Short Name, Abbreviation, Import ID, Export ID, Last Edit By, Last Edit Time, Log Count, and Sets Precincts Reporting.

Action buttons available from the Counter Groups view

Table 6-9 lists the action buttons available from the Counter Groups view.

Table 6-9. Action buttons available from the Counter Groups view

Button	Description
Add	See "Adding or editing a counter group" below.
Delete	To delete a counter group: <ol style="list-style-type: none"> 1. Select the check boxes in the rows corresponding to the counter groups that you want to delete. 2. Click Delete.

6.6.1 Adding or editing a counter group

To add or edit a counter group:

1. Do one of the following:
 - To add a new counter group:
 - a. From the Election menu, select **Vote Center Categories**.
 - b. From the Vote Center Categories view, select the Counter Groups tab.
 - c. When ClearDesign displays the Counter Group view, click **Add**.
 - To edit an existing counter group:
 - a. From the Election menu, select **Vote Center Categories**.
 - b. From the Vote Center Categories View, click **Edit** in the row corresponding to the desired counter group.

ClearDesign displays the Counter Group dialog (Figure 6-11).

Counter Group: Election Day

Name	<input type="text" value="Election Day"/>	Sort Seq	<input type="text" value="10"/>
Short Name	<input type="text" value="Election Day"/>	Abbreviation	<input type="text" value="ED"/>
Import ID	<input type="text"/>	Export ID	<input type="text"/>
Sets Precincts Reporting	<input checked="" type="checkbox"/>		
Vote Center Categories	<input checked="" type="checkbox"/> Election Day		

Figure 6-11. Counter Group dialog

2. If necessary, edit the following common attributes:

- **Name**
- **Sort Seq**
- **Short Name**
- **Import ID**
- **Abbreviation**
- **Export ID**

See "Common attributes of entities" on page 241.

ClearCount uses the value of the **Abbreviation** field of a counter group in data presented by web reports and on target cards (which conventionally use two-character alphabetic codes). Inform Clear Ballot of all counter group abbreviations before your target cards are prepared.

3. (Optional) Select **Sets Precincts Reporting**.

The **Sets Precincts Reporting** check box affects the ClearCount PDF report headers and the "X precincts reported out of Y total" message on the ClearCount Dashboard. The value X indicates the number of precincts that have scanned ballots, and the value Y indicates the total number of precincts.

In ClearCount, it is possible to manually override a precinct as reported. This is useful when no ballots are scanned in a reporting counter group for a given precinct. For more information, see the *ClearCount Reporting Guide*.

Note: In the count of reporting precincts, consolidated precincts are counted as a regular precincts.

Default values: The default **Sets Precincts Reporting** values for the three counter groups automatically created by ClearDesign are:

- Election Day (ED)—True
- Early Voting (EV)—False
- Absentee (AB)—False

Example 1: Suppose that **Sets Precincts Reporting** is true for a counter group that has scanned three regular precincts and one consolidated precinct. In this situation, the message on the ClearCount Dashboard appears as "4 precincts reported out of 4 total".

Example 2: Suppose that Election 2 has Absentee and Election Day ballots. However, the jurisdiction considers only the Election Day ballots in the count of precincts that have scanned ballots.

For this election, the jurisdiction keeps the default value of true for the **Sets Precincts Reporting** check box of the Election Day counter group. No matter how many absentee ballots are scanned, ClearCount considers only Election Day ballots when displaying the number of precincts that have scanned ballots. If no Election Day ballots end up being cast in a particular precinct, the ClearCount administrator can manually mark the precinct as reported.

Example 3: A jurisdiction wants to include Election Day, Absentee, and Early Voting ballots when counting the number of precincts that have scanned ballots for Election 2.

For this election, all three corresponding counter groups must have a **Sets Precincts Reporting** value of true. Any precinct that scans a ballot in any of the three counter groups is counted in the "X precincts reported out of Y total" message.

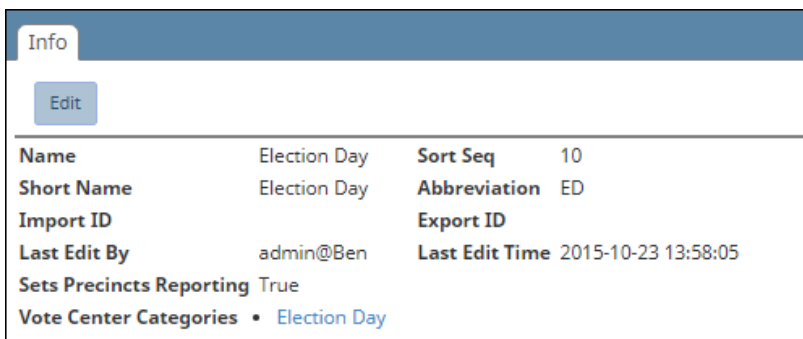
If a precinct scans even a single ballot, it is counted in the "X precincts reported out of Y total" message.

4. Select at least one of the **Vote Center Categories**.
5. Click **Save**.

6.6.2 Displaying the Info tab for a counter group

To display the Info tab for a counter group, click the corresponding **Name** cell in the Counter Groups view.

Figure 6-12 shows an example of an Info tab for a counter group.



Info			
Edit			
Name	Election Day	Sort Seq	10
Short Name	Election Day	Abbreviation	ED
Import ID		Export ID	
Last Edit By	admin@Ben	Last Edit Time	2015-10-23 13:58:05
Sets Precincts Reporting	True		
Vote Center Categories	• Election Day		

Figure 6-12. Info tab for a counter group

To change any of the setting for this counter group, click the Edit button and follow the steps in "Adding or editing a counter group" on page 128

Chapter 7. Setting up and laying out ballots

7.1 Objectives

This topic describes the tasks for setting up and laying out ballots.

After reading this chapter, you should be able to set up and lay out ballots and manage the entities associated with these tasks. For definitions of the entities associated with ballot setup and layout, see the next section.

7.2 Definitions of entities associated with ballot setup and layout

This topic defines entities associated with ballot setup and layout.

If you are a new user of ClearDesign, become familiar with these terms before reading the remainder of this chapter. This topic presents the terms in the order that they appear in the remainder of this chapter.

Header

Headers are the main tool for formatting ballots. Settings of headers determine the position of contests on ballots. Headers also manage non-contest text, such as titles, instructions, and separators.

Ballot

A ballot is an entity that contains all contests in an election. A contest can represent a decision on a candidate for a particular office or a decision such as a referendum question or the recall of a previously elected official.

The physical representation of a ballot can vary. For example, a ballot can appear on a printed card or on the screen of an accessible voting device.

Ballot set

A ballot set is a group of ballots that share the same dimensions and stylization. The first ballot set in an election, called Standard, must contain all contests. However, additional ballot sets can contain only a subsection of contests.

Jurisdictions often use additional ballot sets to create ballots that have formatting and dimensions that differ from the Standard ballot set.

Jurisdictions can also create ballot sets for categories of voters that can vote only on subsets of contests in an election. For example, some jurisdictions allow nonresident property owners to vote on certain referendum questions.

All ballot groups, ballot styles, and ballots roll up into a ballot set.

ClearDesign creates the default ballot set called Standard. The abbreviation for the Standard ballot set is STD. This abbreviation appears in the names of PDF and BDF files.

Note: ClearDesign generates the following entities. You cannot manually create these entities but you can edit their common attributes if the role associated with your username has the appropriate permissions:

- Ballot groups
- Ballot styles
- Ballot group styles
- Card styles
- Cards

Ballot group

A ballot group is a set of ballots designated for a split.

Ballot style

A ballot style is a unique collection of card styles that a voter sees. For example, a primary election can have distinct ballot styles for Democratic and Republican voters.

Ballot group style

A ballot group style groups all the splits that have the same contests and therefore share the same set of ballot styles. For general elections and open primaries, there is a one-to-one relationship of ballot group styles to ballot styles. However, in a closed primary, there are multiple ballot styles per ballot group style: there is one ballot style for each voter group.

Card style

A card style is the individual, nonrotated version of a card.

Cards

A card is the rotated version of a card style.

Card template

A card template determines the dimensions of the card, the number of columns on the front and back, the oval position, and the orientation.

ClearDesign provides some card templates. You can also add, edit, and delete any user-defined card templates.

Layout styles

Layout styles are design themes that control the appearance of the rendered ballot.

ClearDesign provides two layout styles:

- Color and Border
- Border

7.3 Setting up headers

This topic describes headers.

7.3.1 Displaying the Headers view

To display the Headers view, click the Headers tab from the Election menu or from the Info view of an election.

Figure 7-1 shows an example of a Headers view.

	Sort Seq	Name	Header Type	Voter Group	Ballot Set
Edit	1	VOTE BOTH SIDES	Card Header	Non-Partisan	
Edit	2	VOTE BOTH SIDES	Card Footer	Non-Partisan	
Edit	10	Clear County, Jefferson State General Election	Card Header	Non-Partisan	
Edit	30	Voting Instructions	Card Header	Non-Partisan	

Figure 7-1. Headers view (default columns shown)

Selectable columns

Selectable columns include: Sort Seq, Name, Short Name, Abbreviation, Import ID, Last Edit By, Last Edit Time, Header Type, Voter Group, From Contest, To Contest, Location, Start Column, Num Columns, and Placement.

Select **Show / hide columns** to select which columns appear in this view.

Action buttons available from the Headers view

Table 7-1 lists the action buttons available from the Headers view.

Table 7-1. Action buttons available from the Headers view

Button	Description
Add	See "Adding or editing a header" on page 137.
Delete	To delete a header: <ol style="list-style-type: none"> 1. Select the check boxes in the rows corresponding to headers that you want to delete. 2. Click Delete.

7.3.2 Header Type values

ClearDesign provides several types of headers as described in Table 7-2. You specify a **Header Type** value in the Basic view of the Header dialog when you set up a header as described in "Adding or editing a header" on page 137.

Note the following in Table 7-2:

- "Choose Ballot Set?" column
 - Yes—The specified **Header Type** requires you to indicate a **Ballot Set** to which the **Header Type** applies.
 - No—The **Ballot Set** field does not apply to the specified **Header Type** and does not appear on the Basic view of the Header dialog.
- "Applies to selected range of contests?" column
 - Yes—Supply values in the **From Contest** and **To Contest** fields for the specified **Header Type**.
 - No—A range does not apply to this **Header Type**. The **From Contest** and **To Contest** fields do not appear on the Basic view for the specified **Header Type**.

- Header Types that begin with "Sample"

"Sample" headers apply to the sample ballot. The sample header entity types do not support layout options. You can change the text of "Sample" headers, but you cannot change the format.

Table 7-2. Header Type values

Header Type	Purpose	Choose Ballot Set?	Applies to a selected range of contests?
Contest Header	Inserts a header box above the selected contests. A contest header often labels categories of contests, such as "Federal Offices", "Municipal Offices", or "Measures."	Yes	Yes
Contest Footer	Inserts a footer box below the selected contests. A contest footer often does the following: <ul style="list-style-type: none"> • Indicates the end of the ballot • Notifies the voter to continue voting on the next side of the ballot 	Yes	Yes
Card Header	Appears at the top of the card. The card header contains a label for the card. The card header can contain: <ul style="list-style-type: none"> • Logos for the jurisdiction • Election-title information • Any custom identifiers for the ballot 	Yes	No
Card Footer	Appears at the bottom of the card. A card footer can contain: <ul style="list-style-type: none"> • Contact information for the voting office • Disclaimers • Notices to continue voting the next side of the ballot 	Yes	No

Table 7-2. Header Type values (continued)

Header Type	Purpose	Choose Ballot Set?	Applies to a selected range of contests?
Card Stub Top	<p>Adds an additional field above the ballot's scannable area that requires longer paper sizes. The area containing the stub has a perforation to tear off before processing.</p> <p>A stub at the top of a card can contain:</p> <ul style="list-style-type: none"> • ID barcodes • Other tracking information for the jurisdiction. <p>Ballots that include top or bottom ballot stubs do not have any default margins. To include a margin, use the settings on the Layout tab of the Header dialog.</p>	Yes	No
Card Stub Bottom	Similar to Card Stub Top but appears at the bottom of the ballot.	Yes	No
Sample Cover	If you add a Header Type of Sample Cover to an election, a cover page appears when you print a sample ballot in PDF and HTML formats.	No	No
Sample Filler	Modifies the empty-space message which appears on the sample ballot.	No	No
Sample End	Adds a footer to the end of the sample ballot.	No	No
Sample Eligible	Displays text above each contest. Normally, indicates that a contest is eligible for voting. The Sample Eligible header type cannot be turned off.	No	No
Sample Header Continued	If a header is too long for one side of the sample ballot, this header modifies the custom message indicating that the content continues on the next side.	No	No
Sample Contest Continued	At the end of each column, a message appears notifying the voter that the contests continue in the next column.	No	No
Sample Next Column	At the end of each column, a message appears notifying the voter that the contests continue in the next column.	No	No

Table 7-2. Header Type values (continued)

Header Type	Purpose	Choose Ballot Set?	Applies to a selected range of contests?
Sample Next Page	At the end of each side, a message appears notifying the voter that the ballot continues on the next side.	No	No

7.3.3 Adding or editing a header

To add or edit a header:

1. From the Election menu, select **Headers**.
2. When the Headers view appears, select one of the following options:

- To edit an existing header, follow one of these paths:

Path 1:

1. From the Headers view, click the desired **Name** cell.
2. When the Info tab for the selected header appears, click **Edit**.

Path 2:

From the Headers view, click the **Edit** button in the row corresponding to the desired header.

- To create a new header, click **Add** from the Headers view.

ClearDesign displays the Basic tab of the Header dialog (Figure 7-2).

The screenshot shows the 'Header: Header 10' dialog box with the 'Basic' tab selected. The fields are as follows:

- Name: Header 10
- Short Name: Header 10
- Import ID: (empty)
- Header Type: Contest Header
- From Contest: None
- To Contest: None
- Sort Seq: 10
- Abbreviation: Head10
- Export ID: (empty)
- Voter Group: All
- Ballot Set: All

The Ballot Text area is set to 'English' and contains the text 'Header 10' followed by a paragraph symbol 'p'.

Figure 7-2. Header dialog, Basic tab

Editing the Basic tab of the Header dialog

To edit the Basic tab of the Header dialog:

1. If necessary, edit the following common attributes:
 - **Name**
 - **Sort Seq**
 - **Short Name**
 - **Import ID**
 - **Abbreviation**
 - **Export ID**

See "Common attributes of entities" on page 241.

2. In **Header Type**, select one of values listed in Table 7-2.
The default value for the **Header Type** field is Contest Header.
3. In **Voter Group**, select one of the options listed in Table 7-3.

Table 7-3. Header dialog—Voter Group selections

Selection for the Voter Group field	Description
All	Applies the header to all contests in the election.
Nonpartisan	Applies the header to nonpartisan contests in the election, such as referendum questions.
The name of a voter group	Applies the header to contests associates with the named voter group (political party).

In a closed primary, where each party (voter group) gets its own ballot, choosing Nonpartisan or a specific voter group makes the header appear only on that specific ballot.

To generate separate ballots for each voter group, select the **Separate Voter Group Ballots** check box on Ballot Set dialog. See "Adding or editing a ballot set" on page 170.

Example: Suppose the following setup:

- A closed primary election has Republican, Democratic, and Nonpartisan voter groups.
- The field **Separate Voter Group Ballots** is selected on the Ballot Set dialog.

This election produces three ballots: Republican, Democratic, and Nonpartisan (for nonparty-affiliated contests such as referendum questions).

4. If the selected **Header Type** requires you to choose a **Ballot Set**, select one from the drop-down list.

You must select **Ballot Set** value for all Header Types except the Sample* Header Types where you cannot select a Ballot Set.

You can also select a Ballot Set if desired for formatting purposes.

The default for **Ballot Set** is All, which applies the Header Type to all ballot sets.

5. If the **Header Type** is Contest Header or Contest Footer, select the following:
 - a. In **From Contest**, select the first contest related to the header.
 - b. In **To Contest**, select the last contest related to the header.

If you do not set values for **From Contest** and **To Contest** for a Contest Header or Contest Footer, the header or footer does not display.

Examples:

- A Contest Header can label a category of contests such as "Federal Offices."
- A Card Header can contain the logo of the jurisdiction and the name of the election such as "Clear County November 2019 General Election."

Editing header text in the Ballot Text editor

The Ballot Text editor appears at the bottom of the Basic tab of the header dialog. Use the Ballot Text to enter, edit, and format the text of the header.

Example: Figure 7-2 on page 137 shows the Header dialog of a Contest Header where the Ballot Text editor contains "Header 10."

Text entry and formatting options in the Ballot Text editor are similar those in many word processing applications. For details, see "Formatting toolbar: Ballot Text editor" on page 243

You can use macros to insert variables in the Ballot Text Editor. See "Using Macros" on page 145.

If you insert a table in the Ballot Text editor of a header, do not use any of the table-alignment properties. ClearDesign sets the table to match the width of containing header. Setting the table-alignment properties of a table in a header can result in undesirable formatting in the printed ballot.

Inherited default formatting in the Ballot Text editor

Any formatting in the Ballot Text editor overrides any inherited formatting according to the following precedence:

1. The Ballot Text editor inherits formatting from the **Layout Style** field value specified for the first ballot set listed in the Ballot Sets view.
2. The Layout tab of the current entity overrides the formatting inherited from the **Layout Style** field of the first ballot set.
3. Any local formatting in the Ballot Text editor of the current entity overrides the formatting specified in the Layout tab of the current entity.

Language tabs in the Ballot Text editor

The Ballot text editor has one tab for each language in the election. By default, languages other than English inherit their formatting from the English tab. You can use the language tabs to customize the text and formatting according to language.

If you add languages to an election, Clear Ballot recommends that you do so after all English ballot text is stable. See "Adding languages and changing language settings" on page 206.

Editing the Layout tab of the Header dialog

Click the Layout tab of the Header dialog to begin editing it.

Figure 7-3 shows an example of a Layout tab of the Header dialog for a Header Type of Card Header.

Figure 7-3. Layout tab of the Header dialog for a Header Type of Card Header

The top portion of the Layout tab of the Header dialog contains several fields depending on the Header Type. The remainder of this section describes these fields and which fields apply to which Header Types.

Placement field—Layout tab of the Header dialog

The **Placement** field appears in the top portion of the Layout tab of Header dialog of the following Header Types:

- Card Header
- Card Footer
- Contest Header
- Contest Footer
- Card Stub Top
- Card Stub Bottom

The **Placement** field does not appear on the Layout tab when the value of the **Header Type** field begins with Sample.

The selections available for the **Placement** field depend on the value of the **Header Type** field as indicated in Table 7-4.

Table 7-4. Placement field options—Layout tab of the Header dialog

Placement option	Applies to Header Type values
Each Card Each Side Front Only Back Only	All Header Type values other than values that begin with Sample
Front of First Card Only	Card Header, Card Footer
Front of All Except First Card Front with Contest on Back Last Side* Back of Last Card Back of All Except Last Card	Card Footer
Each Column	Contest Footer
Each Column Front Only	
Each Column Back Only	

* Last side refers to that last side of a card that contains contests.

Start Column and Num Columns fields—Layout tab of the Header dialog

The **Start Column** and **Num Columns** fields appear in the top portion of the Layout tab of the Header dialog of the following Header Types:

- Card Header
- Card Footer
- Contest Header

The **Start Column** and **Num Columns** fields do not appear on the Layout tab of any Sample Header Types.

The **Start Column** field is an integer that indicates the column of the ballot where the header begins. A **Start Column** value of 0 means the current column.

Note: If header contains a **Num Columns** value larger than number of columns on the card, ClearDesign will size the header to fit the card.

The **Num Columns** field indicates the number of columns that the header spans.

Location field—Layout tab of the Header dialog for a Header Type of Contest Header

The top portion of the Layout tab of the Header dialog for a **Header Type** of Contest Header contains the **Location** field in addition to the **Placement**, **Start Column**, and **Num Columns** fields.

Figure 7-4 shows an example of the Layout tab of a Header dialog for a **Header Type** of Contest Header.

The screenshot shows the 'Header: Header 340' dialog box with the 'Layout' tab selected. The 'Placement' dropdown is set to 'Each Card', 'Location' to 'Current Column', 'Start Column' to '0', and 'Num Columns' to '1'. The 'Default Style' section includes options for 'English' language, font name, size, justify, background color, letter spacing, line spacing, option, and text color. It also includes border, margin, padding, and language position settings, all of which are currently set to 'Inherit' or 'Single'.

Figure 7-4. Example: Layout tab of a Header dialog for a Header Type of Contest Header

The **Location** field enables you to select one of the following possible values for the position of the Contest Header:

- Current Column
- Next Column
- Next Side
- Next Card

When the **Start Column** value of a header is greater than zero, it affects the **Location** field as described in Table 7-5.

Table 7-5. Effects of Start Column > 0 on Location field values

Location field value	Behavior when Start Column > 0
Next Column	Next Column is ignored.
Next Side	The header and associated contests are placed on the back of the card.
Next Card	The header and associated contests are placed on the front of the next card.

Placement and Height field—Layout tab for Header Types of Card Stub

ClearDesign provides the **Header Types** values Card Stub Top and Card Stub bottom to format ballots containing tear-off stubs that jurisdictions can use for barcodes or other identifying information.

The top of the Layout tab of the Header dialog for a **Header Type** of Card Stub Top or Card Stub Bottom contains the **Placement** and **Height** fields. Figure 7-5 shows an example.

The screenshot shows the 'Header: Header 340' dialog box with the 'Layout' tab selected. At the top right are 'Save', 'Reset', and 'Cancel' buttons. Below the title bar, there are two tabs: 'Basic' and 'Layout'. The 'Layout' tab contains the following fields:

- Placement:** A dropdown menu set to 'Each Card'.
- Height:** A dropdown menu set to '1.0'.
- Default Style:** A pane with two tabs: 'English' and 'Spanish'. It contains several rows of settings, each with a dropdown menu set to 'Inherit':
 - Font Name, Size, Justify, Background Color
 - Letter Spacing, Line Spacing, Option, Text Color
 - Border (Top, Left, Bottom, Right), Color
 - Margin (Top, Left, Bottom, Right), Color
 - Padding (Top, Left, Bottom, Right)
 - Language Position, Separator

Figure 7-5. Example: Layout tab of the Header dialog for a Header Type of Card Stub Top

For a description of the **Placement** field, see Table 7-4 on page 141.

The **Height** field specifies a number of inches at the top or bottom of the card for the stub. The default is 1.0.

Default Style pane—Layout tab of the Header dialog

The lower portion of the Layout tab of the Header dialog contains a Default Style pane as shown in Figure 7-3 on page 140 and Figure 7-4 on page 142. This pane enables you to change the default inherited font and formatting options of a header.

Note: Before you edit the Default Style pane of the Header dialog, make sure that you understand how style inheritance works in ClearDesign. See "" on page 139 and "Inheritance of layout styles" on page 186. Any settings changed in the Default Styles pane of the Header dialog override any inherited default settings.

Settings for each language

The top section of the Default Style pane of the Header dialog contains a tab for each language in the election. By default, languages other than English inherit their settings from English unless you explicitly change the settings for an individual language.

Table 7-6 lists the settings for each language in the election.

Table 7-6. Settings for each language in the election

Setting	Description
Font Name	The font name. You can select any font installed with ClearDesign or any font that you have added to the election. The default font is Noto Sans. Chapter 3, "Adding fonts and images" on page 52.
Size	The font size in points.
Justify	Justified text is spaced so that both the left and right side of the text block have an even, clean edge. Selections are: Inherit, Left, Center, and Right
Background Color	The hex code or name of an HTML color. This field also supplies a color picker that enables you to click the desired color.
Letter Spacing	The amount of space between a group of letters to affect density in a line or block of text. Selections are: Inherit, Compressed, Normal, Expanded, and Very Expanded
Line Spacing	The vertical distance between lines of text.
Option	The available options can vary depending on the selected font. One of the following: Inherit, Normal, Bold, Italic, Underline, Bold Italic, Bold Underline, Italic Underline, and Bold Italic Underline
Text color	The hex code or name of an HTML color. This field also supplies a color picker that enables you to click the desired color.

Margins, borders, and padding in the Default Style pane—Layout tab of the Header dialog

The lower section of the Default Style Pane of the Layout tab of the Header dialog contains settings for margins, borders, and padding. (For examples of the Default Style pane, see Figure 7-3 on page 140 and Figure 7-4 on page 142.)

To conceptualize margins, borders, and padding, imagine that text is contained in a box. The box has the margin, border, and padding attributes as shown in Figure 7-6.

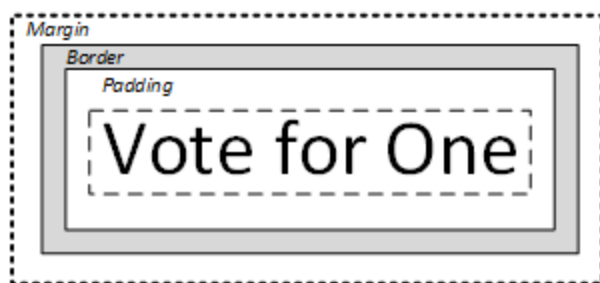


Figure 7-6. Margins, border, and padding

Figure 7-6 shows the following:

- The margin is the space outside the border up to the edge of the box.
- The border is the optional outline that separates the margin and the padding.
- The padding is the space between the border and the content.

If desired, use the Default Style pane to change the inherited default margin, border, and padding settings.

Language Position and Separator in the Default Style pane—Layout tab of the Header dialog

The last row of the Default Style pane on the Layout tab of the Header dialog contains the field **Language Position** and **Separator**. These fields apply to multi-language ballots.

If an election contains multi-language ballots, a header inherits the **Language Position** and **Separator** values from the layout style for the ballot set. (See "Inheritance of layout styles" on page 186.) Update the **Language Position** and **Separator** fields on the Default Style pane of the Header dialog to override the inherited default values.

7.4 Using Macros

Macros are placeholders for variable data that appear in headers.

You can also use macros in device messages.

Example of using a macro in a header

For example, suppose that you set up a template for creating new elections. If you insert a macro representing the election name in various headers in the template, you can avoid manually updating the election name in every location each time you create a new election. Instead, the election-name macro picks up value of the **Name** field specified in the Election dialog.

How macros appear in the Ballot Text editor of a header

Figure 7-7 on page 146 shows an example of how macros appear in the Ballot Text editor of a header. This header contains two macros:

- `~{card.voterGroup.name}` is a placeholder for the name of the voter group (political party) associated with the card.
- `~{split.precinct.name}` is a placeholder for the name of the precinct associated with the split.

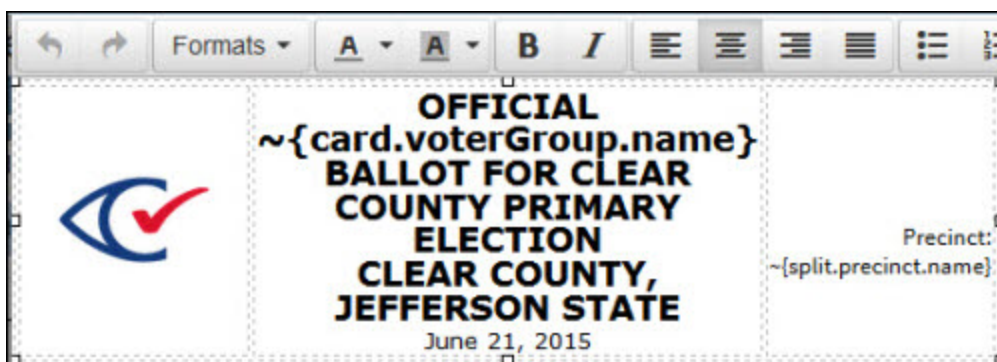


Figure 7-7. Example: macros in a header

Viewing macros when previewing and printing cards and ballots

When you preview or print the cards and ballots, the actual names of the voter group and precinct appear instead of the macros.

Note: When you click **Layout Preview** from a Card Style and Ballot Style view, ClearDesign may not display all values for the macros in the associated preview. Therefore, Clear Ballot recommends previewing and proofing macros by using the Ballot view and Card view tabs.

7.4.1 Adding macros to headers

To add a macro to a header:

1. From the **Headers** view of the election, locate the desired header.
2. Click the **Edit** button for the header.
The Header dialog appears.
3. In the Ballot Text editor section of the Header dialog, click the location where you want to add the macro.
4. Type the macro using the syntax `<tilde>{MacroName}`.
ClearDesign allocates space for the macro based on its name.
5. Click **Save**.

7.4.2 Previewing macros

To preview macros:

1. Open the associated cards in the Layout Preview page to review macro substitutions.
2. Fix any macros that appear as undefined.

3. Lay out the cards so that ClearDesign will process the macros.

You cannot view macros if you have only generated ballots.

7.4.3 Macro and alias definitions

This topic lists macros according to categories based on ClearDesign entities and their attributes.

The information in this topic assumes an understanding of entities, the various attributes (fields) of entities, and the relationships between entities. To review this information for a specific entity, read the topic in this *User Guide* that describes how to create and edit a particular entity.

Hierarchy of macro definitions

Macro definitions follow a hierarchy that goes from left to right. Each individual element in the macro hierarchy ends with a period.

The following macro definition is an example:

```
~{split.ballot.ballotStyle.ballotSet.abbreviation}
```

The hierarchy of this macro definition is as follows:

1. This macro is associated with a split (precinct split) entity, which has an associated ballot.
2. The ballot associated with the split has a related ballot style, which is turn, is associated with ballot set.
3. Therefore, this macro is a placeholder for the abbreviation that identifies the ballot set in this hierarchy.

Aliases

Some macros have associated aliases. An *alias* is a shorthand abbreviation for a macro. In the lists of macros in the remainder of this topic, an alias appears indented in the row below its associated macro. Because an alias is shorter than its associated macro, use an alias to save space in the Ballot Text editor.

Ballot macros

{ballot}

{ballot.id}

{ballot.name}

{ballot.shortName}

{ballot.abbreviation}

{ballot.ballotStyle}

{ballot.ballotStyle.id}

Ballot macros (continued)

{ballot.ballotStyle.sortSeq}
{ballot.ballotStyle.name}

Election macros

{election}
{election.id}
{election.name}
{election.sortSeq}
{election.shortName}
{election.abbreviation}
{election.electionDate}

Ballot group macros

{ballotGroup}
{ballotGroup.id}
{ballotGroup.sortSeq}
{ballotGroup.name}
{ballotGroup.shortName}
{ballotGroup.abbreviation}
{ballotGroup.ballotGroupStyle}
{ballotGroup.ballotGroupStyle.id}
{ballotGroup.ballotGroupStyle.sortSeq}
{ballotGroup.ballotGroupStyle.name}
{ballotGroup.ballotGroupStyle.shortName}
{ballotGroup.ballotGroupStyle.abbreviation}

Ballot Group Style macros

{ballotGroupStyle}
{ballotGroupStyle.id}
{ballotGroupStyle.sortSeq}
{ballotGroupStyle.name}
{ballotGroupStyle.shortName}
{ballotGroupStyle.abbreviation}

Ballot style macros

{ballotStyle}
{ballotStyle.id}
{ballotStyle.sortSeq}
{ballotStyle.name}
{ballotStyle.shortName}
{ballotStyle.abbreviation}
{ballotStyle.ballotSet}
{ballotStyle.ballotSet.id}
{ballotStyle.ballotSet.sortSeq}
{ballotStyle.ballotSet.name}
{ballotStyle.ballotSet.shortName}
{ballotStyle.ballotSet.abbreviation}

Ballot set macros

{ballotSet}
{ballotSet.id}
{ballotSet.sortSeq}
{ballotSet.name}
{ballotSet.shortName}
{ballotSet.abbreviation}

Card macros

{card}
{card.id}
{card.name}
{card.VoterGroup}
{card.voterGroup.id}
{card.voterGroup.name}
{card.voterGroup.sortSeq}
{card.voterGroup.shortName}
{card.voterGroup.abbreviation}
{card.cardSequence}

Precinct macros

{precinct}
{precinct.id}
{precinct.name}
{precinct.sortSeq}
{precinct.shortName}
{precinct.abbreviation}

Split macros

{split}
{split.id}
{split.name}
{split.sortSeq}
{split.shortName}
{split.abbreviation}
{split.ballotSequence}
{split.precinct}
 Alias: {precinct}
{split.precinct.id}
{split.precinct.name}
{split.precinct.sortSeq}
{split.precinct.shortName}
{split.precinct.abbreviation}
{split.ballotGroup}
 Alias: {ballotGroup}
{split.ballotGroup.id}
{split.ballotGroup.sortSeq}
{split.ballotGroup.name}
{split.ballotGroup.shortName}
{split.ballotGroup.abbreviation}
{split.ballotGroup.ballotGroupStyle}
 Alias: {ballotGroupStyle}
{split.ballotGroup.ballotGroupStyle.id}

Split macros (continued)

{split.ballotGroup.ballotGroupStyle.sortSeq}
{split.ballotGroup.ballotGroupStyle.name}
{split.ballotGroup.ballotGroupStyle.shortName}
{split.ballotGroup.ballotGroupStyle.abbreviation}
{split.ballot}

Alias: {ballot}

{split.ballot.id}
{split.ballot.sortSeq}
{split.ballot.name}
{split.ballot.shortName}
{split.ballot.abbreviation}
{split.ballot.ballotStyle}

Alias: {ballotStyle}

{split.ballot.ballotStyle.id}
{split.ballot.ballotStyle.sortSeq}
{split.ballot.ballotStyle.name}
{split.ballot.ballotStyle.shortName}
{split.ballot.ballotStyle.abbreviation}
{split.ballot.ballotStyle.ballotSet}

Alias: {ballotSet}

{split.ballot.ballotStyle.ballotSet.id}
{split.ballot.ballotStyle.ballotSet.sortSeq}
{split.ballot.ballotStyle.ballotSet.name}
{split.ballot.ballotStyle.ballotSet.shortName}
{split.ballot.ballotStyle.ballotSet.abbreviation}
{split.ballotGroup.ballotGroupStyle.abbreviation}
{split.ballot}
{split.ballot.id}
{split.ballot.sortSeq}
{split.ballot.name}
{split.ballot.shortName}
{split.ballot.abbreviation}

Split macros (continued)

```
{split.ballot.ballotStyle}
{split.ballot.ballotStyle.id}
{split.ballot.ballotStyle.sortSeq}
{split.ballot.ballotStyle.name}
{split.ballot.ballotStyle.shortName}
{split.ballot.ballotStyle.abbreviation}
{split.ballot.ballotStyle.ballotSet}
{split.ballot.ballotStyle.ballotSet.id}
{split.ballot.ballotStyle.ballotSet.sortSeq}
{split.ballot.ballotStyle.ballotSet.name}
{split.ballot.ballotStyle.ballotSet.shortName}
{split.ballot.ballotStyle.ballotSet.abbreviation}
```

Split macros containing the district category abbreviation

In the following macros, the data enclosed in [] is the district category abbreviation.

Example: Suppose that split 1 is in the district US Senate 51 and the abbreviation for the US Senate district category is "USSEN". The macro `~{split.districts[USSEN].name}` displays the following:

US Senate 51

```
{split.districts[[]].id}
{split.districts[[]].name}
{split.districts[[]].shortName}
{split.districts[[]].abbreviation}
```

7.4.4 Barcode macros

The following formats macros generate barcodes:

```
~{code128A(macro_names)}
~{code128B(macro_names)}
~{code128C(macro_names)}
~{code25(macro_names)}
```

In barcode macros, multiple macro names can be included between the parentheses.

Guidelines for using barcode macros

- ClearDesign ignores invalid characters when generating barcodes.
- The Code25, Code128A, Code128B, and Code128C macros extract only numeric values.
- If a barcode value contains an odd number of digits, ClearDesign adds a leading zero.

Example 1

To create a 2 of 5 barcode using the numbers in the Ballot Set ID, enter the following:

```
~{code25(ballotSet.id)}
```

This example contains the following items:

- The ~ { and } delimit the beginning and end of the macro, respectively.
- The string **code25** indicates the barcode format.
- The parentheses following the barcode format enclose the macro data to be encoded in the barcode.

Example 2

Suppose that the precinct abbreviation is 01-234 and the split.ballotSequence is 5. The following macro contains the barcode value 012345.

```
~{code25(precinct.abbreviation.split.ballotSequence)}
```

Font for barcodes

To display data as barcode, use barcode font code128.ttf provided by Clear Ballot. To get this font, contact Clear Ballot.

7.4.5 Auxiliary format functionality for macros

An auxiliary format enables you:

- Select and capture only a portion of a string represented by a macro
- Add leading zeroes or spaces to the string represented by a macro

Syntax for auxiliary formats

A macro that uses an auxiliary format has the following syntax:

```
~{macro[auxiliary_format]}
```

The *auxiliary_format* specifies a formula indicating which portion of the macro to capture.

Examples

Suppose that:

- The macro **precinct.name** represents the string '1234-567'.
- The macro **split.name** represents the string 'ABCDEFGHIJK'.

Table 7-7 on page 154 lists examples of auxiliary formats that capture parts of the strings represented by these macros or add zeros or spaces to these strings.

Table 7-7. Examples of auxiliary formats

Description	Macro	Values captured
Skip two characters from the left. Capture the third character.	~{precinct.name[2]}	3
	~{split.name[2]}	C
Capture the fifth character from the right.	~{precinct.name[-5]}	4
	~{split.name[-5]}	G
Skip two characters from the left. Capture from the third character to the end of the string.	~{precinct.name[2:]}	34-567
	~{split.name[2:]}	CDEFGHIJK
Count five characters from the right. Capture from that character through the end of the string.	~{precinct.name[-5:]}	4-567
	~{split.name[-5:]}	GHIJK
Skip two characters on the right. Capture from the third character to the sixth character.	~{precinct.name[2:6]}	34-5
	~{split.name[2:6]}	CDEF
Add spaces to the beginning of the string for a total of 12 characters	~{precinct.name[:12]}	<space><space><space> <space><space>1234-567
	~{split.name[:12]}	<space>ABCDEFGHIJK
Add zero to the beginning of the string for a total of 12 characters.	{precinct.name[:012]}	00001234-567
	{split.name[:012]}	0ABCDEDEGHIJK

7.4.6 Using a macro for a serial number in a stub

ClearDesign contains a macro that can insert a placeholder for a serial number in headers for stubs. This macro enables jurisdictions to insert a placeholder for a unique number in a stub appearing at the top or bottom of a card. When the ADF for the elections gets loaded into ClearAccess or PrintNow, an administrator can specify the starting value for the serial number.

To insert a serial number in a stub, use the Ballot Text editor for **Header Type** of Card Stub Top or Card Stub Bottom.

The basic format of the macro for the serial number is:

```
~{serialNumber}
```

This basic format inserts a number that increments each time a card is printed. The basic format does not contain any leading zeros.

To specify the number of digits in a serial number, use an auxiliary format, such as:

```
~{serialNumber[0:4]}
```

This example is a placeholder for a serial number containing four digits. Unused digits are printed as leading zeros.

7.4.7 Using macros for page numbers in a card header or footer

ClearDesign contains macros that can insert placeholders for the current page number and total number of pages in a given ballot. These macros enable jurisdictions to display the current page number and total number of pages at the top or bottom of each card (e.g. "Page 1 of 8").

To insert the current page number and total number of pages in a card header or footer, use the Ballot Text editor for **Header Type** of Card Header or Card Footer.

The basic format for each page number macro is:

```
~{pageNum} = Current page number. This number increments each time a card is printed.
```

```
~{numPages} = Total number of pages.
```

To display the current and total page count together (e.g. "Page 1 of 8"), insert the page number macros in the following format:

```
Page ~{pageNum} of ~{numPages}
```

The number of pages (numPages macro value) includes the blank backs of cards except for the back of the last card if it does not have any contests on it.

7.4.8 Macros that conditionally set the background color or other CSS properties

It is possible to set the background color of a header using macros. For example, if you wanted to set the background color of a header to red (hex value #ff0000) for the party with abbreviation Party1, and green (hex value #00ff00) for the party with abbreviation Party2, you would use the following color macro:

```
~{color(card.voterGroup.abbreviation, Party1: #ff0000, Party2: #00ff00)}
```

In addition to the color macro, you can use the more general css macro to set arbitrary css properties conditionally. When specifying the css property name, use the JavaScript camel case format for the name. For example, you could also set the background color in the previous example using this syntax:

```
~{css(card.voterGroup.abbreviation, backgroundColor, Party1: #ff0000, Party2: #00ff00)}
```

If you wanted to conditionally set the text color instead of the background color, you could use the css property name "color" in this way:

```
~{css(card.voterGroup.abbreviation, color, Party1: #ff0000, Party2: #00ff00)}
```

7.5 Setting up ballot sets

This topic describes how to set up ballot sets.

7.5.1 The workflow for creating ballots

The ballot-creation workflow is as follows:

1. Add an election.
See "Scenarios for creating elections in ClearDesign" on page 37.
2. Build the election by entering the jurisdictional information and the election definition.
See "Fundamental election entities" on page 59.
3. If required, set up primary preference and straight party contests.
See "Setup of advanced election types" on page 103
4. If necessary, reset ballot styles to remove any previously generated ballots, cards, and card IDs.
See "Resetting ballot styles" on page 160.
5. From the **Ballot Sets** view, click **Generate**.
Generating ballots sets consists of identifying and correlating contests to splits and creating ballot styles.
See "Generating ballot styles" on page 159.
6. From the **Ballot Sets** view, click **Layout**.
This is the stage in which ballots are laid out on physical cards to create card styles.
7. Preview the ballot layout.
8. Repeat steps 4 through 6 as needed.

7.5.2 Displaying the Ballot Sets view

To display the Ballot Sets view:

1. From the Elections view, click the name of the desired election.
ClearDesign displays the Info tab for the selected election.
2. From the Info view of the election, click the Ballot Sets tab.
ClearDesign displays a Ballots Sets view that is similar to Figure 7-8.

	Sort Seq	Name	Separate Ballots	Precinct Type	Card Template	Split Identifier	PDF Naming Convention	Layout Style	Ballot Styles Count
<input type="checkbox"/> Edit	10	Standard	True	Standard	8.5 x 5	Name	Card Style First	Color & Border	9

Figure 7-8. Ballot Sets view (default columns shown)

Selectable columns

Selectable columns include: Sort Seq, Name, Short Name, Abbreviation, Import ID, Export ID, Last Edit By, Last Edit Time, Log Count, Separate Ballots, Precinct Type, Card Template, Split Identifier, PDF Naming Convention, Layout Style, and Ballot Styles Count.

Action buttons available from the Ballot Sets view

Table 7-8 describes the action buttons available from the Ballot Sets view.

Table 7-8. Action buttons available from the Ballot Sets view

Button	See
Generate	"Generating ballot styles" on page 159
Reset	"Resetting ballot styles" on page 160
Layout	"Laying out card styles" on page 161
Print	"Printing cards" on page 164
Sample Ballot	"Printing sample ballots" on page 168
Add	"Adding or editing a ballot set" on page 170
Delete	<p>To delete a ballot set:</p> <ol style="list-style-type: none"> 1. From the Ballot sets view, select the desired ballot sets. 2. Click Delete. 3. When the confirmation message appears, click OK. <p>You cannot delete the Standard ballot set.</p>

Additional tabs available from the Ballot Sets view

The following tabs are available from the Ballot Sets view (Table 7-9).

Table 7-9. Additional tabs available from the Ballot Sets view

Tab	See
Ballot Group Styles	"Setting up ballot group styles" on page 172
Ballot Groups	"Setting up ballot groups" on page 173
Ballot Styles	"Setting up ballot styles" on page 174
Ballots	"Setting up ballots" on page 176
Card Styles	"Setting up card styles" on page 180
Cards	"Setting up cards" on page 181
Card Templates	"Setting up card templates" on page 183
Layout Styles	"Layout Preview" on page 195

7.5.3 Generating ballot styles

The Generate action creates ballot styles for all contests for each split in an election. The Generate action is required in the following situations:

- Initially after you perform all the setup for a new election
- If you add or remove contests or headers from a ballot or split

The Generate action does not create cards. It only sets the header and contest relationship data for a given ballot. This capability allows changes to formatting or aspects of the ballot without requiring you to regenerate the ballots again. The ballot is laid out to reflect any new changes in real time.

The Layout Action generates the static cards for final review. (See "Laying out card styles" on page 161.)

To generate a ballot style:

1. From the **Ballot Sets** view, click **Generate**.

The Generate Ballot Styles dialog appears.

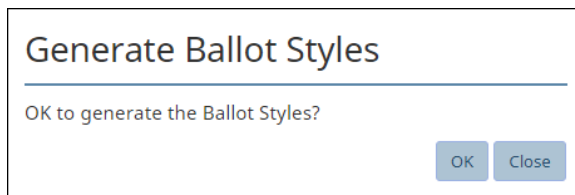


Figure 7-9. Generate Ballot Styles dialog

2. Click **OK**.

A status bar displays progress until the confirmation message appears. The message provides the count of generated ballot styles (Figure 7-10).

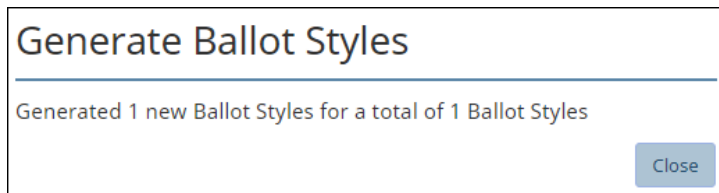


Figure 7-10. Generate Ballot Styles confirmation

If ClearDesign detects no changes when you click the **Generate** button, it displays the following message (Figure 7-11 on page 160).

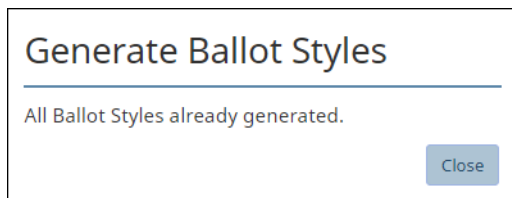


Figure 7-11. Ballot Styles already generated

3. Click **Close**.

7.5.4 Resetting ballot styles

To reset ballot style:

1. From the **Ballot Sets** view, click **Reset**.

The Reset Ballot Styles dialog appears.

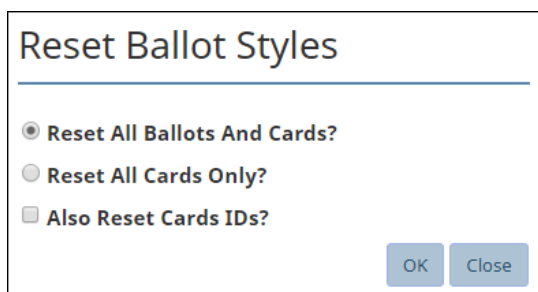


Figure 7-12. Reset Ballot Styles dialog

2. Choose one of the following:
 - **Reset all Ballot and Cards?**—Removes all previously generated ballot set information.
 - **Reset all Cards only?**—Removes card style information (created by clicking **Layout**) but not ballot style information (created by clicking **Generate**).
3. (Optional) Check **Also Reset Card IDs** to remove previously generated Card IDs and restart numbering at 1.

Do not reset card IDs if any cards are already sent for printing.

4. Click **OK**.

Resetting the ballot set removes previously generated information.

Resetting ballot sets invalidates previously generated BDFs, BDFxs and ADFxs.

If you regenerate an election that already exists in ClearCount or ClearAccess, make sure to do the following:

- a. Generate a new ADFx, BDF, and BDFx files in ClearDesign.
- b. Delete any existing data for the election in ClearCount and ClearAccess.

- c. Load the new BDF or BDFx into ClearCount and ClearCast and the new ADFx into ClearAccess.

Loading the new BDF, BDFx, and ADFx files removes all previous data for the election.

7.5.5 Laying out card styles

To lay out the card styles in a ballot set:

1. Ensure ballots are generated.
2. From the navigation pane, choose **Ballot Sets**.
3. Click **Layout**.

The Layout Card Styles dialog appears.

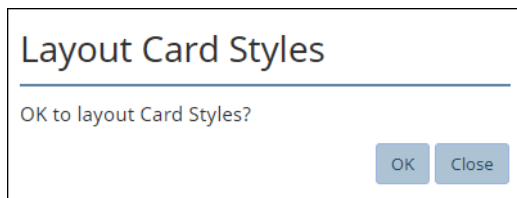


Figure 7-13. Layout Card Styles dialog

The message *All card styles already laid out* indicates that regeneration is required because the deletion of content removed some cards from the ballot set; however, none of the remaining cards were affected.

4. Click **OK**.

A status bar displays progress until the confirmation message appears. The message provides the count of generated card styles.

5. Click **Close**.

Ballot styles and ballot layout can change after the cards are laid out. These changes usually occur because ClearDesign displays previously unrendered macros. The card layout is more accurate and will be printed. If you generate the ballots, but do not lay out the cards, the layout may change.

Suppose that you manually change a layout in the Layout Preview window. If you then launch an automatic layout that can overwrite the manual change, ClearDesign issues a warning message.

7.5.6 The logic for card layout

This topic describes the logic that ClearDesign uses to lay out cards.

A header that specifies a start column and more than one column

Contests can wrap under a header that specifies a start column and more than one column.

For example, suppose the following:

- A header starts in column 1 and specifies two columns
- The associated contests are one column wide
- The contests are placed in column 1, then column 2, and then on the back of the card in column 1.

In this situation, ClearDesign attempts to start contests and their associated headers on the front of the card when they are attached to a header that specifies the column.

This arrangement may cause contests to appear out of order on the ballot.

Note: If a contest is attached to more than one header that specifies a start column, ClearDesign uses the last header's start column.

Additional options when a header specifies a start column

If a header specifies a start column *and* one of the following:

- Next-column—Next column is ignored.
- Next-side—The header and associated contests are placed on the back of the ballot.
- Next-card—The header and associated contests are placed on the front of the next card.

Linked contests

Another case involves a contest that is linked to:

- A header that specifies a start column
- A subsequent header that specifies a next column

In this case, the contest and subsequent header are placed in the next column after the specified column.

For example, in Figure 7-14 on page 163, if the first header specifies the start column of 1, the second header and contest are placed in column 2. (If there is no column 2, they are placed on the next side.)

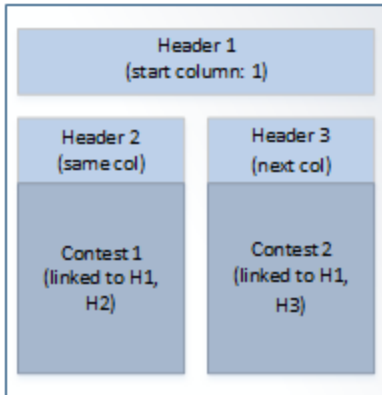


Figure 7-14. A linked contest with multiple headers

Another case is a contest that meets the following criteria:

- The contest is not the first contest that specifies a start column
- The contest does not fit the specified column.

In this situation, the following logic applies:

- If the header that specifies the start column also specifies more columns than the contest specifies, the contest is placed in the next column, as long as it fits within the header's columns. For example, if a header specifies two columns and the contests all specify one column, the contests are placed first in column 1 and then in column 2.
- If the contest does not fit beneath the header, it moves to the next side of the specified column.

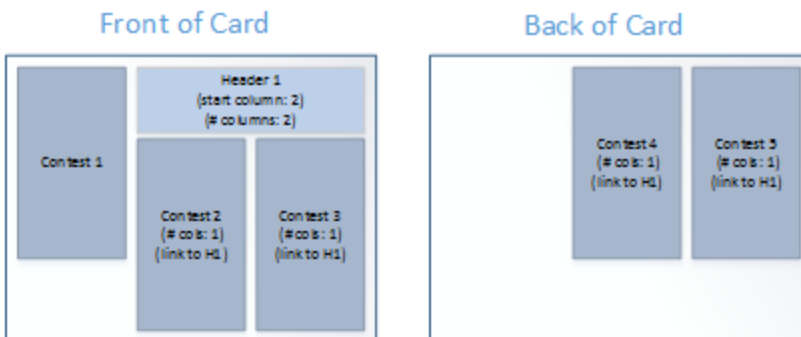


Figure 7-15. A linked contest spread across the front and back of a card

7.5.7 Selecting the right ballot set options

The following distinctions apply when you are managing ballot sets:

- Generating ballot styles organizes the contest information for each split. It does not lay out physical cards.

- If you add or delete a contest or candidate, you need to regenerate the ballot styles.
- Laying out the card set creates the physical card images.
- If you make an editorial change that does *not* change the underlying contests or candidates, ClearDesign requires you to lay out the cards again, but you do not have to regenerate the ballot style. (Editorial changes include correcting typos, editing header text, changing the order of contests on the ballot, and so on.)

7.5.8 Printing cards

A **Print** button appears at the top of the Ballot Sets view. Clicking this button displays a dialog when you can select the options for generating a Zip file containing the PDF images for the various cards associated with the election.

To generate a zip of PDF images for the cards in a ballot set:

1. From the **Ballot Sets** view, click **Print**.

ClearDesign displays the Print Cards dialog (Figure 7-16).

Figure 7-16. Print Cards dialog

2. From the **Print Cards** drop-down list, select an option listed in Table 7-10 to generate a file with the specified naming convention:

Table 7-10. Options the Print Cards drop-down list

Print Cards Option	Naming convention for the output file
For each Precinct	<i>ElectionName-card_precincts.zip</i>
For each Split	<i>ElectionName-card_splits.zip</i>

Table 7-10. Options the Print Cards drop-down list (continued)

Print Cards Option	Naming convention for the output file
For each Card - for proofing only	<i>ElectionName-cardStyles.zip</i>
For each Card Style - for proofing only	<i>ElectionName-cardStyles.zip</i>

Important: Depending on your selected Split Identifier, some of the preceding options may be unavailable. For details, see "Naming conventions for PDF files associated with splits" on the next page.

3. From the **Ballot Set** drop-down list, select All or Standard.
4. From the **Language** drop-down list, select one of the following:
 - All—(Default) Prints the cards for all languages
 - A specific language name—Prints only the cards for the specified language
5. (Optional) Select (check) **Print Stubs**.
The **Print Stubs** check box appears only when the ballot set contains a header containing a **Header Type** value of Card Stub Top or Card Stub Bottom. By default, the **Print Stubs** check box is selected.
6. (Optional) Select (check) **Show Serial Number**.
If the ballot contains a serial number macro, selecting this option displays the serial number on the printed ballots. The number displayed will be 0, formatted according to the macro specification; if the macro does not show a number, spaces will be used instead.
7. (Optional) Add a visible watermark to each ballot image:
 - a. Check **Show Proof Mark**.
 - b. In **Proof Mark**, enter the text of the watermark.

When printing cards or card styles, you cannot deselect **Show Proof Mark** because a watermark is required. However, you can customize the watermark text in **Proof Mark**. This functionality prevents someone from using a proof as an actual card. Proofs are not scannable.
8. (Optional) Select **Set Election State to Cards Created**.
9. (Optional) Select **Include Election Backup** to back up the election.
Selecting **Include Election Backup** enables the **Validation Code** field.
10. (Required if election is backed up) In **Validation Code** and **Confirm Validation Code**, enter the validation code for restoring the backup.

- Click **OK**.

A status bar tracks the progress (Figure 7-17). To stop generating the files, click the **Cancel** button.

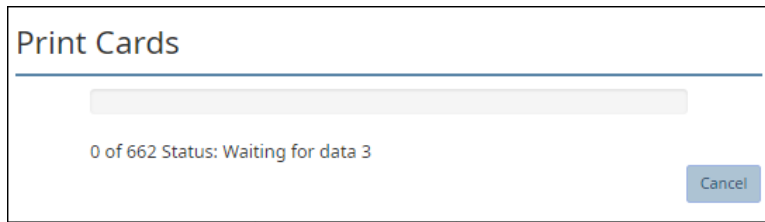


Figure 7-17. Status message when generating a Zip of PDF card images

When the process is finished, a link to the location of the Zip file appears at the bottom of the browser window. ClearDesign downloads the file to Google Chrome's default Downloads folder. Usually, this location is:

`c:\Users\Your User Name\Downloads`

You can change default this location by editing the Downloads area of the Settings in Google Chrome.

- Click **Close**.
- Obtain the files from the default download folder.

The files can include:

- *ElectionName-bdf.zip*
- *ElectionName-backup.zip* (if election backup is selected)
- All the PDF images for the various cards associated with the election

- Print the files locally or send them to a vendor.

Naming conventions for PDF files associated with splits

The naming conventions for PDF files associated with splits depend on the type of **Split Identifier** and the **PDF Naming Convention** used for the ballot set. See Table 7-11.

Table 7-11. Naming conventions for PDF files—based on the Split Identifier setting

Split Identifier setting	Card Style First naming convention for the PDF file	Precinct First naming convention for the PDF file
Name	<i>Card ID-Precinct Name-Split Name(s)-Ballot Set Abbreviation-Voter Group Abbreviation-Language Abbreviation.pdf</i>	<i>Precinct Name-Split Name(s)-Card ID-Ballot Set Abbreviation-Voter Group Abbreviation-Language Abbreviation.pdf</i>

Table 7-11. Naming conventions for PDF files—based on the Split Identifier setting (continued)

Split Identifier setting	Card Style First naming convention for the PDF file	Precinct First naming convention for the PDF file
Ballot Sequence	<i>Card ID-Precinct Name-Ballot Sequence-Ballot Set Abbreviation-Voter Group Abbreviation-Language Abbreviation.pdf</i>	<i>Precinct Name-Ballot Sequence-Card ID-Ballot Set Abbreviation-Voter Group Abbreviation-Language Abbreviation.pdf</i>

The subsections that follow provide additional details and examples.

Split Identifier—Name

When you choose "Name" for the **Split Identifier**, ClearDesign uses the precinct name plus the split name to identify your ballot PDFs. If the split name begins with the precinct name, ClearDesign lists the precinct name once in the naming convention and does not duplicate it.

If similar styles within a precinct are combined by choosing to print by precinct, ClearDesign uses the first applicable split name as the identifier for a given precinct and card style combination. See "Printing cards" on page 164.

The Card Information appears at the bottom of the PDF images. ClearDesign lists all applicable splits for the card in square brackets. ClearDesign allows a total of 40 characters for the combined split name and precinct names. If there are more splits that exceed the 40-character limit, ClearDesign appends '...' to the list to indicate that splits in addition to those listed apply to the card.

The card style also appears at the bottom of the card in the format (CS *CardStyleNumber*).

Split Identifier—Ballot Sequence

When you choose "Ballot Sequence" as the **Split Identifier**, ClearDesign uses the precinct name and a ballot sequence number to identify your ballots. Ballot sequence numbers increment (1, 2, 3, and so on) for every new card in a precinct. When ClearDesign calculates a new precinct, the sequence number increments—starting from 1 again—for every unique card style within the precinct.

When printing PDFs, only the option to print by "precinct" is enabled because this option does not support printing splits with duplicate styles. If one ballot set is defined as printing by Name and another by Ballot Sequence, regardless of the printing method selected for the Name ballot set, the Ballot Sequence ballot set always prints by "precinct."

A precinct can contain some splits with no contests. In this situation, ClearDesign assigns a sequence number for empty splits in that precinct to the first applicable split. The sequence number for the empty split does not appear among the printed cards. This situation can cause ballot sequences to skip a number when counting up.

Example: PDF files associated with splits

For example, suppose the following:

- Precinct name: 10
- Split name: 10-003

In this situation, the split information appears on the card information and in the title of the PDF file as:

10-003

Table 7-12 lists how the data from this example appears in the card information and in the PDF file name based on the selected type of **Split Identifier**.

Table 7-12. Example: Card information and PDF file name based on the selected type of Split Identifier

Selected type of Split Identifier	Card information	PDF file name with card style first	PDF file name with precinct first
Name	10 [003] (CS 1)	1-10-003-STANDA-_NP_-EN.pdf	10-003-1-STANDA-_NP_-EN.pdf
Ballot Sequence	10-1 (CS 1)	1-10-1-STANDA-_NP_-EN.pdf	10-1-1-STANDA-_NP_-EN.pdf

Truncation occurs when the precinct name and split name match. If the two names differ, no truncation occurs.

7.5.9 Printing sample ballots

The sample ballot lists all contests in an election. The sample ballot does not represent the finalized format of the actual ballot.

Special header types apply to sample ballots. See "Header Type values" on page 134.

To print a sample ballot for all contests in an election:

1. From the navigation pane, select **Ballot Sets**.
2. Click **Sample Ballot**.

The Print Sample Ballot dialog appears.

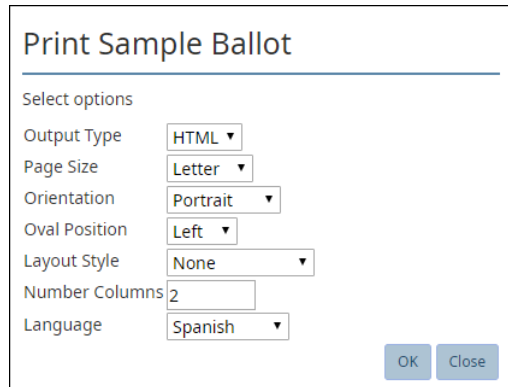


Figure 7-18. Print Sample Ballot dialog

3. In **Output Type**, select HTML (the default) or PDF.
4. In **Page Size**, select Letter (the default), Legal, or Tabloid.
5. In **Orientation**, select Portrait or Landscape.
6. In **Oval Position**, select Left or Right.
7. In **Layout Style**, select one of: None, Color & Border, Border, or a user-defined layout style.
8. In **Number Columns** enter the number of columns to render.
9. In **Language**, select English or another language defined for the election.
10. Click **OK**.

ClearDesign displays the sample ballot.

If you select PDF for the **Output Type**, the sample ballot appears in a browser window. To download the ballot in PDF format in this situation:

- a. Move the cursor to the upper right of the browser window and click the download icon when it appears.
- b. If you receive the message "Failed - Network Error" in the status bar at the bottom of the screen, click the Print icon at the top of the screen or enter Ctrl-P.
- c. When the Print dialog appears, change the **Destination** field to Microsoft Print to PDF.
- d. When the Save Print Output As dialog appear, designate a File name and select a location to save the PDF file. The default location is your Windows Downloads folder.

7.5.10 Adding or editing a ballot set

To edit a ballot set:

1. Select one of the following options:

- To add a ballot set:
 - a. Select the Ballot Sets tab.
 - b. Click Add.

ClearDesign displays the Ballot Set dialog (Figure 7-19).

- To edit an existing ballot set, click the **Edit** button in the row corresponding to the desired ballot set.

ClearDesign displays the Ballot Set dialog (Figure 7-19).

The screenshot shows the 'Ballot Set: Absentee' dialog box. It has a title bar with 'Save', 'Reset', and 'Cancel' buttons. The dialog is divided into two main sections. The top section contains various input fields and checkboxes:

- Name:** Text box containing 'Absentee'.
- Sort Seq:** Text box containing '20'.
- Short Name:** Text box containing 'Absentee'.
- Abbreviation:** Text box containing 'Absent'.
- Import ID:** Empty text box.
- Export ID:** Empty text box.
- Card Template:** Dropdown menu showing '8.5 x 11 - 3 Column'.
- Layout Style:** Dropdown menu showing 'Color & Border'.
- Split Identifier:** Dropdown menu showing 'Name'.
- PDF Naming Convention:** Dropdown menu showing 'Card Style First'.
- Combine Similar Ballots:** Unchecked checkbox.
- Separate Voter Group Ballots:** Unchecked checkbox.
- Precinct Type:** Dropdown menu showing 'Standard'.

 The bottom section is titled 'Contests' and contains a list of checkboxes for different contest types:

- All Contests
- US Senate
- 12th Congressional
- City Council Ward 2
- School Levy
- 9th Congress
- City Council Ward 1
- City Auditor
- Mad River Fire Question

Figure 7-19. Ballot Set dialog

2. If necessary, edit the following common attributes:

- **Name**
- **Sort Seq**
- **Short Name**
- **Import ID**
- **Abbreviation**
- **Export ID**

See "Common attributes of entities" on page 241.

3. In **Card Template**, select the card template that controls ballot size and orientation.
4. In **Layout Styles**, select the layout style that controls visual appearance.

5. (Optional) In **Split Identifier**, if permitted, select one of:
 - **Name**—Prints the split name at the bottom of the ballot.
For additional information, see "Split Identifier—Name" on page 167.
 - **Ballot Sequence**—Prints the ballot sequence number at the bottom of the ballot.
For additional information, see "Split Identifier—Ballot Sequence" on page 167.
6. (Optional) In **PDF Naming Convention**, select Card Style First or Precinct First:
 - Card Style First is the default, and it produces card PDF filenames that begin with the card style number.
 - If you select Precinct first, card PDF filenames will begin with the precinct name.
7. (Optional) **Check Combine Similar Ballots**, if permitted, to consolidate ballots where possible.
By default, this option is not checked. If **Combine Similar Ballots** and **Separate Voter Group Ballots** are both checked, it can result in a card that contains only nonpartisan measures and is shared among multiple voter groups. This complicates the display of voter registration counts in ClearCount reports because the shared card will be associated with a special "Combined Party Card" voter group, as a card can only be associated with a single voter group. If it is important for your jurisdiction to be able to report voter registration totals by voter group for all cards, Clear Ballot recommends that you do not use **Combine Similar Ballots**.
8. (Optional) Check **Separate Voter Group Ballots** to generate separate ballots for each voter group.
Headers are affected when you generate separate ballots for each voter group. See Table 7-3, "Header dialog—Voter Group selections" on page 138.
9. (Optional) In **Precinct Type**, select Standard or All.
The Standard selection is the default.
If you have a consolidated precinct, set the **Precinct Type** to All or create a separate ballot set for the consolidated precinct.
10. In the **Contests** area, do one of the following:
 - Check **All Contests** if the ballot set is to contain all of the contests in the election.
 - To select individual contests, check **All Contests** and then uncheck specific contests. Check only those contests to be included in the ballot set.When you edit the first ballot set of an election, the **All Contests** check box is selected in the Contests section. You cannot change this setting.
11. Click **Save**.

7.6 Setting up ballot group styles

This topic describes how to:

- Display the ballot group styles that ClearDesign automatically generates
- Edit the common attributes of ballot group styles

7.6.1 Displaying the Ballot Group Styles view

To display the Ballot Group Styles view:

1. From the Elections view, click the name of the desired election.
ClearDesign displays the Info view of the selected election.
2. From the Info view, click the Ballot Sets tab.
ClearDesign displays the Ballot Sets view.
3. From the Ballot Sets view, click the Ballot Group Styles tab.
ClearDesign displays the Ballot Group Styles view (Figure 7-20).

	Sort Seq	Name	Ballot Set Name	Splits Count	Contests Count	Ballot Groups Count	Ballot Styles Count
Edit	1	Ballot Group Style 1	Standard	1	11	1	1
Edit	2	Ballot Group Style 2	Standard	1	9	1	1
Edit	3	Ballot Group Style 3	Standard	2	9	2	1

Figure 7-20. Ballot Group Styles view (default columns shown)

Selectable columns

Selectable columns include: Sort Seq, Name, Short Name, Abbreviation, Import ID, Last Edit By, Last Edit Time, Ballot Group Style, Splits Count, Splits, Contests Count, Contests, Ballot Groups Count, Ballot Groups, Ballot Styles Count, and Ballot Styles.

7.6.2 Editing the common attributes of a ballot group style

To edit the common attributes a ballot group style:

1. From the Ballot Group Styles view, click **Edit** in the row corresponding to the desired ballot group style.

ClearDesign displays the Ballot Group Style dialog.

The screenshot shows a dialog box titled "Ballot Group Style: Ballot Group Style 1". At the top right of the dialog are three buttons: "Save", "Reset", and "Cancel". Below the title bar, there are six input fields arranged in two columns. The left column contains "Name" (with the value "Ballot Group Style 1"), "Short Name" (with the value "Ballot Group Style 1"), and "Import ID" (empty). The right column contains "Sort Seq" (with the value "1"), "Abbreviation" (with the value "Ballo1"), and "Export ID" (empty).

Figure 7-21. Ballot Group Styles dialog

2. If necessary, edit the following common attributes:
 - **Name**
 - **Sort Seq**
 - **Short Name**
 - **Import ID**
 - **Abbreviation**
 - **Export ID**

See "Common attributes of entities" on page 241.

3. Click **Save**.

7.7 Setting up ballot groups

This topic describes how to:

- Display a list of ballot groups that ClearDesign generates for the current election
- Edit the common attributes of a ballot group

7.7.1 Displaying the Ballot Groups view

To display the Ballot Groups view:

1. From the Elections view, click the name of the desired election.
ClearDesign displays the Info view of the selected election.
2. From the Info view of the election, click the Ballot Sets tab.
ClearDesign displays the Ballot Sets view.
3. From the Ballot Sets view, click the Ballot Groups tab.
ClearDesign displays the Ballot Groups view (Figure 7-22).

Ballot Sets | Ballot Group Styles | Ballot Groups | Ballot Styles | Ballots | Card Styles | Cards | Card Templates | Layout Styles													
Search: <input type="text"/>								Copy	PDF	Excel	CSV	Print	Show / hide columns
	Sort Seq	Name	Ballot Group Style	Ballot Set	Splits Count	Contests Count	Ballots Count						
Edit	1	Ballot Group 1	Ballot Group Style 1	Standard	1	11	1						
Edit	2	Ballot Group 2	Ballot Group Style 2	Standard	1	9	1						
Edit	3	Ballot Group 3	Ballot Group Style 3	Standard	1	9	1						

Figure 7-22. Ballot Groups view (default columns shown)

Selectable columns

Selectable columns include: Sort Seq, Name, Short Name, Abbreviation, Import ID, Export ID, Last Edit By, Last Edit Time, Log Count, Ballot Group Style, Ballot Set, Splits Count, Splits, Contests Count, Contests, Ballots Count, and Ballots.

7.7.2 Editing the common attributes of a ballot group

To edit the common attributes of ballot group:

- From the **Ballot Groups** view, click Edit in the row corresponding to the desired ballot group. ClearDesign displays the Ballot Group dialog (Figure 7-23).

Ballot Group: Ballot Group 1 Save Reset Cancel

Name <input type="text" value="Ballot Group 1"/>	Sort Seq <input type="text" value="1"/>
Short Name <input type="text" value="Ballot Group 1"/>	Abbreviation <input type="text" value="Ballo1"/>
Import ID <input type="text"/>	Export ID <input type="text"/>

Figure 7-23. Ballot Group dialog

- If necessary, edit the following common attributes:
 - **Name**
 - **Sort Seq**
 - **Short Name**
 - **Import ID**
 - **Abbreviation**
 - **Export ID**

See "Common attributes of entities" on page 241.

- Click **Save**.

7.8 Setting up ballot styles

This topic describes how to:

- Display a list of previously generated ballot styles
- Edit the common attributes of ballot styles

7.8.1 Displaying the Ballot Styles view

To display the Ballot Styles view:

1. From the Elections view, click the name of the desired election.
2. From the Info view of the election, click the Ballot Sets tab.
3. When ClearDesign displays the Ballot Sets view, click the Ballot Styles tab.

ClearDesign displays the Ballot Styles view (Figure 7-24 on page 175).

		Sort Seq	Name	Ballot Set	Voter Group	Card Template	Ballot Groups Count	Ballots Count	Card Styles Count	Contests Count	Precincts Count
Edit	Layout	1	Democratic	Standard	Non-Partisan	8.5 x 11 - 3 Column	1	1	0	11	1
Edit	Layout	2	Republican	Standard	Non-Partisan	8.5 x 11 - 3 Column	1	1	0	9	1
Edit	Layout	3	Libertarian	Standard	Non-Partisan	8.5 x 11 - 3 Column	2	2	0	9	2

Figure 7-24. Ballot Styles view (default columns shown)

7.8.2 Editing the common attributes of a ballot style

To edit the common attributes of a ballot style:

1. From the **Ballot Styles** view, click Edit in the row corresponding to the desired ballot style.

ClearDesign displays the Ballot Style dialog.

Ballot Style: Democratic Save Reset Cancel

Name Sort Seq

Short Name Abbreviation

Import ID Export ID

Voter Group Democratic

Figure 7-25. Ballot Style dialog

2. If necessary, edit the following common attributes:

- **Name**
- **Sort Seq**
- **Short Name**
- **Import ID**
- **Abbreviation**
- **Export ID**

See "Common attributes of entities" on page 241.

3. Click **Save**.

7.8.3 Previewing the layout of a ballot style

To preview the layout of a ballot style:

1. Click **Layout** in the row corresponding to the desired ballot in the Ballot Styles view.
ClearDesign populates the Layout Preview with the selected ballot style.
2. Review and modify the layout as needed.
See "Layout Preview" on page 195.

7.9 Setting up ballots

This section describes how to:

- Display the Ballots view
- Edit the common attributes of a ballot
- Preview an accessible ballot

7.9.1 Displaying the Ballots view

To display the Ballots view:

1. From the Elections view, click the name of the desired election.
ClearDesign displays the Info tab for the selected election.
2. From the Info view, click the Ballot Sets tab.
ClearDesign displays the Ballots Sets view.
3. From the Ballot Sets tab, click the Ballots tab.
ClearDesign displays the Ballots view (Figure 7-26).

Ballot Sets | Ballot Group Styles | Ballot Groups | Ballot Styles | Ballots | Card Styles | Cards | Card Templates | Layout Styles																	
											Search:	Copy	PDF	Excel	CSV	Print	Show / hide columns
			Sort Seq	Name	Ballot Style	Ballot Set	Card Template	Voter Group	Contest Count	Card Count	Precincts Count	Split Count					
Edit	Layout	HTML Layout	1	Ballot 1	Democratic	Standard	8.5 x 11 - 3 Column	Non-Partisan	11	0	1	1					
Edit	Layout	HTML Layout	2	Ballot 2	Republican	Standard	8.5 x 11 - 3 Column	Non-Partisan	9	0	1	1					
Edit	Layout	HTML Layout	3	Ballot 3	Libertarian	Standard	8.5 x 11 - 3 Column	Non-Partisan	9	0	1	1					

Figure 7-26. Ballots tab (default columns shown)

Selectable columns

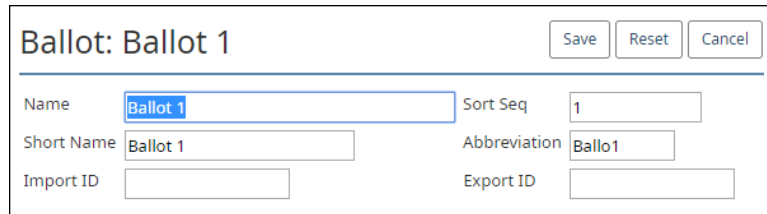
Selectable columns include: Sort Seq, Name, Short Name, Abbreviation, Import ID, Last Edit By, Last Edit Time, Ballot Style, Ballot Set, Card Template, Voter Group, Ballot Groups, Contest Count, Contest Rotations, Contests, Card Count, Cards, Split Counts, and Splits.

7.9.2 Editing the common attributes of a ballot

To edit the common attributes of a ballot:

1. From the Ballots view, click **Edit** in the row corresponding to the desired ballot.

ClearDesign displays the Ballot dialog.



The screenshot shows a dialog box titled "Ballot: Ballot 1" with three buttons: "Save", "Reset", and "Cancel". Below the title bar, there are six input fields arranged in two columns. The left column contains "Name" (with "Ballot 1" entered), "Short Name" (with "Ballot 1" entered), and "Import ID" (empty). The right column contains "Sort Seq" (with "1" entered), "Abbreviation" (with "Ballo1" entered), and "Export ID" (empty).

Figure 7-27. Ballot dialog

2. If necessary, edit the following common attributes:

- **Name**
- **Sort Seq**
- **Short Name**
- **Import ID**
- **Abbreviation**
- **Export ID**

See "Common attributes of entities" on page 241.

3. Click **Save**.

7.9.3 Previewing the layout of a printed ballot

To preview the layout of a printed ballot:

1. Click **Layout** in the row corresponding to the desired ballot in the Ballots view.

ClearDesign populates the Layout Preview with the selected ballot.

2. Review and modify the layout as needed.

See "Layout Preview" on page 195.

7.9.4 Previewing the layout of an accessible ballot

For more information about accessible ballots, see the *ClearAccess Supervisor Guide*.

To preview ballot appearance on an accessible device:

1. In the **Ballots** tab (Figure 7-26), click **HTML Layout** for the ballot you want to preview.

The following window appears (Figure 7-28 on page 178)

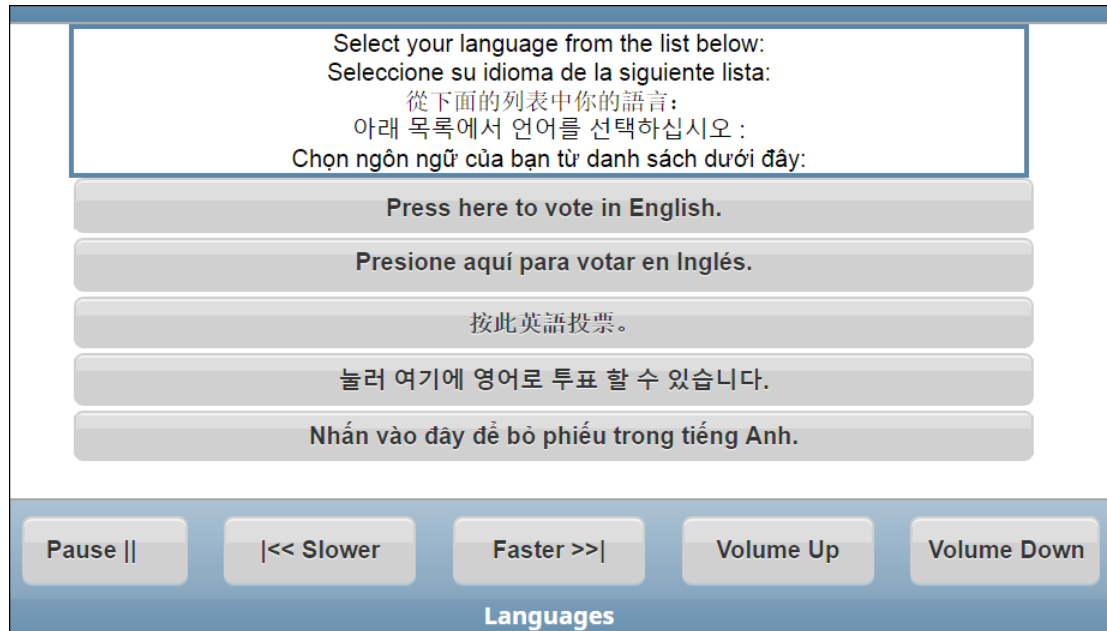


Figure 7-28. Selecting a language

2. Click to the appropriate button to select the desired language.

The following screen appears (Figure 7-29).

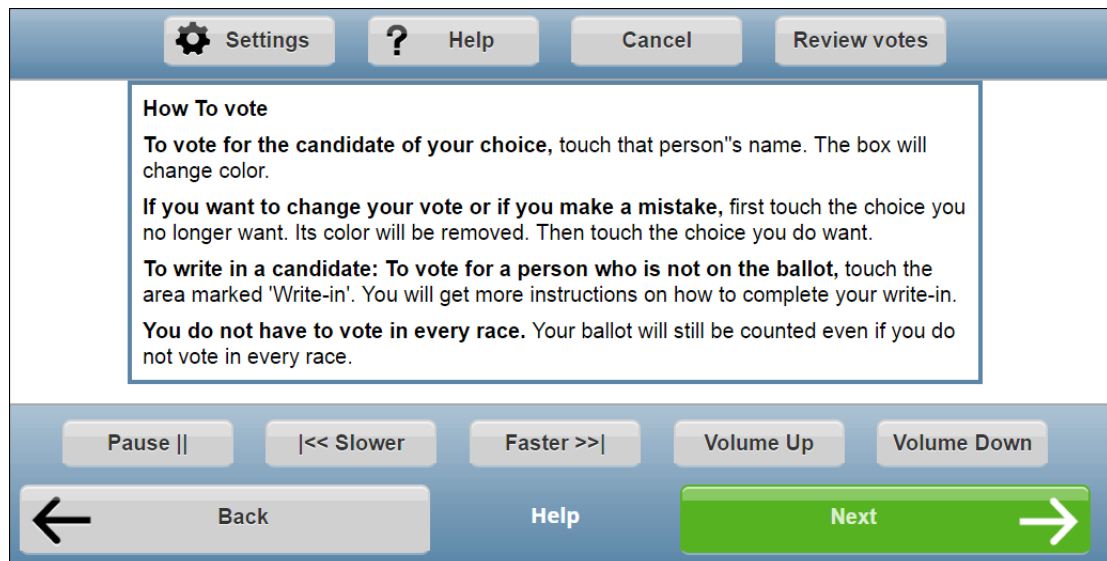


Figure 7-29. How to vote screen

3. Do any of the following:

- To move forward, click **Next**.
- To move backward, click **Back**.
- To change the zoom, color, sound, or screen, click **Settings** (Figure 7-30).

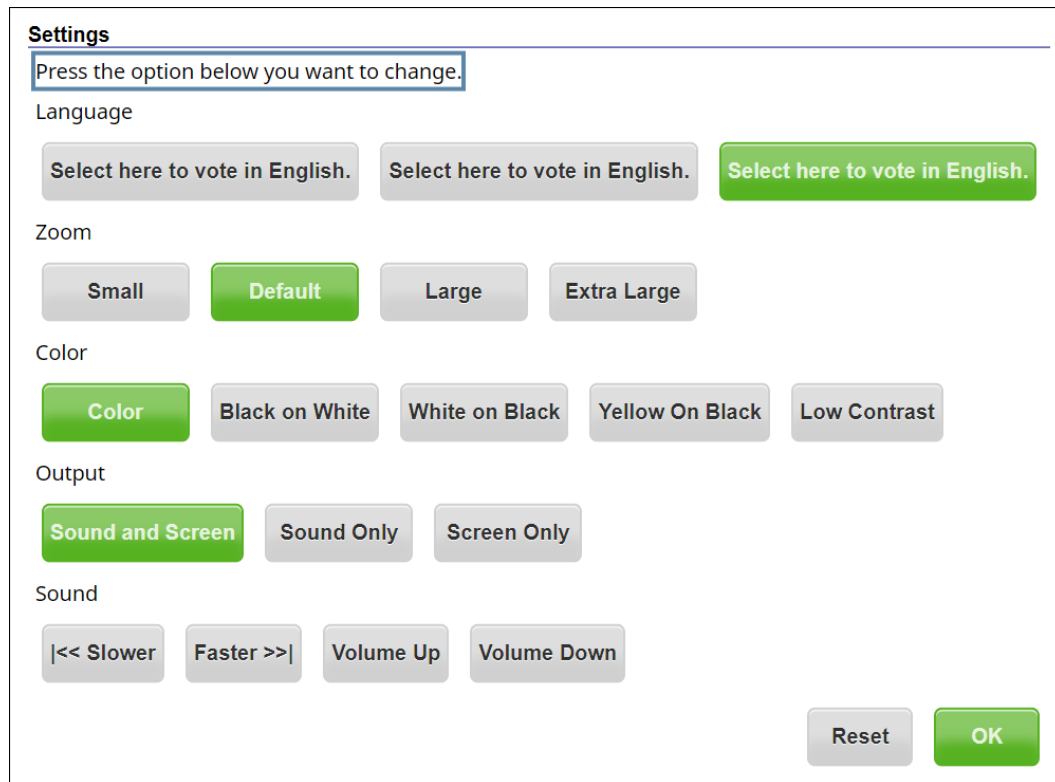


Figure 7-30. Settings screen

On the Settings screen, the Zoom settings control the font size. All font sizes specified for a contest text are converted to a relative font size when you preview an accessible ballot. Examples: A font size of 10 is equal to 100%. A font size of 16 is equal to 160%.

- To view a summary of the voter's actions, click **Review votes**.
4. To return to the **Ballots** view, click **Cancel**.

7.10 Setting up card styles

This topic describes card styles.

Previously generated election media become invalid when any of the following details of card styles change:

- Card layouts—Contests, candidates, voter groups, headers, ballot text (including margins, borders, padding, fonts, justification and colors)
- Candidates—Addition or removal
- Voter groups
- Rotation settings
- Ballot order

7.10.1 Displaying the Card Styles view

To display the Card Styles view:

1. From the Elections view, click the name of the desired election.
ClearDesign displays the Info tab for the selected election.
2. From the Info view, click the Ballot Sets tab.
ClearDesign displays the Ballots Set view.
3. From the Ballot Sets view, click the Card Styles tab.
ClearDesign displays the Cards Styles view (Figure 7-31).

	Sort Seq	Name	Ballot Set	Voter Group	Card Sequence	Card Template	Layout Style	Ballot Styles Count	Cards Count	Contests Count
Edit	1	Card Style 1	Standard	Non-Partisan	1	8.5 x 11 - 3 Column	Color & Border	1	1	10
Edit	2	Card Style 2	Standard	Non-Partisan	2	8.5 x 11 - 3 Column	Color & Border	1	1	2
Edit	3	Card Style 3	Standard	Non-Partisan	1	8.5 x 11 - 3 Column	Color & Border	1	1	9
Edit	4	Card Style 4	Standard	Non-Partisan	1	8.5 x 11 - 3 Column	Color & Border	1	2	9

Figure 7-31. Card Styles view (default columns shown)

Selectable columns

Selectable columns include: Sort Seq, Name, Short Name, Abbreviation, Import ID, Last Edit By, Last Edit Time, Card Sequence, Voter Group, Card Template, Layout Style, Ballot Styles Count, Ballot Styles, Cards Count, Cards, Contests Count, and Contests.

7.10.2 Editing the common attributes of a card style

To edit a card style:

1. From the Cards Styles view, click **Edit** in the row corresponding to the desired card style. ClearDesign displays the Card Style dialog.

The screenshot shows a dialog box titled "Card Style: Card Style 1" with three buttons at the top right: "Save", "Reset", and "Cancel". The dialog contains several input fields and dropdown menus:

- Name:** Card Style 1
- Sort Seq:** 1
- Short Name:** Card Style 1
- Abbreviation:** CS1
- Import ID:** (empty field)
- Export ID:** (empty field)
- Card Sequence:** 1
- Card Template:** 8.5 x 11 - 3 Column (dropdown menu)
- Layout Style:** Color & Border (dropdown menu)

Figure 7-32. Card Styles dialog

2. If necessary, edit the following common attributes:
 - **Name**
 - **Sort Seq**
 - **Short Name**
 - **Import ID**
 - **Abbreviation**
 - **Export ID**

See "Common attributes of entities" on page 241.

The **Layout Style** field is read only.

3. Click **Save**.

7.10.3 Previewing the layout of a card style

To preview the layout of a card style:

1. Click **Layout** in the row corresponding to the desired card style in the Card Styles view. ClearDesign populates the Layout Preview with the selected card style.
2. Review and modify the layout as needed. See "Layout Preview" on page 195.

7.11 Setting up cards

This topic describes how to:

- Display the Cards view
- Edit the Card dialog
- Preview the layout of a card

7.11.1 Displaying the Cards view

To display the Cards view:

1. From the Elections view, click the name of the desired election.
ClearDesign displays the Info tab for the selected election.
2. From the Info view, click the Ballots Sets tab.
ClearDesign displays the Ballots Sets view.
3. From the Ballot Sets view, click the Cards tab.
ClearDesign displays the Cards View (Figure 7-33).

	Sort Seq	Name	Card Style	Ballot Set	Ballots	Voter Group	Card Sequence	Card Template	Contests Count	Splits Count
Edit Layout	19	Card 19	Card Style 1	Standard	Ballot 1	Non-Partisan	1	8.5 x 11 - 3 Column	10	1
Edit Layout	20	Card 20	Card Style 2	Standard	Ballot 1	Non-Partisan	2	8.5 x 11 - 3 Column	2	1
Edit Layout	21	Card 21	Card Style 3	Standard	Ballot 2	Non-Partisan	1	8.5 x 11 - 3 Column	9	1

Figure 7-33. Cards view (default columns shown)

Selectable columns

Selectable columns include: Sort Seq, Name, Short Name, Abbreviation, Import ID, Last Edit By, Last Edit Time, Card Style, Voter Group, Card Sequence, Card Template, Contests Count, Contests, Splits Count, and Splits.

7.11.2 Editing the common attributes of a card

To edit the common attributes of a card:

1. From the cards view, click Edit in the row corresponding to the desired card.
Clear Ballot displays the Card dialog (Figure 7-34).

Card: Card 19 Save Reset Cancel

Name Sort Seq

Short Name Abbreviation

Import ID Export ID

Card Style

Figure 7-34. Card dialog

2. If necessary, edit the following common attributes:
 - **Name**
 - **Sort Seq**
 - **Short Name**
 - **Import ID**
 - **Abbreviation**
 - **Export ID**

See "Common attributes of entities" on page 241.

The **Card Style** field is read only.

3. Click **Save**.

7.12 Setting up card templates

This topic describes how to:

- Display the card templates view
- Add or edit a card template

7.12.1 Displaying the Card Templates view

To display the Card Templates view:

1. From the Elections view, click the name of the desired election.
ClearDesign displays the Info tab for the selected election.
2. From the Info view of the election, click the Ballot Sets tab.
ClearDesign displays the Ballots Set view.
3. From the Ballot Sets view, click the Card Templates tab.
ClearDesign displays the Cards Templates view.

	Sort Seq	Name
<input type="checkbox"/> Edit	10	8.5 x 11 - 3 Column
<input type="checkbox"/> Edit	20	8.5 x 14 - 3 Column
<input type="checkbox"/> Edit	30	8.5 x 17 - 3 Column
<input type="checkbox"/> Edit	40	8.5 x 18 - 3 Column

Figure 7-35. Card Templates view

7.12.2 Adding or editing a card template

To add a card template:

1. Select one of the following options:
 - To edit an existing card template, click **Edit** in the row corresponding to the desired card template in the Card Templates view.
 - To create a new card template, click **Add** in the Card Templates view.

ClearDesign displays the Card Template dialog (Figure 7-36).

The screenshot shows a dialog box titled "Card Template: 8.5 x 11 - 3 Column". At the top right are three buttons: "Save", "Reset", and "Cancel". Below the title bar, there are several fields for configuration:

- Name:** 8.5 x 11 - 3 Column
- Sort Seq:** 10
- Height:** 11
- Front Orientation:** Portrait
- Back Orientation:** Portrait
- Front Number Columns:** 3
- Back Number Columns:** 3
- Oval Position:** Left

Figure 7-36. Card Template dialog

2. If necessary, edit the fields listed in Table 7-13.

Table 7-13. Fields of the Card Templates dialog

Field	Description
Height	Height in inches
Front Orientation	Portrait or Landscape for the front of the template
Back Orientation	Portrait or Landscape for the back of the template
Front Number Columns	The number of columns on the front of the template
Back Number Columns	The number of columns on the back of the template
Oval Position	Right or Left position of the vote targets relative to the candidate names

3. Click **Save**.

7.13 Setting up layout styles

Layout styles control the overall look and feel of a ballot set.

7.13.1 Displaying the Layout Styles view

The Layout Styles view enables to add, delete, or change a layout style.

To display the Layout Styles view:

1. From the Elections view, click the name of the desired election.
ClearDesign displays the Info view of the selected election.
2. From the Info view, click the Ballot Sets tab.
ClearDesign displays the Ballot Sets view.
3. From the Ballot Sets view, click the Layout Styles tab.
ClearDesign displays the Layout Styles View (Figure 7-37).

	Sort Seq	Name
<input type="checkbox"/> Edit	10	Color & Border
<input type="checkbox"/> Edit	20	Border

Figure 7-37. Layout Styles view

Selectable columns

Selectable columns include: Sort Seq and Name.

Default layout styles

ClearDesign provides two default layout styles:

- Color & Border
- Border

To display the settings for these entities, click the corresponding **Edit** button in the Layout Styles view.

Action buttons available from the Layout Styles view

Table 7-14 lists the action buttons available from the Layout Styles view.

Table 7-14. Action buttons available from the Layout Styles view

Button	Description
Add	See "Adding or editing a layout style" on the next page.
Delete	<p>To delete layout styles:</p> <ol style="list-style-type: none"> 1. Select the check boxes in the rows corresponding to the desired layout styles. 2. Click Delete. <p>You cannot delete the default layout styles: Color & Border and Border.</p>

7.13.2 Inheritance of layout styles

Layout styles are hierarchical and inherit their values from their parent element by default.

ClearDesign also supplies default entity style types that other styles inherit. This arrangement allows you to specify an attribute in one place for each language.

The hierarchy of the styles for inheritance is as follows:

1. Layout Style of the ballot set

An entity first inherits style formatting from the Layout Style specified for the ballot set as follows:

- a. The language of the entity subtype (card header, contest header, candidate contest, question contest, and so on) in the layout style for the ballot
- b. The layout for the entity type (header, contest, choice, voter group) default in the layout style for the ballot
- c. The language for the Default option in the layout style for the ballot

2. Layout tab of the entity

If an entity contains a Layout tab, the style specified by language on this tab override any styles inherited from the Layout Style specified for the ballot set.

3. Local formatting in the Ballot Text editor of an entity

Any local formatting by language in the ballot text editor of an entity overrides any formatting inherited from the Layout tab of an entity and any layout styles specified for the ballot set.

Example

Suppose that the font family is specified only in the Default layout entity style. In this situation, you can globally change the font family for each language by setting it in the default layout entity style. If the font family is specified for a contest's default language, all languages in that contest will use that font family.

If you want a different font only for the candidate names, add the Choice Candidate option and set the alternative font at this level by language. With this arrangement, the Choice Candidate option overrides the Default option, but only for Candidates.

7.13.3 Adding or editing a layout style

To add or edit a layout style:

1. Select one of the following options:
 - To add a new layout style, click the Add button from the Layout Styles view.
 - To edit an existing layout style, click the Edit button in the row corresponding to the desired layout style in the Layout Styles view.

ClearDesign displays the Layout Style dialog (Figure 7-38).

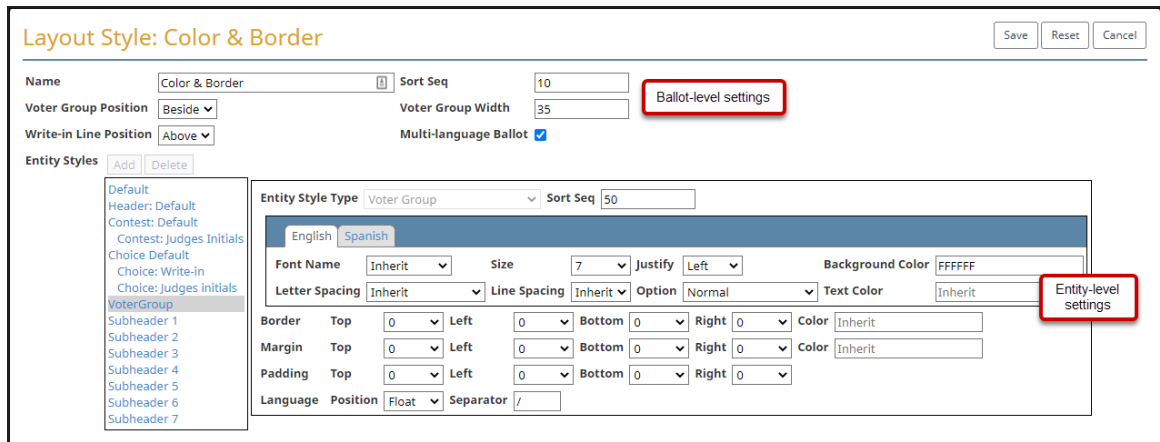


Figure 7-38. Layout Style dialog

The remainder of this topic describes the settings available from the Layout Styles dialog.

Ballot-level settings

Ballot-level settings appear at the of Layout Style dialog. Table 7-15 describes these settings.

Table 7-15. Ballot-level settings

Setting	Description	Default
Name	Name of the layout style	NA
Sort Seq	Editable sort sequence for the layout style	NA

Table 7-15. Ballot-level settings (continued)

Setting	Description	Default
Voter Group Position	<p>Position of the voter group name relative to candidate name.</p> <p>One of the following:</p> <ul style="list-style-type: none"> • None (no voter group name) • Beside • Below 	Beside
Voter Group Width	<p>Distance between the candidate name and voter group name when they appear together.</p> <p>If you select a Voter Group Position of Beside, enter a percentage for the Voter Group Width.</p> <p>If no Voter Group is desired, set this value to 0 to allocate maximum space for the candidate or choice name.</p> <p>If the Voter Group Width is 0, the text goes to the bottom right and flows into the name of the candidate.</p>	35
Write-in Line Position	<p>Sets the position of the write-in line in relation to the write-in label.</p> <p>One of the following:</p> <ul style="list-style-type: none"> • Above—The write-in line appears above the write-in label. • Below—The write-in line appears below the writer-in label. • None—The write-in line does not appear. <p>By default, ClearDesign places the line for the bottom write-in choice on top of the bottom border line of the contest when the write-in line is below the write-in label or when there is no label. To ensure that the write-in line is visible in this situation, select the Choice Default entity style and set a sufficiently large Padding Bottom value.</p>	Above
Multi-language Ballot	<p>If checked, text for all languages defined appear on the same ballot. Language options in the entity-level settings define how the multiple languages are displayed for each entity type.</p>	

Entity-levels settings for each language

The Layout Style dialog contains some settings related to each language in the election.

Table 7-16 lists the entity settings related to each configured language.

Table 7-16. Entity-level settings for each configured language

Setting	Description
Font Name	The font name
Size	The font size in points.
Justify	The alignment of the text. Selections are: Inherit, Left, Center, and Right
Background Color	An HTML color hex code or name
Letter Spacing	The amount of space between a group of letters to affect density in a line or block of text. Selections are: Inherit, Compressed, Normal, Expanded, and Very Expanded
Line Spacing	The vertical distance between lines of text.
Option	Options for the font. The available options can vary depending on the selected font. One of the following: Inherit, Normal, Bold, Italic, Underline, Bold Italic, Bold Underline, Italic Underline, and Bold Italic Underline
Text color	An HTML color hex code or name.

Entity-level settings for margins, borders, and padding

Because ClearDesign layout is based on a table model, each entity can be considered as a "box." Each box has margin, border, and padding attributes that interact as shown in Figure 7-39

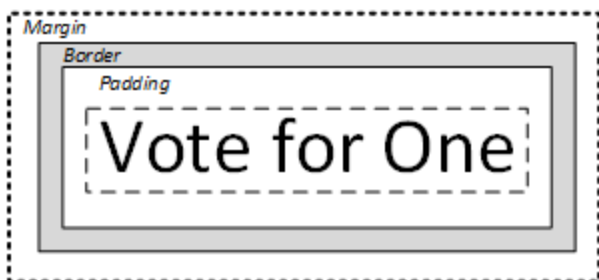


Figure 7-39. Margin, border, and padding

Figure 7-39 shows the following:

- The margin is the space outside the border up to the edge of the entity's box.
- The border is the optional outline that separates the margin and the padding.
- The padding is the space between the border and the content.

The Layout Style Editor contains settings for margins, borders, and padding. You can specify that the language-specific settings inherit values from a parent entity or you can a pixel value in the range of 0 to 18.

Entity-level settings for multi-language ballots

When the Multi-language Ballot setting is checked, all the languages defined are displayed together for each entity type. The entity-level Language Position setting determines how the languages are placed, with options Inherit, Single, Stack, Merge, and Float. When Float is selected, a character can be specified in the Language Separator setting to separate the languages.

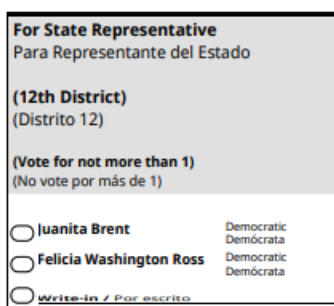


Figure 7-40. Example: multi-language ballot with two languages defined

Figure 7-40 demonstrates the following settings for an election with two languages defined:

- The Default Entity Style has the Language Position set to Merge.
This means that paragraphs of text are merged by language individually. Where there are blank lines between the paragraphs, only one blank line will be merged, and the others will be removed; there should be an equal number of paragraphs in each language for the merging to work best.
In the example shown in Figure 7-40, the Contest Entity Style has Language Position set to Inherit. As a result, the Contest text inherits the Default Merge setting and shows English followed by Spanish for each paragraph of text.
- The Choice Candidate Entity Style has the Language Position set to Single.
This means that only the first defined language (English in this case) is shown for candidate names.
- The Voter Group Entity Style has the Language Position set to Stack.
This means that the text for each language is stacked vertically.

- The Choice Write-in Entity Style has the Language Position set to Float, with Separator “/”. This means that the text for each language is floated horizontally, with “/” between each language.

If Float is used for headers and contest text, ClearDesign tries to place the text side by side to fill the available width. However, if the text is too wide for the available space, ClearDesign wraps the block below the preceding one. If the text has a background color, the background color fills only the width used by the text.

Applying a layout style to a ballot

To apply a layout style to a ballot set:

1. In the **Ballot Sets** view, in the row for the ballot set you want to modify, click **Edit**.
The Ballot Set dialog appears.
2. In **Layout Style**, select the layout style you want to apply.

Setting entity styles

An *entity style* is named collection layout settings, such as font type, size, and position. Examples are Header Default, Voter Groups, and various Sub Headers.

The lower portion of Layout Style dialog manages entity styles (Figure 7-41).

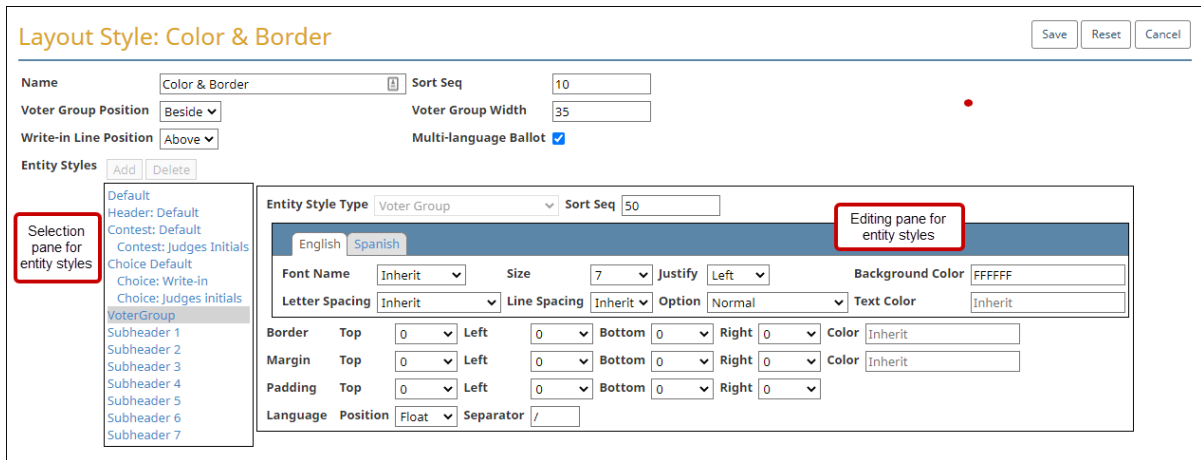


Figure 7-41. Entity Styles section of the Layout Style dialog

Table 7-17 lists the actions that are available for entity styles.

Table 7-17. Actions available for entity styles

Actions	Description
Edit an existing entity style	<ol style="list-style-type: none"> 1. Click the name of the desired entity style in the selection pane. 2. Change any desired settings in the editing pane. 3. Click Save.
Add a new entity style	<ol style="list-style-type: none"> 1. Click Add. 2. Enter settings for the new entity style in the editing window. 3. Click Save.
Delete an entity style	<ol style="list-style-type: none"> 1. Click the name of the desired entity style in the editing pane. 2. Click Delete.

Entity style types

An entity style type associates a unique set of layout parameters with a named entity style. The following types are customized through the **Layout Styles** editor.

You cannot change the entity style type for an existing entity.

Table 7-18. System-defined entity style types

Entity style type	Description
Header Entity Styles	
Header Default	Controls all headers unless overridden by a more specific entity style for headers
Header Card Header	Controls card headers only
Header Card Footer	Controls card footers only
Header Contest Header	Controls contest headers only
Header Contest Footer	Controls contest footers only
Contest Entity Styles	
Contest Default	Controls all contests unless overridden by a more specific entity style for contests.

Table 7-18. System-defined entity style types (continued)

Entity style type	Description
Contest Candidate	Controls Candidate-type contests except for Choices
Contest Question	Controls Question-type contests except for Choices
Contest Retention	Controls Retention-type contests except for Choices
Contest Recall	Controls Recall-type contests except for Choices.
Contest Straight Party	Controls the Straight Party-specified contest, but not the contests affected by the straight party contest. Also does not affect Choices.
Contest Primary Preference	Controls the Primary Preference-specified contest. Does not affect Choices.
Choice entity styles	
Choice Default	Controls all choices unless overridden by a more specific entity style for choices
Choice Candidate	Controls the choices of a Candidate-type contest
Choice Question	Controls the choices of a Question-type contest
Choices Retention	Controls the choices of a Retention-type contest.
Choices Recall	Controls the choices of a Recall-type contest.
Choice Straight Party	Controls the choices of a Straight Party-type contest.
Choice Primary Preference	Controls the choices of a Primary Preference-type contest.
Choice Judges Initials	Controls the choices of a Judges Initials-type contest
Choice Label	Controls the label (informational text) field of any contest
Choice Write-in	Controls the write-in field of any contest
Miscellaneous entity styles	
Voter Group	Controls the displayed voter group if a candidate choice has a partisan association

Table 7-18. System-defined entity style types (continued)

Entity style type	Description
Subheader 1 through Subheader 7	<p data-bbox="630 331 1268 363">Controls the settings for the selected subheader type.</p> <p data-bbox="630 384 1398 527">Subheader 5 is reserved for the contest Vote For value imported from files such as BDF, GEMS, or OCVR. (The fixed text can be modified by localizing message 5004. See the <i>ClearDesign Administration Guide</i>.)</p> <p data-bbox="630 558 1393 621">For OCVR format only, Subheader 4 is reserved for question text other than the first line.</p>

Chapter 8. Layout Preview

This chapter describes Layout Preview.

8.1 What is Layout Preview?

A **Layout Preview** provides an on-screen view of a selected ballot style, ballot, card style, or card. The page is useful for ballot proofing.

The Layout Preview allows you to experiment with layout styles and card templates. You can drag contests and headers to different areas of the ballot to find the best location. Available actions vary according to the type of entity that you preview.

The initial generation of ballot and ballot style layouts is a manual operation: you click **Generate** on the Ballot Set page.

For convenience, ClearDesign makes automatic adjustments when you format headers or the content of existing contests in the Layout Preview. Manual regeneration is required only when you add or remove contests and candidates from any ballot styles.

Card generation is always manual. In general, card generation is required only when proofing macros and when formatting is finalized.

Note: ClearDesign discards any changes in Layout Preview when you reset any affected ballot styles, even if you have clicked **Save** in Layout Preview. See "Resetting ballot styles" on page 160.

8.2 Displaying the Layout Preview

To display the Layout Preview:

1. From the Info view of an election, click the Ballot Sets tab.
See "Displaying the Info tab" on page 39.
2. From the Ballot Sets view, select one of the following views (tabs):
 - Ballot Styles view (page 175)
 - Ballots view (page 176)
 - Card Styles view (page 180)
 - Cards view (page 182)

3. Click the **Layout** button in the row corresponding to the entity that you want to preview.

For example, Figure 8-1 shows the Ballots Sets view. In this image, the **Layout** buttons are enclosed in red.

Ballot Sets											
Ballot Group Styles											
Ballot Groups											
Ballot Styles											
Ballots											
Card Styles											
Cards											
Card Templates											
Layout Styles											
Search: <input type="text"/>											
Copy PDF Excel CSV Print Show / hide columns											
	Sort Seq	Name	Ballot Set	Voter Group	Card Template	Ballot Groups Count	Ballots Count	Card Styles Count	Contests Count	Precincts Count	
Edit	Layout	1	Ballot Style 1	Standard	Non-Partisan	8.5 x 11 - 3 Column	1	1	2	11	1
Edit	Layout	2	Ballot Style 2	Standard	Non-Partisan	8.5 x 11 - 3 Column	1	1	1	9	1
Edit	Layout	3	Ballot Style 3	Standard	Non-Partisan	8.5 x 11 - 3 Column	2	2	1	9	2

Figure 8-1. Ballot Sets view-Layout buttons

When you click a **Layout** button, ClearDesign displays the corresponding Layout Preview.

Figure 8-2 shows the top portion of a Layout Preview. Buttons to control viewing options appears above an image of the ballot. In Figure 8-2, only the top two lines of the ballot image appear.

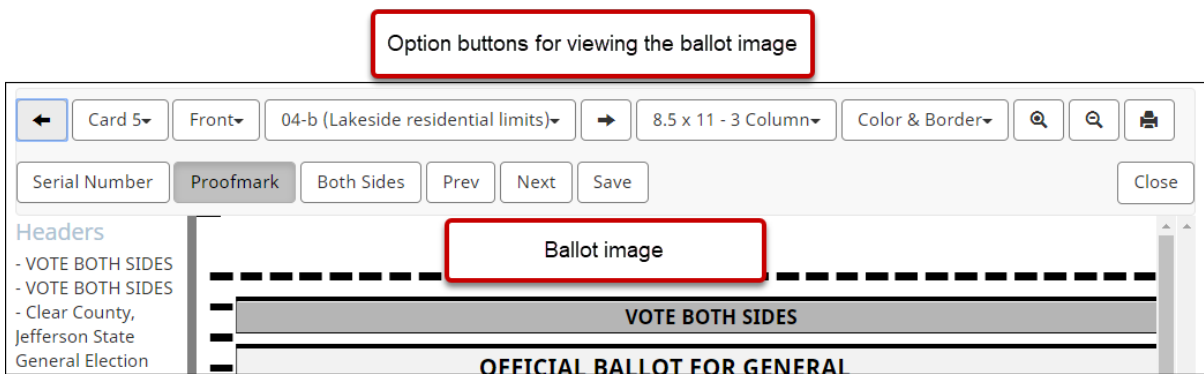


Figure 8-2. Layout Preview of a ballot

8.3 Selecting the card side

To select the card side to view in the **Layout Preview**, do one of the following:

- Select **Front** or **Back** (Figure 8-3).

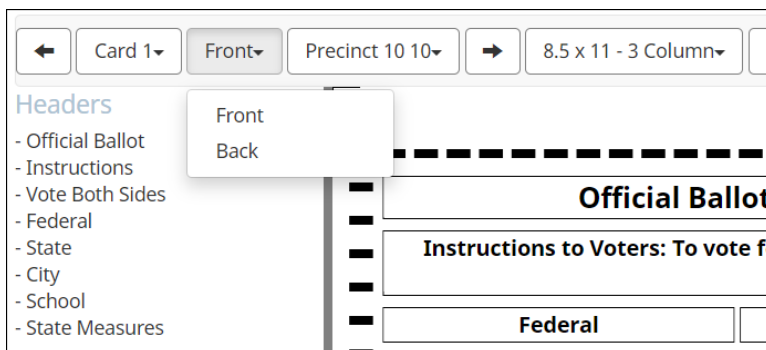


Figure 8-3. Selecting the Front and Back

- Click the forward and back arrow key to change sides (Figure 8-4).

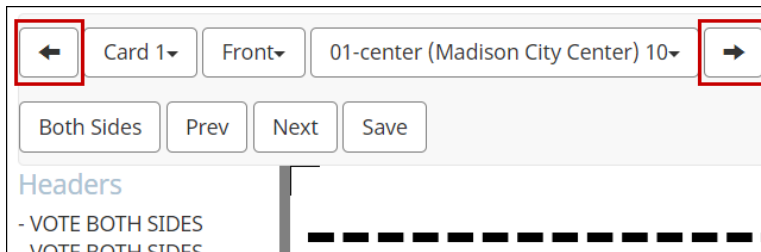


Figure 8-4. Using the arrow keys to change card sides

8.4 Changing the card template

The Layout Preview enables you to select a card template that specifies the card dimensions of the card, the number of columns on the front and back, the oval position, and the orientation.

For example, the first selection in Figure 8-5 for the card template is **8.5 x 18 - 4 Front 3 Back**. To change the card template, select another value from the drop-down list.

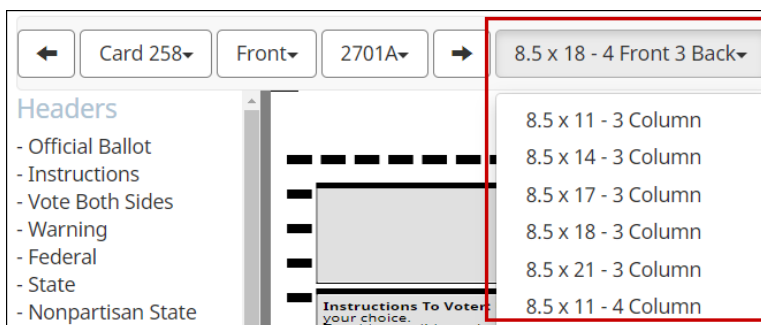


Figure 8-5. Selecting a card template

See also "Setting up card templates" on page 183.

8.5 Selecting the split

Select the desired split from the drop-down list (Figure 8-6).

The drop-down list for a split is available only for ballots and cards. It is unavailable when you select a ballot style or card style.

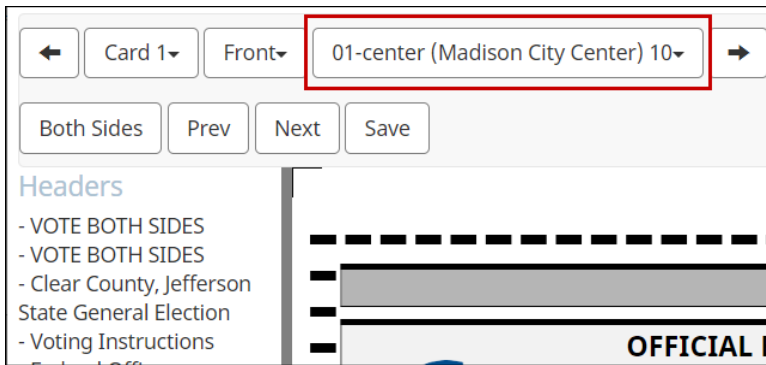


Figure 8-6. Selecting a split

If a split name appears in more than one precinct, the precinct name precedes the split name in the drop-down list.

Example:

Precinct 10 - Split B

Precinct 20 - Split B

See also "Splits" on page 79.

8.6 Changing the layout style

The layout style controls the overall design of the ballot style on the **Layout Preview** page. Figure 8-7 shows that the layout style Color & Border is selected.

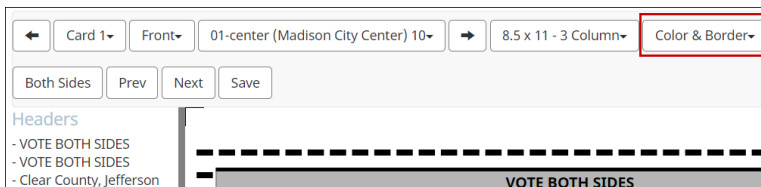


Figure 8-7. Selecting a layout style

See also "Setting up layout styles" on page 185.

8.7 Zooming in or out

To zoom in or out on an image in the **Layout Preview** page, use the zoom buttons (Figure 8-8 on page 199):

- To make the preview larger, click **Zoom In (+)**.
- To make the preview smaller, click the **Zoom Out (-)**.

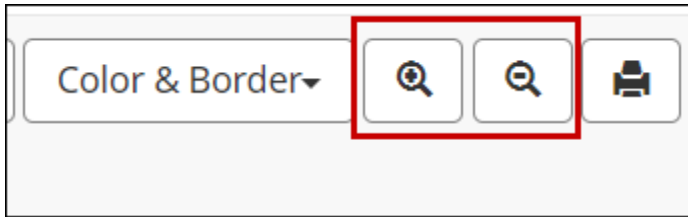


Figure 8-8. Options for zooming in and out

8.8 Printing the layout preview image

To print the image in the **Layout Preview** to a local printer, click the **Print** button (Figure 8-9).

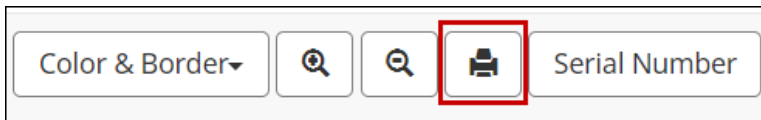


Figure 8-9. Print button for the Layout Preview image

8.9 Viewing stubs

A Layout Preview of an entity contains a **Stubs** button only when an election contains a **Header Type** of Card Stub Top or Card Stub Bottom.

For a description of Card Stub Top and Card Stub Bottom, see Table 7-2, "Header Type values" on page 135

The **Stubs** button toggles the display of stubs. By default, the stubs do not display in Layout Preview until you click **Stubs**.

Figure 8-10 shows the top section of a ballot after clicking the Stubs button. The Stubs button is highlighted to indicate that the stub is active. This stub contains the placeholder text "Stub text."

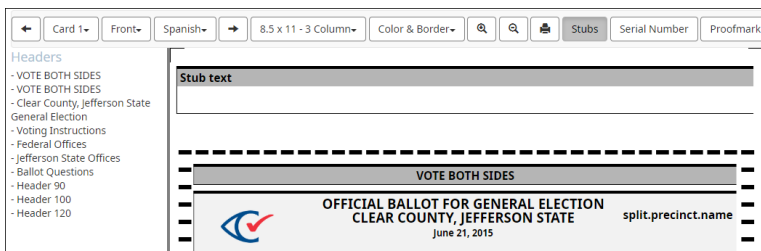


Figure 8-10. Layout Preview of a ballot containing a stub

8.10 Adding proof marks

To add a proof mark to the image in the **Layout Preview** page, click **Proof Mark**.

The previously specified proof mark is added as a watermark to the image.

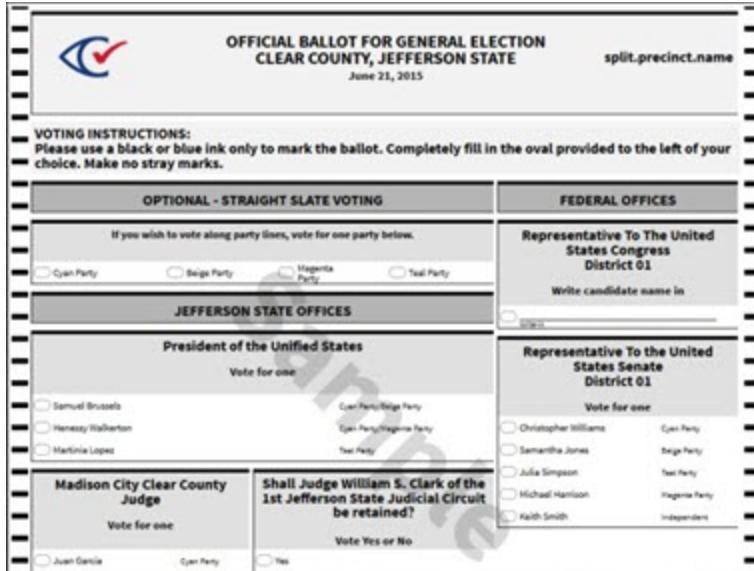


Figure 8-11. Layout Preview showing the proof mark "Sample"

8.11 Previewing both sides of cards

To preview both sides of a card, side by side, click **Both Sides**.

When dragging and dropping headers with both sides visible, activate the side where you will drop the header.

8.12 Resizing and repositioning contests or headers

To change the position of a contest or a header in the **Layout Preview** page:

1. Within the ballot image, click a contest or header to select it.
The selected entity is outlined in red.
2. To move the selected entity, hold down the left mouse button, drag it to a new location, and release the mouse button.
3. To resize the selected entity, hold down the left mouse button, drag an edge of the entity to the desired size, and release the mouse button.

When you drag to resize an entity, it snaps to regular predetermined intervals. To resize an entity in smaller intervals, hold down the **Ctrl** key when you drag.

Because other entities do not automatically move to accommodate a new entity, move each entity manually.

8.13 Adding headers to layouts

To add a header to a layout:

1. In the **Headers** pane, click the header to select it.
The cursor changes to a four-sided arrow.
2. Drag the header from the **Headers** pane to the desired location in Layout Preview (Figure 8-12).
3. Release the mouse button.

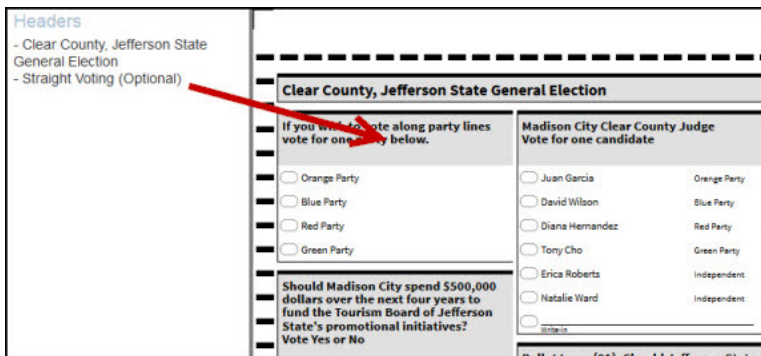


Figure 8-12. Dragging a header to the desired location in the Layout Preview

8.14 Paging through a series of ballot images

To page through a series of ballot images in the **Layout Preview** page, click **Prev** to move backward or **Next** to move forward.

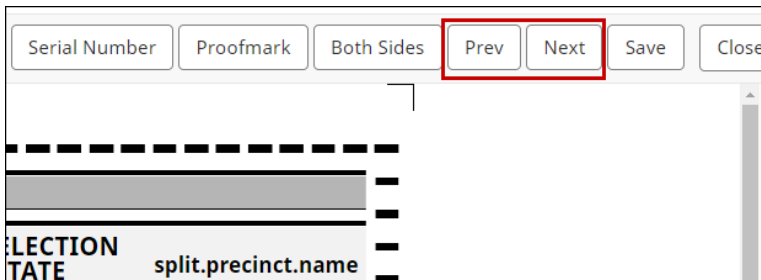


Figure 8-13. The Prev and Next buttons for paging through ballot images

8.15 Moving text from one card to another

To move text from one of the cards in a ballot to another card in the same ballot on the **Layout Preview** page:

1. Select the text you want to move.
2. Enter **[Ctrl+X]** to cut the text from the present location.
3. Move the cursor to the location where you want to place the text.
4. Enter **[Ctrl+V]** to paste the text in the new location.

8.16 Saving preview changes

To save changes made through the **Layout Preview** page, click **Save**.

Saving fails when any ovals overlap in the preview. This problem can occur when dragging and dropping contests. An error message directs you to the side, row, and column where the overlap occurs. The problem is resolved by adjusting the position of at least one of the affected contests.

8.17 Closing the Layout Preview page

To close the **Layout Preview** page:

1. Click **Save**.
ClearDesign discards any unsaved changes.
2. Click **Close**.

Chapter 9. Managing languages, device messages, and audio

9.1 Objectives

After reading this chapter, you should be to add languages to an election, edit device messages, and manage audio associated with device messages.

9.2 Prerequisites

Before adding languages, make sure that an election meets the following prerequisites:

- Define all required splits.

When you add a language, you can associate the language with all or specific splits. This action ensures the language-specific ballot media get generated for the appropriate splits.

See "Adding or editing contests" on page 85.

- Stabilize all ballot text in English.

By default, ClearDesign provides an English tab for entities containing a Ballot Text editor (voter groups, contests, candidates, and headers). When you add new languages, ClearDesign adds tabs associated with each language in the Ballot Text editor. The tabs for the additional languages inherit layout and formatting from the English tab. To apply consistent formatting of ballot text for all languages, stabilize the ballot text in English to avoid potential reformatting when you add other languages.

However, you have to the option of applying language-specific formatting, if desired.

See the following topics:

- "Adding or editing a voter group" on page 62
- "Adding or editing contests" on page 85
- "Adding or editing candidates" on page 99
- "Adding or editing a header" on page 137

Before you edit device messages and record audio, set up vote centers and configure device types.

See the following topics:

- "Adding or editing vote centers" on page 1
- "Device types" on page 120

9.3 Guidelines for supporting languages in addition to English

This topic provides guidelines for supporting languages in addition to English.

ClearDesign creates ballots in English by default. You can include additional languages as needed. ClearDesign creates separate ballot image files for each language in the election unless Multi-language Ballot is checked in the layout style being used. (For an explanation, see "Entity-level settings for multi-language ballots" on page 190.)

When you add a language, associate the language with the relevant splits.

If your election contains audio associated with accessible devices, ClearDesign requires you to provide translations of the audio for any languages in addition to English

Table 9-1 lists some considerations for adding languages, translations, and audio to an election.

Table 9-1. Considerations: adding languages other than English

Requirement	Action	See
Paper ballots only/ English only	No translation or audio required.	Skip this section.
Paper ballots/ Translation required	Translate ballot text in ClearDesign.	"Managing translations" on page 210
Audio required (ClearAccess)/ English only	Use automatic text-to speech. You can preview this audio by clicking the TTS button on the affected screens.	"Text-to-speech (TTS)" on page 215
Audio required (ClearAccess)/ Translation required	Translate ballot/contest questions. Translate ClearAccess device messages.	"How to record device messages and ballot text" on page 216

9.4 Displaying the Languages view

To display the Languages view, select one of the following options:

- From the Election menu, select **Languages**.
- From the Info view of an election, click the Languages tab.

ClearDesign displays the Languages view (Figure 9-1).

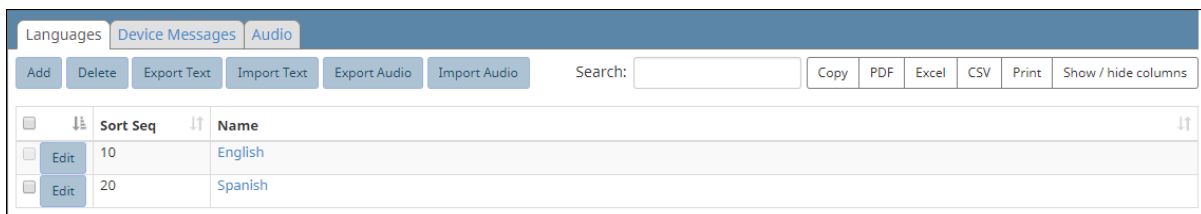


Figure 9-1. Languages view (default columns shown)

Selectable columns: Languages view

Use the **Show / hide columns** button to select which columns appear. Selectable columns include: Sort Seq, Name, Short Name, Abbreviation, Import ID, Export ID, Last Edit By, Last Edit Time, Log Count, and ISO Code. By default, the Sort Seq and Name columns appear.

Table 9-2. Action buttons: Languages view

Action Button	Description
Add	See "Adding languages and changing language settings" on the next page.
Delete	To delete a language other than the English: <ol style="list-style-type: none"> 1. Select the check box for each desired language. 2. Click Delete. <p>You cannot delete English, which is the default language.</p>
Export Text	See "Exporting language text files for translation" on page 210.
Import Text	See "Importing a translated language text file" on page 213.
Export Audio	See "Managing device messages" on page 207.
Import Audio	See "How to record device messages and ballot text" on page 216.

Table 9-3. Additional tabs available from the languages view

Tab	See
Device Messages	"Managing device messages" on the next page
Audio	"Displaying the Audio view" on page 214

9.5 Adding languages and changing language settings

To add a language to an election template:

1. Select one of the following options:
 - To add a language, click **Add** from the Languages view.
 - To edit the settings of a language, click **Edit** in the desired row of the Languages view.

ClearDesign displays the Language dialog.

The screenshot shows the 'Language: Spanish' dialog box. At the top right are 'Save', 'Reset', and 'Cancel' buttons. Below the title bar are two tabs: 'Basic' (selected) and 'Splits'. The 'Basic' tab contains the following fields:

- Name:** Spanish
- Sort Seq:** 30
- Short Name:** Spanish
- Abbreviation:** Spanis
- Import ID:** (empty text box)
- Export ID:** (empty text box)
- Iso Code:** es (with a dropdown arrow)

Figure 9-2. Language dialog, Basic tab

2. If necessary, edit the following common attributes:
 - **Name**
 - **Sort Seq**
 - **Short Name**
 - **Import ID**
 - **Abbreviation**
 - **Export ID**

See "Common attributes of entities" on page 241.

3. (Optional) In **ISO Code**, select the ISO code of the language from the drop-down list. This setting is required for generating text-to-speech audio.

- (Optional) Select the **Splits** tab.

Figure 9-3. Language dialog, Splits tab

By default, all splits in the election are selected. Clear the check boxes of any splits that do not require ballots in the current language.

- Click **Save**.

9.6 Managing device messages

A device message is text presented to users of ClearAccess (Accessible Marker Device Type) or ClearCast (Paper Scanner Device Type).

9.6.1 Displaying the Device Messages view

To display the Device messages view (Figure 9-4), click the Devices Messages tab when on the Languages view.

Name	Device Class	Language	Message	Audio Source	Audio Length
Edit	Accessible Marker	English	erase		
Edit	Accessible Marker	Spanish	erase		

Figure 9-4. Device Messages view (default columns shown)

Selectable columns: Device Messages view

Click **Show / hide columns** to select which columns appear. Selectable columns include: **Name**, **Log Count**, **Device Class**, **Language**, **Message**, **Audio Source**, and **Audio Length**. By default, all columns appear other than **Log Count**.

Reset button

Click **Reset** to return device messages to their default state.

9.6.2 Editing device messages

To edit and record an individual device message:

1. From the **Languages** view, select the **Device Messages** view.
2. Click **Edit** in the row corresponding to the desired device message.

Ensure the correct language is selected.

ClearDesign displays the Device Message dialog for the selected device message. Figure 9-5 shows an example.

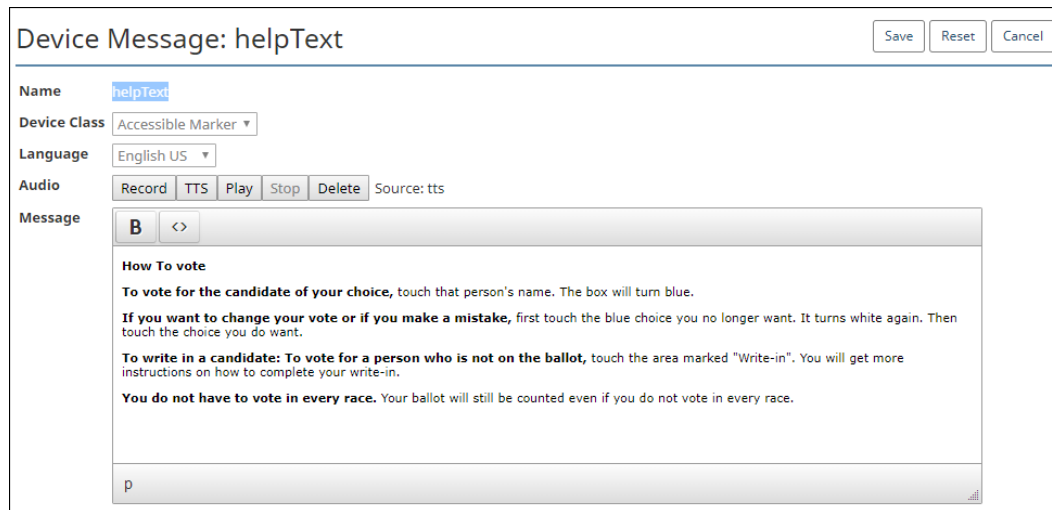


Figure 9-5. Device Message dialog

3. In **Message**, edit the text of the message:
 - To apply boldface, highlight any portion of the message and click **B**.
 - To view the HTML source code, click **<>**.
 You can use only the HTML tags **
, **<p>, and ****.
4. (Optional) To create an MP3 recording of the message that ClearAccess can use, do the following:
 - a. Click **Record**.
 Google Chrome may issue a message about using your internal microphone.
 - b. Read the message.
 - c. When done, click **Stop**.
5. When you finish editing the device message, click **Save**.

For straight party elections and open primaries, Clear Ballot recommends that jurisdictions edit device messages to suit their specific requirements and circumstances.

9.6.3 Using HTML in device messages

You can format device messages by using HTML. You can use only the following HTML tags:

- <p>
-
-

Figure 9-6 an example of HTML in a device message.

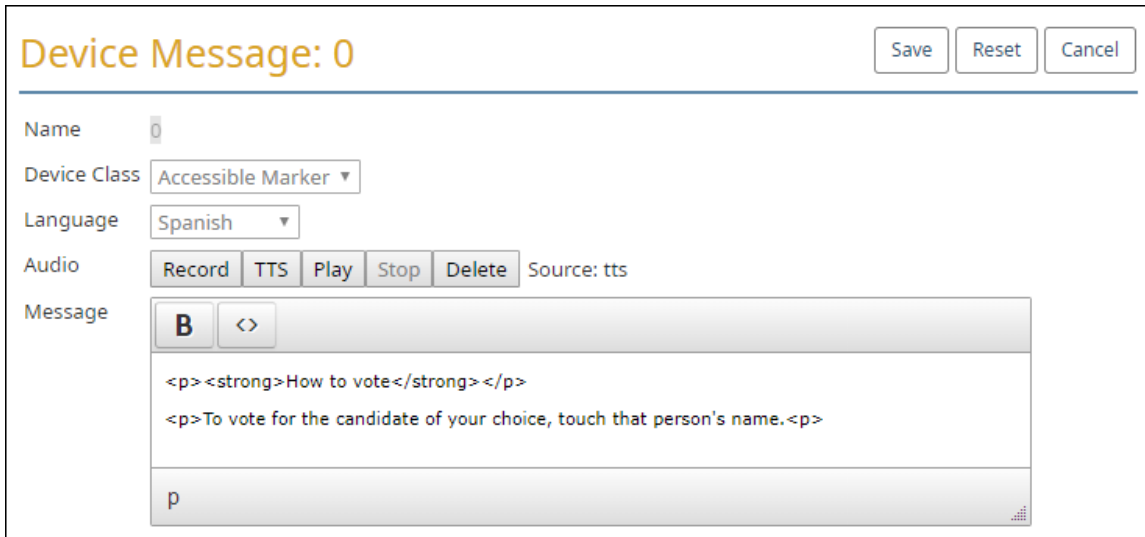


Figure 9-6. Example of HTML in a device message

9.6.4 Using macros in device messages

Device messages can use macros to handle variable text, such as geographical information. Figure 9-7 shows an example.

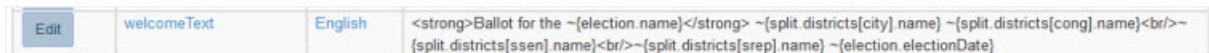


Figure 9-7. Example of macro usage in device messages

For more information, see "Using Macros" on page 145.

9.7 Managing translations

This topic describes how to manage translations.

9.7.1 Exporting language text files for translation

To export language text files for translation:

1. If the election was upgraded from a previous version of ClearDesign software, click **Reset** from the **Device Messages** view.

The reset action removes previous audio recording recordings of device messages and ensures that your election has the most up-to-date device messages. The reset action does not remove audio recordings of contests, candidates, and so on.

2. From the **Language** view of the election, click **Export Text**.

The Export Language Text Files dialog appears (Figure 9-8).

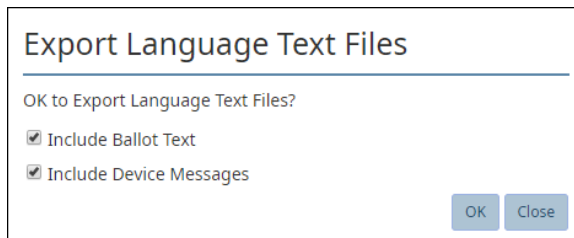


Figure 9-8. Export Language Text Files dialog

The Export Language Texts Files dialog contains two option that are selected by default:

- **Include Ballot Text**
- **Include Device Messages**

3. To export the language text data:
 - a. (Optional) Deselect either or both of the options in the Export Language Text Files dialog.
 - b. Click **OK**.

When you click **OK**, ClearDesign creates a zip folder with a name in the following format in your browser-specific download folder:

ElectionName-yyyy-mm-ddmm-ss-text.zip

The zip folder contains an HTML file named TextEditor.html and one CSV file for each language in the election.

9.7.2 Using Google Translate

This section provides some guidelines for using Google Translate.

Do not rely on Google Translate alone for completely accurate and error-free translations. Use the output from Google Translate only as a baseline for review and verification by a human translator.

The steps in the remainder of this section assume the following:

- You have exported the Zip language folder as described in the previous section.
- Google Chrome is installed and configured as the default browser on your computer.

To use Google Translate, do the following:

1. Transfer the zip folder that you exported in the previous section to a computer that can access the Internet.
2. Navigate to the location of the zip folder, right-click it, select **Extract All**, and specify a location.

Window Explorer opens the extracted language text folder. Figure 9-9 shows an example.




Name	Date modified	Type	Size
 Spanish.csv	1/24/2018 1:56 PM	Microsoft Excel C...	66 KB
 TextEditor.html	1/24/2018 1:56 PM	Chrome HTML Do...	305 KB
 Vietnamese.csv	1/24/2018 1:56 PM	Microsoft Excel C...	68 KB

Figure 9-9. Example of an extracted language text folder

3. Double-click the file TextEditor.html to open it in Google Chrome.

The Text Editor appears in the browser window (Figure 9-10).

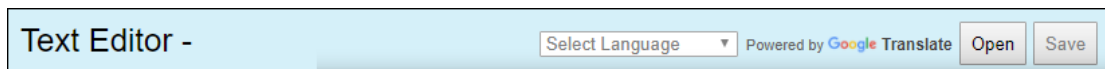


Figure 9-10. TextEditor.html opened in Google Chrome

4. Click the **Open** button in the Text Editor.
5. When the Open dialog appears, click to select the CSV file associated with a language and click the **Open** button (Figure 9-11 on page 212).

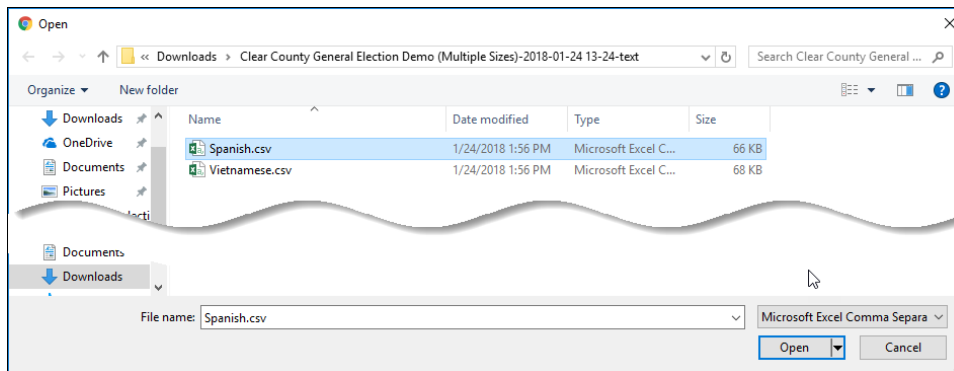


Figure 9-11. Open dialog

The contents of the CSV file for the selected language appears in the Text Editor (Figure 9-12).

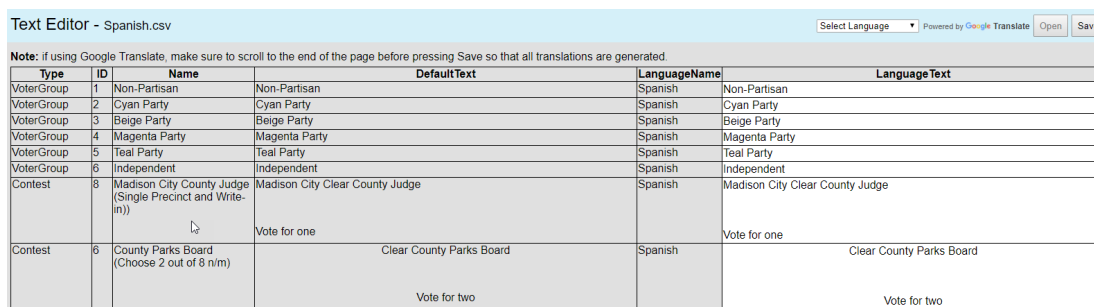


Figure 9-12. CSV language file in the Text Editor window (partial window shown)

6. Make a selection from the **Select Language** drop-down list.
7. Scroll to the end of the file to ensure that everything in the Language Text column gets translated.
8. Click the **Save** button.

The Text Editor saves the translated CSV file and the **Open** button becomes disabled.

9. To translate another CSV or continue working on a CSV file that you previously saved, do the following:
 - a. Right-click in the browser window and select **Reload** to clear the previously loaded file from the Text Editor.
 - b. Repeat steps 4 through 8.

After you complete processing all files with Google Translate, create a zip folder containing the translated CSV files. Continue with "Importing a translated language text file" on the next page.

9.7.3 Using a third-party translator

To outsource translation to a vendor or verify the translation manually, do the following:

1. Export the language text files to a zip folder.
See "Exporting language text files for translation" on page 210.
2. Extract the zip folder.
3. Manually open each CSV file and edit it with an appropriate program.
Microsoft Excel will work in most cases, but translation agencies may have their own unique tools.
4. Once the translations are complete, zip the CSV files together.
5. Reimport the Zip file into ClearDesign by using the **Import Text** button under the Languages model.
See "Importing a translated language text file" below.

If you have problems reimporting your Zip package, double-check that the formatting parameters in the CSV file were not compromised during the translation process. Contact Clear Ballot Technical Support if problems persist.

9.7.4 Importing a translated language text file

This section describes how to import a translated language file processed by Google Translate or by a third-party vendor.

To import a translated language text file:

1. From the **Language** view of the election, click **Import Text**.

The Import Language Text Files dialog appears.

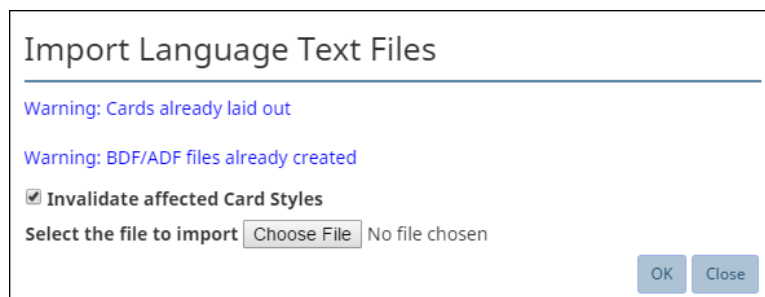


Figure 9-13. Import Language Text Files dialog

2. To import the language text data:
 - a. Deselect **Invalidate affected Card Styles**, if desired.

By default, this option is selected. As a result, ClearDesign invalidates any text affected by the import in cards that are already laid out. A message in the dialog indicates if card have already been laid out. A message also indicates if the ADFx, BDF, and BDFx have been created so that you can regenerate these files after the import.

- b. Click **Choose File** to locate and select the Zip file.
 - c. Click **OK**.

New and modified translations replace affected ballot text or device messages, for which you can now generate audio for use by the ClearAccess system. If the ballot is only in English, ClearAccess automatically uses Chrome's text-to-speech functionality.

9.8 Managing audio

This topic describes how to manage the audio content of an election. ClearAccess and ClearCast use audio content. If your jurisdiction does not use ClearAccess and ClearCast, you can skip this topic.

9.8.1 Displaying the Audio view

To display the Audio view (Figure 9-14), click the Audio tab when in the Languages view.

After you import audio into your election, the Audio tab displays all the available files for the election.

ID	Language	Entity Type	Entity	Audio File	Size (Bytes)
103	Chinese	VoterGroup	Non-Partisan	Play	5183
104	Chinese	VoterGroup	Cyan Party	Play	5291
105	Chinese	VoterGroup	Beige Party	Play	5075
106	Chinese	VoterGroup	Magenta Party	Play	5399
107	Chinese	VoterGroup	Teal Party	Play	4967
108	Chinese	VoterGroup	Independent	Play	4319

Figure 9-14. Audio view (default columns shown)

Selectable columns

Table 9-4 lists the selectable columns of the Audio view.

Table 9-4. Selectable columns: Audio view

Column	Description
ID	The internal ID value that identifies the audio file.

Table 9-4. Selectable columns: Audio view (continued)

Column	Description
Language	The language of the audio file.
Log Count	The number of logs generated for this entry. This is the only column that does not appear by default on the Audio tab. To display this column, use the Show / hide columns button.
Entity Type	The type of content of the file. This column is useful for identifying files with similar content, but with different purposes.
Entity	The name of the entity to which the audio pertains.
Audio File	Use the Play button to review the previously recorded audio file, verify pronunciation, and check the overall quality. <ul style="list-style-type: none"> • Rerecord any errors in pronunciation by using the device messages, contest, or header entity related to the given audio file. • For text-to-speech corrections, re-export the audio. Then fix the pronunciation by modifying the text in the Ballot Text editor.
Audio Length	The length of the audio file in bytes

9.8.2 Recording audio

Two of Clear Ballot's products, ClearAccess and ClearCast, use audio recordings to increase accessibility. You use ClearDesign to record audio for both ClearAccess and ClearCast.

There are two options for recording audio:

- Text-to-speech
- Manual recording

You can use these options individually or in tandem.

9.8.3 Text-to-speech (TTS)

Text-to-speech, also known as TTS, uses computer-generated audio to record all necessary dialog for a given language. Use the Ballot Text editor to record text-to-speech.

ClearAccess and ClearCast automatically provide text-to-speech translations for English, even if no audio is recorded. To preview text-to-speech in ClearDesign, click the **TTS** button in the Ballot Text editors for contests, headers, and device messages.

See the "How to record device messages and ballot text" on the next page for more information

9.8.4 Manually recording audio

You can record manually in ClearDesign by using the record feature in the following locations:

- Ballot Text editor
- Device Message tab, under Language
- AudioEditor.html

Remember to record in all these locations because not all text present in ClearAccess and ClearCast is derived from Contest and Header content. A summary of all available text is present under the **Audio** tab.

Manually recording audio can be useful for difficult-to-pronounce names, which present a challenge for text-to-speech.

You can also change the pronunciation of text-to-speech by editing the text in the Ballot Text editor. Therefore, manual recording is usually unnecessary except in rare cases.

You can record manually in tandem with text-to-speech recording, if desired.

You can record audio with systems other than ClearDesign, but make sure to name the audio files to correspond with any text strings within ClearDesign.

All audio files must be in MP3 format.

For more information, see "How to record device messages and ballot text" below.

9.8.5 How to record device messages and ballot text

This section describes how to record device messages and ballot text.

For assistance with recording audio, contact Clear Ballot Technical Support.

AudioEditor and Voice RSS

The AudioEditor is included when audio is exported. The AudioEditor contains a link to Voice RSS, which is a third-party provider of text-to-speech in many languages. When generating audio, Clear Ballot uses the services provided by Voice RSS. Clear Ballot recommends this service for voice generation.

To use Voice RSS, go to <http://www.voicerss.org/> and set up an account. Using Voice RSS requires you to purchase a license. You can use Voice RSS to process up 1000 KB of data free each day. If you process larger amounts, charges apply.

Steps for recording device messages and ballot text

To record device messages or ballot text:

1. From the **Language** view of the election, click **Export Audio**.

The Export Language Audio Files dialog appears.

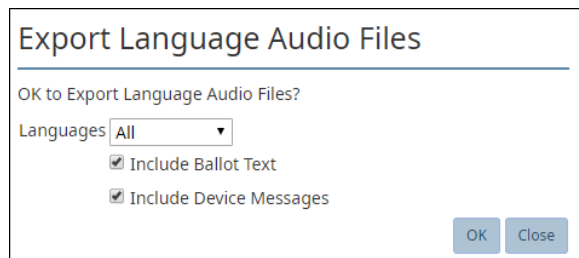


Figure 9-15. Export Language Audio Files dialog

2. To export the language audio data:
 - a. In Language, select **All** or a specific language.
 - b. (Optional) Check **Include Ballot Text**.
 - c. (Optional) Check **Include Device Messages**.

A Zip file named *ElectionName-mm-dd mm-ss-audio.zip* appears in the browser-specific download folder. The file contains a folder for each language in the election and a file named *AudioEditor.html*.

AudioEditor.html, the Audio editor, is a program for manually recording audio or converting text to audio using the Voice RSS online service.

3. Extract the contained folders and *AudioEditor.html* to a dedicated folder on a computer with an Internet connection.
4. From the extracted archive, double-click *AudioEditor.html*.

The Audio editor appears in a browser window. (No text is loaded initially.)

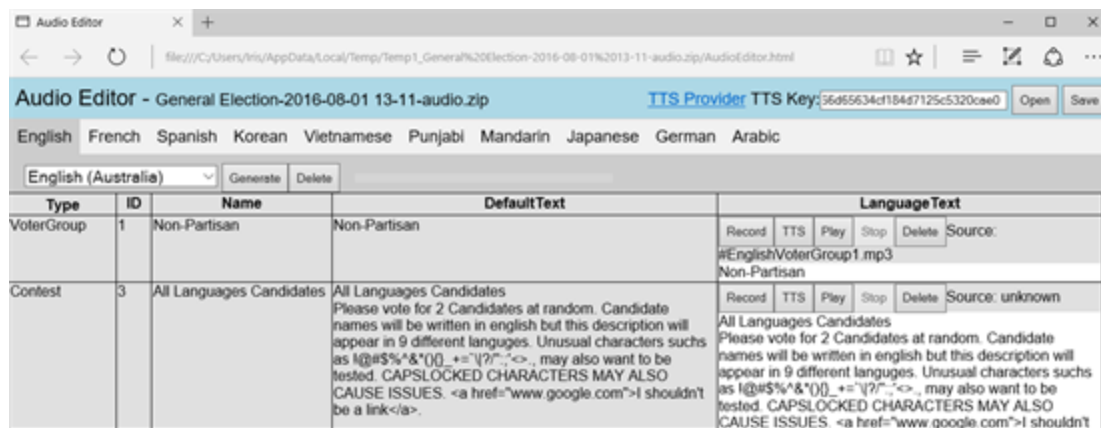


Figure 9-16. Audio editor window (audio data loaded)

5. In **TTS Key**, enter the key provided by the Voice RSS service on registration.

When you are logged into Voice RSS, the TTS key is available under **My Account**.

6. Click **Open** to locate and open the Zip file.

7. For each language:

- a. Click the name of a language.

The data for the selected language appears.

- b. Complete any of the following optional steps

- Select the desired voice (inflection) from the drop-down.
- Click **Generate** to record all text using the selected inflection.
- Click **Delete** to remove all existing recordings.

8. Click **Save**.

A Zip file appears in the browser-specific download folder. The file contains a folder containing MP3 files for each language in the election.

9. From the **Language** view of the election, click **Import Audio**.

The Import Language Audio Files dialog appears.

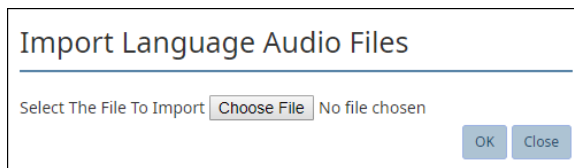


Figure 9-17. Import Language Audio Files dialog

10. To import the language audio data:

- a. For **Select the file to import**, click **Choose File** to locate and select the Zip file.
- b. Click **OK**.

The Audio tab now includes the imported audio files.

Chapter 10. Proofing elections

Proofing is a critical part of the ballot-development workflow. This chapter provides some guidelines and recommendations for proofing elections and identifies some workflow considerations.

Clear Ballot does not provide legal advice or recommendations on following local statutes for ballot proofing. If you have compliance questions, consult with the election officials in your jurisdiction.

10.1 When to proof an election

Proof raw data as early as possible in the process. Then, generate ballots and proof them because they adjust in real time. Make sure that you generate and proof your ballots before generating cards. The cards are static, and any change requires you to regenerate the cards.

10.2 Proofing on paper versus online

When proofing an election in ClearDesign, you can print the reports and ballots and proof the paper copy or proof these documents online using ClearDesign's visual ballot imaging tools and screens.

In some jurisdictions, statutes mandate the format for proofing.

Many jurisdictions prefer to proof on paper for accuracy. The person proofing a document can annotate it to list required changes. The printed and annotated paper copy can become part of the audit trail for producing the election.

10.3 Recommendations for proofing elections

After creating an election and laying out ballots, it is important to proof the election before sending the ballots to be printed. Elections contain a great deal of detailed information, and even a small mistake may lead to confusion or even disqualification.

Proofing an election may include all of the following for every ballot in every language that the election supports:

- Check that you have correctly defined all fundamental election entities.
- Check the district, precinct, and contest elections for each ballot style to make sure they appear correctly.
- Check that candidates and contests are properly represented.
- Make sure rotations are properly represented in each ballot.
- Confirm that the numbers of candidates and contests are correct.
- Make sure that, for each ballot style, each split contains the correct contests.

- If you have defined an advanced election type, such as a specific type of primary, additional ballot sets, or a consolidated precinct, check that the election conforms to the requirements of your jurisdiction and ClearDesign.
- Check that the election definition meets the requirements any downstream ClearDesign products used in your jurisdiction:
 - ClearAccess
 - PrintNow
 - ClearCount
 - ClearCast
- In some jurisdictions, the ClearVote systems have interfaces with third-party election-night systems and other data aggregation systems. Set aside time to test the import of data from ClearDesign systems into the third-party systems
- Look for general typos and misspellings.
- Inspect the overall ballot style layout and making any needed design modifications.
- Look for ballot layout problems, such as missing, overlapping, or otherwise illegible text.
- Resolve any duplicate names.

When you export media, ClearDesign issues a warning message about specific duplicate names. Examples are duplicate contest names, short names, and abbreviations for languages, voter groups, and district categories, districts, and precincts. ClearDesign allows you to export the election containing the duplicates, but Clear Ballot recommends resolving the duplicates before committing to final version. Duplicate names cause identification issues in other ClearVote products.

ClearDesign contains built-in tools that can help prevent users from inadvertently introducing errors to their elections and ballots. In addition, ClearDesign supports efficient yet thorough ballot image review for proofing purposes.

Chapter 11. Ballot proofing reports

11.1 Introduction

ClearDesign provides multiple reports that are useful for proofing an election and analyzing how the election is set up. You can view ballot proofing reports online in HTML format or save them as PDF and CSV files.

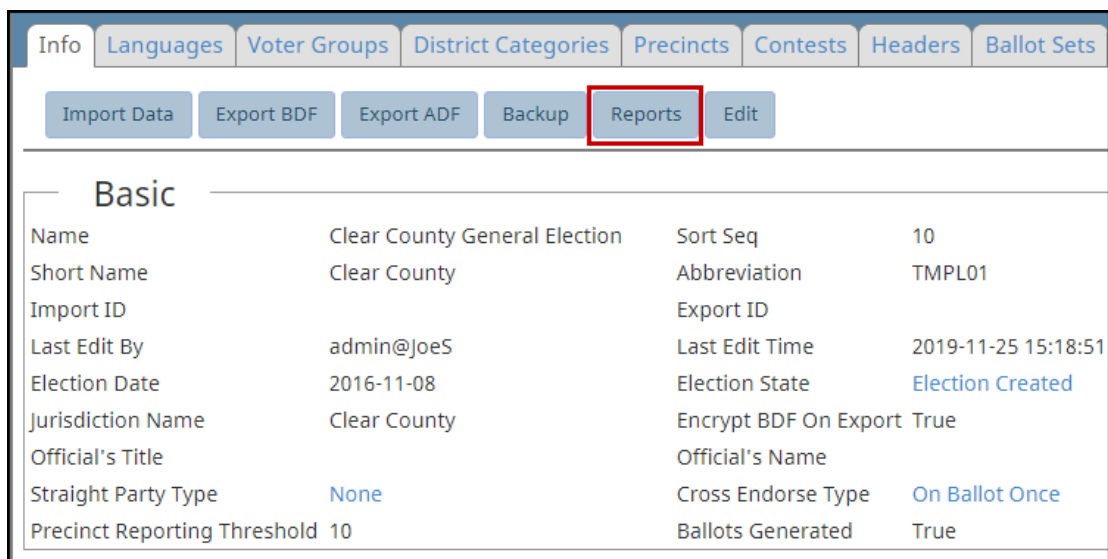
11.2 Displaying the Reports window

The Reports window enables you to select reports the available for an election and specify the options for viewing the reports.

To display the Reports window:

1. From the Elections view, click the name of a desired election to select it.

ClearDesign displays the Info tab for the selected election (Figure 11-1).



Basic			
Name	Clear County General Election	Sort Seq	10
Short Name	Clear County	Abbreviation	TMPL01
Import ID		Export ID	
Last Edit By	admin@joeS	Last Edit Time	2019-11-25 15:18:51
Election Date	2016-11-08	Election State	Election Created
Jurisdiction Name	Clear County	Encrypt BDF On Export	True
Official's Title		Official's Name	
Straight Party Type	None	Cross Endorse Type	On Ballot Once
Precinct Reporting Threshold	10	Ballots Generated	True

Figure 11-1. Selecting Reports on the Info tab for an election

2. On the Info tab, click the **Reports** button.

ClearDesign displays the Reports window (Figure 11-2).

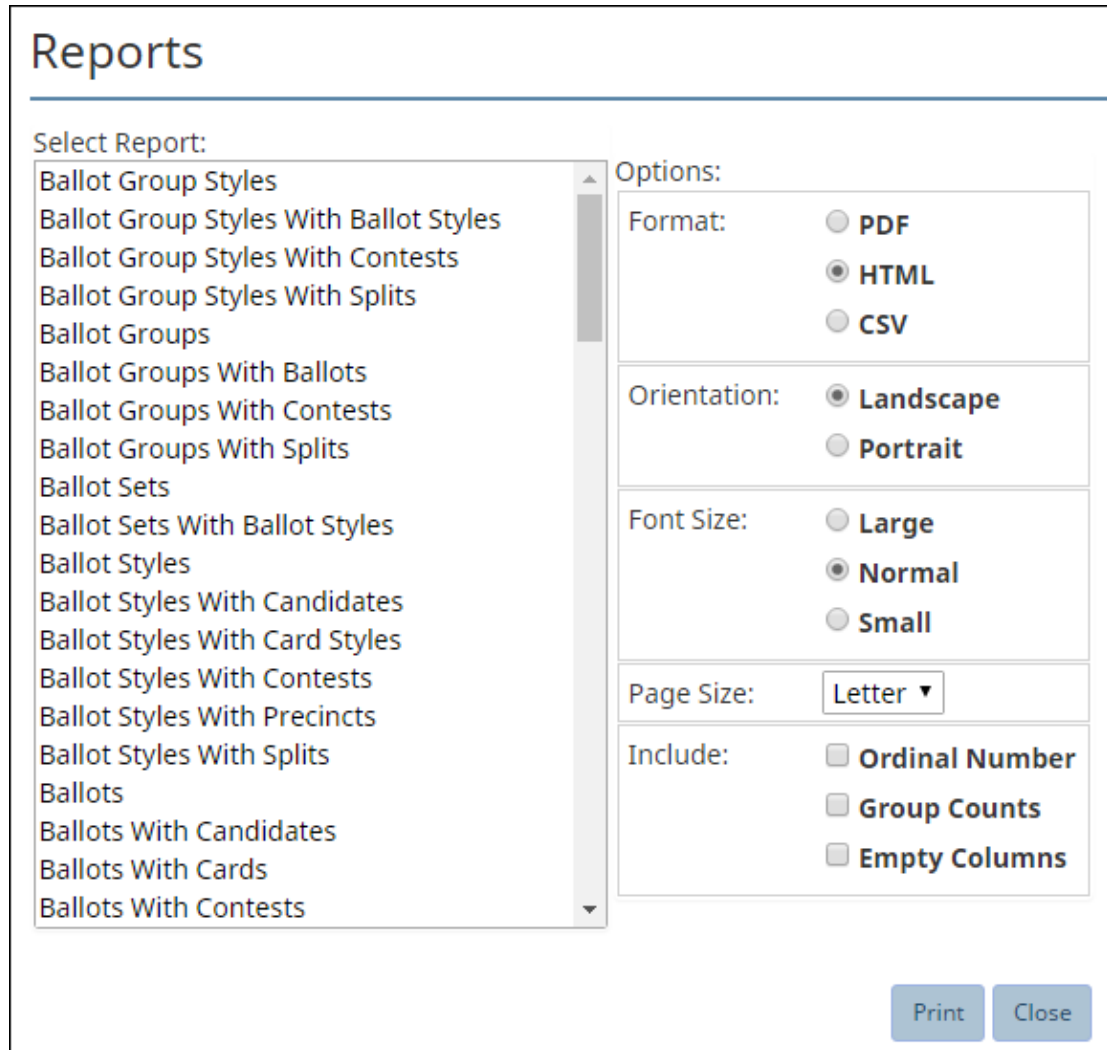


Figure 11-2. Reports window

11.3 Selecting a report and the options for viewing it

To select a report and the desired the options:

1. Click to choose one of the report titles in the **Select Report** pane of the Reports window (Figure 11-2).

For a list and description of all available reports in ClearDesign, see Table 11-2.

2. Select the desired **Options**.

Most options are self-explanatory. Table 11-1 lists the available Include options.

Table 11-1. Include options for reports

Option	Description
Ordinal number	Numbers each item in the report. <i>Example:</i> The Ballot Groups report (Figure 11-3) shows ballot group styles numbered 1 through 6.
Group counts	Lists the numbers of items in each group shown in a report. <i>Example:</i> The partial Ballot Group Styles with Contest Report shown in Figure 11-4 shows two ballot group styles. Ballot Group Standard Style 1 is associated with four contests. Ballot Group Standard Style 2 is associated with the five contests.
Empty columns	Includes empty columns in a report. By default, ClearDesign does not show empty columns in reports. <i>Example:</i> The Ballot Sets report shown in Figure 11-5 shows the empty columns Import ID and Export ID.

3. Once you select the desired options, click the **Print** button to generate the desired report.

The selected report displays in a separate browser tab. You can right-click to save the report, if desired.

11.4 Sample reports

This section shows some sample reports.

11.4.1 Ballot Groups report

Figure 11-3 shows an example of the Ballot Groups report generated with the Ordinal number option selected. In this report, the ballot group styles are numbered 1 through 6 in the left column.

Demo Election Ballot Groups										Mar 23, 2017 11:00:52 AM Page 1 of 1
# Ballot Group Style	Ballot Set	# Sort Seq	Name	Short Name	Abbr	Splits Count	Contests Count	Ballots Count	Last Edit Time	Last Edit By
1 Ballot Group Style 1	Standard	1 1	Ballot Style 1	Ballot Style 1	Ballo1	1	4	1	2015-02-26 19:54:42	admin@Default
2 Ballot Group Style 2	Standard	1 2	Ballot Style 2	Ballot Style 2	Ballo2	1	5	1	2015-02-26 19:54:42	admin@Default
3 Ballot Group Style 3	Standard	1 3	Ballot Style 3	Ballot Style 3	Ballo3	2	4	1	2015-02-26 19:54:42	admin@Default
4 Ballot Group Style 4	Standard	1 4	Ballot Style 4	Ballot Style 4	Ballo4	1	5	1	2015-02-26 19:54:42	admin@Default
5 Ballot Group Style 5	Standard	1 5	Ballot Style 5	Ballot Style 5	Ballo5	2	4	1	2015-02-26 19:54:42	admin@Default
6 Ballot Group Style 6	Standard	1 6	Ballot Style 6	Ballot Style 6	Ballo6	2	5	1	2015-02-26 19:54:42	admin@Default

Figure 11-3. Ballot Groups report (Ordinal number option selected)

11.4.2 Ballot Group Styles with Contests report

Figure 11-4 shows an example of the Ballot Group Styles with contests report generated with the Group Counts options selected.

This report shows two ballot group styles:

- BallotGroup Standard Style 1 is associated with four contests as indicated by the label **Count: 4**.
- Ballot Group Standard Style 2 is associated with five contests as indicated by the label **Count: 5**.

Clear County General Election Ballot Group Styles With Contests					Nov 26, 2019 1:09:59 PM Page 1 of 2
Ballot Group Style	Ballot Set	Contest	District	Voter Group	
Ballot Group Style 1	Standard	US Senate	US Senate District	Non-Partisan	
		US Congressional District 1	US Congressional District 1	Non-Partisan	
		State House District 27	State House District 27	Non-Partisan	
		State Measure 92 - Casinos	Jurisdiction Wide	Non-Partisan	
		Count: 4			
Ballot Group Style 2	Standard	US Senate	US Senate District	Non-Partisan	
		US Congressional District 1	US Congressional District 1	Non-Partisan	
		State House District 27	State House District 27	Non-Partisan	
		City of Lake Worth Councilor	City of Lake Worth	Non-Partisan	
		State Measure 92 - Casinos	Jurisdiction Wide	Non-Partisan	
Count: 5					

Figure 11-4. Example: Ballot Group Styles with Contests report

11.4.3 Ballot Sets report

Figure 11-5 shows an example of a Ballot Sets report generated with the Empty Columns option selected. In this example, the Import ID and Export ID columns are blank. By default, reports do not show empty columns.

Clear County General Election										Nov 26, 2019	
Ballot Sets										1:15:37 PM	
										Page 1 of 1	
Sort S Name	Short Name	Abbr	Card Template	Layout Style	Separate Ballots	Ballot Styles Count	Import ID	Export ID	Last Edit Time	Last Edit By	
10	Standard	Standard	Standard 8.5 x 11 - 3 Column	Border	False	6			2018-11-27 20:20:16	admin@Carolyne	

Figure 11-5. Example: Ballot Sets report

11.5 List of ballot proofing reports

Table 11-2 lists and describes the ballot proofing reports that are available in ClearDesign.

Table 11-2. ClearDesign ballot proofing reports

Report name	Lists
Ballot Group Styles	The number of ballot groups, splits, contests, and ballot styles for each ballot group style in an election
Ballot Group Styles with Ballot Styles	The associated ballot style, voter group, and number of contests associated with each ballot group style used in an election
Ballot Group Styles with Contests	The contests for each district in each ballot group style
Ballot Group Styles with Splits	The precincts and splits in each ballot group style in the election
Ballot Groups	The number of splits, contests, and ballots for each ballot group
Ballot Groups with Ballots	The ballot, contest count, and voter group for each ballot group in the election
Ballot Groups with Contests	The contests in each ballot group in the election
Ballot Groups with Splits	The precincts and splits in each ballot group in the election

Table 11-2. ClearDesign ballot proofing reports (continued)

Report name	Lists
Ballot Sets	The card template and layout style used by each ballot set in the election, as well as the ballot styles count and whether or not the ballot set uses separate ballots
Ballot Sets with Ballot Styles	The ballot styles and voter groups for each ballot set in the election
Ballot Styles	Each ballot style in the election
Ballot Styles with Candidates	The contests and candidates by district and voter group for each ballot style.
Ballot Styles with Card Styles	The card styles that roll up into each ballot style
Ballot Styles with Contests	The contests that appear in each ballot style, by district
Ballot Styles with Precincts	The voter group and precincts for each ballot style
Ballot Styles with Splits	The precincts and splits in each ballot style
Ballots	All the ballots in the election
Ballots with Candidates	The contests and candidates for each ballot
Ballots with Cards	All ballots and corresponding cards
Ballots with Contests	The contests on each ballot by district
Ballots with Precincts	The voter group and precincts for each ballot
Ballots with Splits	The precincts and splits on each ballot
Candidates	The candidates in an election
Candidates with Ballot Text	The candidates and ballot text for each contest

Table 11-2. ClearDesign ballot proofing reports (continued)

Report name	Lists
Card Styles	Each card style in the election
Card Styles with Candidates	All candidates in each card style by district and contest
Card Styles with Cards	The cards associated with each card styles
Card Styles with Contests	The contests in each card style by district
Card Styles with Precincts	The voter group, card sequence number, and precincts for each card style
Card Styles with Splits	The precincts and splits for each card style
Cards	All cards used in a n election
Cards with Candidates	The contests and candidates for each card
Cards with Contests	The contests on each card by district
Cards with Precincts	The voter group, card sequence number, and precincts for each card
Cards with Splits	The precincts and splits for each card
Contests	All contests in an election
Contests with Ballot Styles	The contests associated with each ballot style
Contests with Ballot Text	The ballot text for each contest by district
Contests with Ballots	The ballots where each contest appears
Contests with Candidates	The candidate for each contest by district
Contests with Card Styles	The card styles associated with each contest

Table 11-2. ClearDesign ballot proofing reports (continued)

Report name	Lists
Contests with Cards	The cards on which each contest appears
Contests with Entity Styles	Contest-specific formatting that has been applied by using entity styles
Contests with Rotations	The rotation groups of districts or precincts for each contest
Contests with Splits	The precincts and splits in each contest
Counter Groups	All counter groups in an election
Counter Group with Vote Center Categories	The name of each counter group and its associated vote center category
Device Types	Information about each device used in an elections. This report contains a Media Hash column. Use the Media Hash value to verify the ADF and BDF.
Device Types with Vote Center Categories	The name of each device type and its associated vote center category
Device Types with Vote Centers	The name of each device type and the vote centers using each device type.
District Categories	The district categories in an election
District Categories with Districts	Each district category and its associated district
District Categories with Unassigned Splits	Each district category in an election, the precincts in each district category, and any unassigned splits.
Districts	All districts in an election
Districts with Contests	Each contest and its associated voter group for each district category in the election

Table 11-2. ClearDesign ballot proofing reports (continued)

Report name	Lists
Districts with Precincts	Each district and its associated precincts for each district category in the election
Districts with Splits	The districts, precincts, and splits associated with each district category in an election
Headers	All headers used in ballots
Headers with Ballot Text	Each header, its language, and associated ballot text
Headers with Card Styles	All card styles where each header appears
Headers with Cards	Each header, its associated voter group, ballot sets, cards, and voter groups
Headers with Entity Styles	Each header and its justification and option settings
Languages	Each language used in an election
Languages with Splits	Each language used in an election, its associated precincts, and splits
Layout Styles	The layout styles used in an election
Layout Styles with Entity Styles	Each layout style, its associated entity style type, and current format settings
Logs	The log for the current election. You can also the view election log by selecting a desired elections and clicking the Logs tab.
Precincts	All precincts in an election
Precincts with Ballots	The details of each ballot group within each precinct or split
Precincts with Candidates	Candidate information for each district and context on a precinct by precinct basis
Precincts with Cards	Details of the ballot groups in each precinct or split
Precincts with Contests	All contests in each precinct by district

Table 11-2. ClearDesign ballot proofing reports (continued)

Report name	Lists
Precincts with Districts (columnar)	The districts in each precinct by district category
Precincts with Districts (tabular)	The districts in each precinct in tabular format.
Precincts with Splits	The splits in each precinct
Precincts with Voter Counts	The Voter Count for each precinct or split
Splits	The Splits and associated Ballot Groups for each precinct in the election
Splits with Ballots	The ballot used for each split and the number of contests that it contains
Splits with Candidates	Candidate information for each district and contest in a precinct on a per-split basis
Splits with Cards	Details of the ballot groups within each split, including card IDs.
Splits with Contests	The contests in each split
Splits with Districts (Columnar)	The districts and district categories for each split in columnar format
Splits with Districts (Tabular)	The districts and district categories for each split in tabular format
Splits with Languages	The languages for each split in a precinct
Splits with Voter Counts	The voter count for each split
Vote Center Categories	The identifiers (Name, Short Name, Abbr) for vote center categories, the associated devices types and counter groups, the timestamp of the last edit, and the login ID of the person who made the edit

Table 11-2. ClearDesign ballot proofing reports (continued)

Report name	Lists
Vote Center Categories with Counter Groups	The counter groups associated with each vote center category
Vote Center Categories with Device Types	The device types and ballot sets associated with each vote center category
Vote Center	All vote centers in an election
Vote Centers with Cards	The cards associated with each vote center
Vote Centers with Device Types	The device types associated with each vote center
Vote Centers with Precincts	Vote center categories and associated precincts
Voter Groups	Details for all voter groups in an election
Voter Groups with Ballot Styles	Each voter groups, the associate ballot sets, and ballot names
Voter Groups with Ballot Text	Each voter group, the ballot text, and language of the text
Voter Groups with Candidates	Each voter group, the candidates in that voter group, the contest, and contest voter group
Voter Groups with Contests	Each voter group, the associated contests, and district of each contest.
Voter Groups with Voter Counts	For each voter group, the voter counts per split

Chapter 12. Producing an election

This chapter describes the tasks for producing an election.

12.1 Exporting a ballot definition file (BDF or BDFx)

After generating, proofing, and finalizing the election definition, create the BDF so that you can load the election into ClearCount and ClearCast.

1. Ensure that you have generated and laid out the ballot for the election.
2. From the Info dialog of an election, click **Export BDF**.

ClearDesign displays the **Export BDF Files** dialog if the election is ready to export (Figure 12-1).

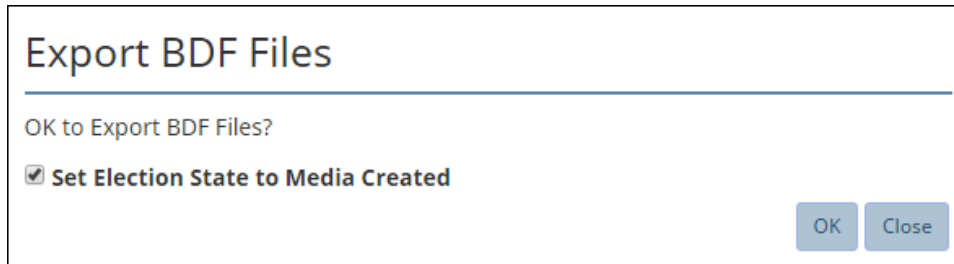


Figure 12-1. Export BDF Files dialog

The message *Not all ballots generated or all cards laid out, cannot export BDF* indicates that the election is not ready to export.

3. If desired, deselect the option **Set Election State to Media Created**.
4. Click **OK** to export the BDF.

ClearDesign displays a status message while creating the BDF or BDFx.

When the export is complete, the following message appears.

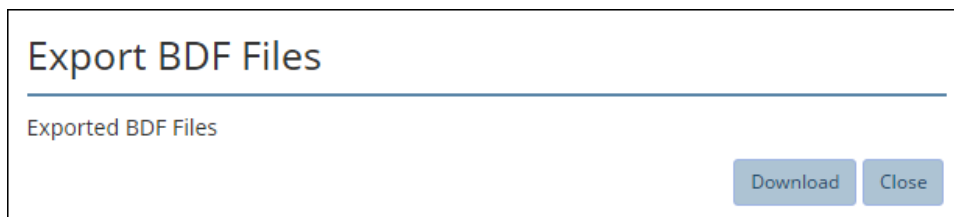


Figure 12-2. Export complete message

5. Click **Close**.

6. To navigate to the location of the BDF zipped archive file, click the link that appears at the bottom of the screen.

The usual location is the Downloads folder in your Windows User folder.

After you generate the BDF, you can copy it to a USB drive that you can load into ClearCount and ClearCast.

12.2 Exporting an encrypted accessible definition file (ADFx)

After generating, proofing, and finalizing the election definition, create the ADF so that you can load the election definition into ClearAccess.

To generate the ADFx:

1. Ensure that:
 - Ballots are generated and laid out
 - Passwords are set up and associated with ballot sets
2. From the **Info** view of an election, click **Export ADF**.

The Export ADF Files dialog appears if the election is ready to export (Figure 12-3).

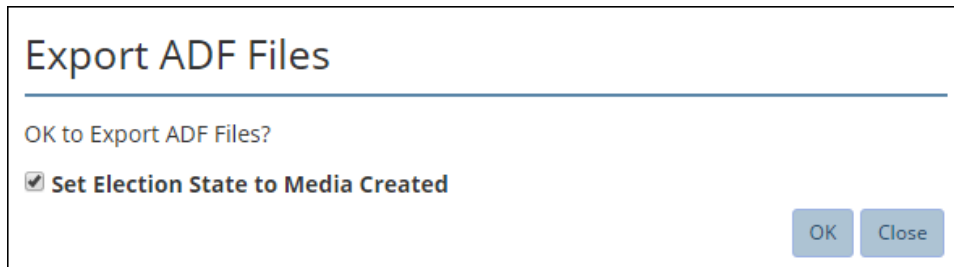


Figure 12-3. Export ADF Files dialog

The message *Not all ballots generated or all cards laid out, cannot export ADF* indicates that the election is not ready to export.

3. (Optional) Deselect **Set Election State to Media Created**.

4. Click **OK**.

ClearDesign displays a status message while creating the ADFx.

When the export process is complete, ClearDesign displays the following message (Figure 12-4).



Figure 12-4. Export complete message

5. Click **Download**.

ClearDesign displays a progress message as the ADFx archive downloads to the user-specified location for the browser.

6. When the Exported ADF message appears, click **Close**.
7. To navigate to the location of the ADFx zipped archive file, click the link that appears at the bottom of the screen.

The usual location is Downloads folder in your Windows User folder.

After you export the ADF, you can copy it to a USB drive and load it into ClearAccess.

12.3 Printing cards

One final step in preparing an election is generating a zip file containing all card images.

See "Printing cards" on page 164.

You can print the cards locally or send them to a designated printer.

12.4 Backing up a finalized election

After you have finalized an election and generated the BDF and ADF, create a backup of the election.

See "Backing up an election" on page 43

Follow the requirements of your jurisdiction for storing the backup in a secure location.

Chapter 13. Logs

This chapter describes ClearDesign logs.

13.1 Types of ClearDesign Logs

ClearDesign maintains the following read-only logs.

Table 13-1. Types of ClearDesign logs

Log type	Records the following
Election	User actions, such as adding items or deleting them, for each election, starting with election creation. ClearDesign enables you to view the logged events associated with each individual election.
Entity	User actions for an individual entity, such as creating or editing the entity.
System	User-access and administrative exceptions across all elections in the ClearDesign system. The system log also tracks functional updates and changes to the election database. The <i>ClearDesign Administration Guide</i> describes the System log.

The layout and functionality of all Logs tab are similar.

13.2 Permission for viewing logs

To access ClearDesign logs, the role assigned to your username must have the Log View permission enabled. For information about roles, permissions, and the system log, see the *ClearDesign Administration Guide*.

13.3 Viewing a log for an individual election

This topic assumes that the role assigned to your username has the Log View permission enabled.

To view an election log:

1. From the Administration menu in the navigation page, select **Elections**.
The Election tab appears in the content pane.
2. From the Elections view, click to select an individual election.
3. Do one of the following:
 - From the Administration menu in the navigation pane, select **Logs**.
 - From the content pane, select the Logs tab.

The Logs tab for the selected election appears in the content pane. Figure 13-1 shows an example of the top portion of the Logs tab for an election. The Log tab is a list view where each row represents is an event record.

ID	Date Time	Severity	Message
1114	2020-01-22 18:30:40	Info	User prompted; Backup Election - Backup files use a validation code to ensure the contents have not changed
1115	2020-01-22 18:31:23	Info	Language: Spanish added
1446	2020-01-22 18:32:00	Info	Language: Vietnamese added
1777	2020-01-22 19:06:05	Info	User prompted; Backup Election - Backup files use a validation code to ensure the contents have not changed
1778	2020-01-22 19:09:05	Info	User prompted; Clear Election Logs - This action will download a full election log backup to your computer and then clear the existing logs from you want to proceed?

Figure 13-1. Election log (partial view)

Buttons available from the Election log

As with all list views, you can use the buttons at the top of the screen to

- Show or hide columns
- Copy or print the contents
- Export the contents to a PDF, Excel, or CSV file

Backing up and clearing the election log

To back up and clear the election log, click **Clear Election Log**.

ClearDesign displays the following dialog (Figure 13-2).

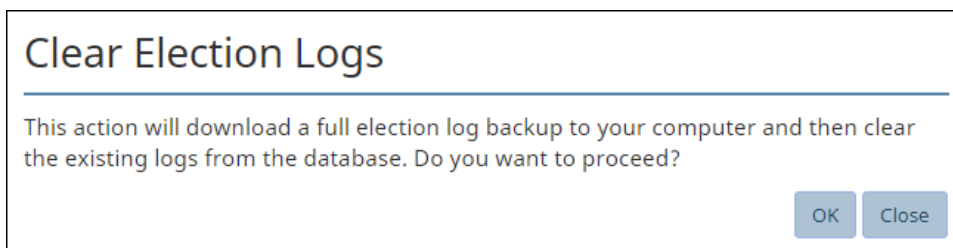


Figure 13-2. Clear Election Log dialog

13.4 Viewing an entity-specific log

An entity-specific log shows only event records specific to the current entity. The formats of an entity-specific log, the system log, and the election log are similar.

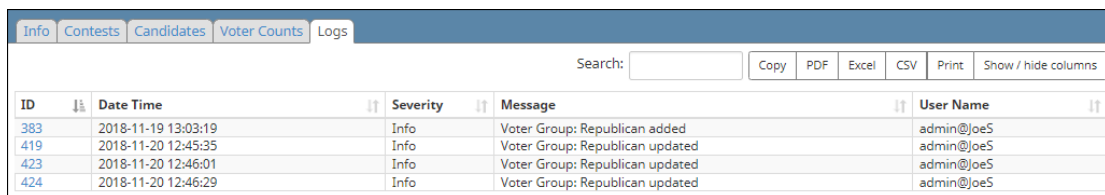
To view the log for a specific entity:

1. Display the view for the desired entity type.
2. From the view for the desired entity type, click the **Name** cell of the desired entity.
ClearDesign displays the Info tab for the desired entity.
3. From the Info tab of the entity, click the Logs tab.

For example, suppose that you want to view the log for a voter group called Republican. Follow these steps:

1. Display the Voter Groups view.
2. Click the **Name** cell "Republican" from the Voter Groups view.
ClearDesign displays the Info tab for the Republican voter group.
3. From the Info view of the Republican voter group, click the Log tab.

ClearDesign displays a log like the example in Figure 13-3.



ID	Date Time	Severity	Message	User Name
383	2018-11-19 13:03:19	Info	Voter Group: Republican added	admin@joeS
419	2018-11-20 12:45:35	Info	Voter Group: Republican updated	admin@joeS
423	2018-11-20 12:46:01	Info	Voter Group: Republican updated	admin@joeS
424	2018-11-20 12:46:29	Info	Voter Group: Republican updated	admin@joeS

Figure 13-3. Example: Log for the Republican voter group

13.5 Filtering log records

The tab containing a log has several filter fields for displaying events that meet specified criteria. Table 13-2 describes these filter fields. After you fill in the fields, click the **Filter** button to display the desired results.

Table 13-2. Filters for log events

Filter	Description						
Start Date End Date	<p>Indicate a date range for retrieving event records. The Start Date must be earlier or the same as the End Date.</p> <p>When filtering by dates and no entries appear in the results, the date range is too restrictive, and the available log entries fall outside the specified range. To display all potential log entries, enter the following:</p> <ul style="list-style-type: none"> • Start Date: the system installation date or a date preceding the installation date. • End Date: the current date 						
Limit	<p>Specifies the number of records to retrieve.</p> <p><i>Example:</i> If you specify a Limit of 200, ClearDesign displays the first 200 records that meet all the filter criteria.</p>						
Severity	<p>Enables filtering of election records according to level of severity. The Severity drop-down list displays the severity levels in the following hierarchy:</p> <table border="0" data-bbox="526 997 1094 1123"> <tr> <td>1. Exception</td> <td>4. Info</td> </tr> <tr> <td>2. Error</td> <td>5. Detail</td> </tr> <tr> <td>3. Warning</td> <td>6. Tracing</td> </tr> </table> <p>ClearDesign displays all records of the selected Severity level and lower in the hierarchy.</p> <p><i>Example:</i> If you select a Severity level of (3) Warning, ClearDesign retrieves records having Severity levels of:</p> <p>(3) Warning</p> <p>(2) Error</p> <p>(1) Exception.</p>	1. Exception	4. Info	2. Error	5. Detail	3. Warning	6. Tracing
1. Exception	4. Info						
2. Error	5. Detail						
3. Warning	6. Tracing						
Entity types	<p>A drop-down of the entity types contained in the log. If a given entity type does not appear in the drop-down list, the log for the election does not contain any records for that entity type. The default Entity Type selection is All.</p>						

13.6 Searching for log records

The Search field enables you to enter a string. ClearDesign retrieves records containing the specified string.

Example: Enter the string **undervote** to retrieve all records containing this string.

13.7 Printing, copying, and saving a log

Use the standard buttons in the top corner of the screen to copy, print, or save a log in a format such as PDF, Excel, or CSV. For an explanation of these buttons, see "Buttons in the top right corner of a list view" on page 26.

Appendix A. Supported data import formats

ClearDesign supports the following data-import formats.

- Ballot definition file (BDF and BDFx), which is a Clear Ballot-proprietary format
Import a BDF only to verify election data. Do not use the BDF as the basis for developing a new election.
- Colorado SCORE system (GEMS standard import)
- Global Election Management Systems (GEMS)
- North Carolina Statewide Elections Information Management System (SEIMS)
- Ohio format
- Oregon OCVR (Unity format)
- Vermont State Export
- Washington Election Information Managements Systems (EIMS) format
For details on the formats for the state of Washington, contact the state election officials.

Appendix B. Common attributes of entities

Entity definitions in ClearDesign use a common set of attributes. The values of the common attributes are user-defined fields for each instance of an entity. Table B-1 lists and defines the common attributes of entities.

Table B-1. Common attributes of entities

Attribute	Description	Default
Name	<p>Full user-defined name used across ClearDesign and ClearCount.</p> <p>A Name can contain only the following characters: a through z, A through Z, 0 through 9, hyphen (-), under bar (_), comma (,), asterisk (*), and space ().</p> <p>If you enter any other characters in a Name, ClearDesign converts them to spaces.</p> <p>ClearDesign provides a default consisting of the model name, followed by a number, in increments of 10.</p> <p>Example: Election 10, Election 20, Election 30, and so on.</p> <p>Maximum characters: 60 for entities other than the Name of an election.</p> <p>For the Name of an election, use a maximum of 38 characters, including spaces, to ensure that ClearCast and ClearCount can import the BDF or BDFx file.</p>	<i>ModelName SortSeq</i>
Short Name	<p>Concise name used across ClearDesign and ClearCount, primarily in reports.</p> <p>Maximum characters: 20</p>	Up to the first 20 characters of Name.
Abbreviation	<p>Very short name used across ClearDesign and ClearCount, primarily for voter groups.</p> <p>Maximum characters: 6</p>	Up to the first 6 characters of Name .
Sort Seq	<p>Sorting index.</p> <p>ClearDesign provides default values in increments of 10.</p> <p>Can be user-defined but must be numeric.</p>	Numeric portion of the default value of Name . Usually a multiple of 10.

Table B-1. Common attributes of entities (continued)

Attribute	Description	Default
Import ID	Used when importing <i>or</i> exporting most values in ClearDesign. Example: When handling voter registration counts or ballot definition files, ClearCount refers to the Import ID .	Blank
Export ID	Optionally, used for recognizing entities, such as contests, candidates, precincts, that are defined by an external system, such as a statewide reporting system. The Export ID is useful when the voter registration systems of counties are separate from the statewide reporting system. The Export ID is included in the ClearCount XML Results file.	Blank

Appendix C. Formatting toolbar: Ballot Text editor

C.1 Dialogs containing a ballot text editor.

This topic describes the formatting toolbar of the Ballot Text editor. The Ballot Text editor enables you to enter and format text that appears on a ballot to identify the entity.

Example: The ballot text associated with a voter group identifies a political party, such as "Democratic".

The Ballot Text editor contains a tab for each language in the election.

The dialogs of the entities listed in Table C-1 contain a Ballot Text editor.

Table C-1. Dialogs of entities that contain a Ballot Text editor

Entity	See
Voter group	"Adding or editing a voter group" on page 62
Contest	"Adding or editing contests" on page 85.
Candidate	"Adding or editing candidates" on page 99
Header	"Adding or editing a header" on page 137

C.2 Location, position, and appearance of the formatting toolbar

The Ballot Text editor has a formatting toolbar that is similar to those found in many word processing applications. The formatting toolbar appears directly above the field where you enter text.

Figure C-1 shows the formatting toolbar.

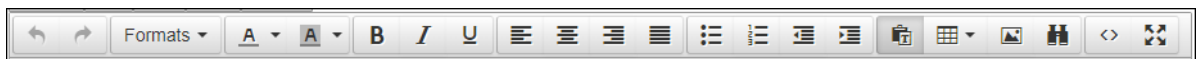


Figure C-1. Formatting toolbar of the Ballot Text editor

As you move your mouse over each icon in the formatting toolbar, ClearDesign displays a caption that identifies the associated formatting option.

If you are familiar with word processing, you can skip this topic or use it as a reference source for checking formatting details.

The remainder of this topic describes each option on the formatting toolbar.

C.3 Formatting options

Table C-2 lists the options as they appear from left to right in the toolbar of the Ballot Text editor.

Table C-2. Ballot Text editor: toolbar formatting options



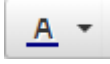
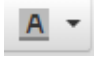
















Icon	Description
	Undo the last change.
	Redo the last change.
Formats menu	See "Formats menu" on page 246.
	Choose the color of the currently selected text.
	Choose the background color for the currently selected text.
	Make the currently selected text bold.
	Italicize the currently selected text.
	Underline the currently selected text.
	Left-align the current paragraph.
	Center the current paragraph.
	Right-align the current paragraph.
	Justify the current paragraph.
	Format the currently selected paragraphs as a bulleted list.
	Format the currently selected paragraphs as a numbered list.
	Decrease the indentation of the currently selected paragraphs.

Table C-2. Ballot Text editor: toolbar formatting options (continued)

Icon	Description
	Increase the indentation of the currently selected paragraphs.
	<p>Toggle between pasting as plain text and pasting as formatted text.</p> <p>The DesignServer is installed with the default functionality to paste as plain text. If one ClearDesign user changes this option for pasted text, the change persists for all other ClearDesign users that access the same Design server.</p> <p>To avoid unwanted formatting, Clear Ballot recommends pasting as plain text and then applying desired formatting in the Ballot Text editor.</p>
	Click this icon to display the Table drop-down menu. For a description of the options available from the Table drop-down menu, see "Inserting and formatting tables in the Ballot Text editor" on page 247.
	Image tool
	Find and replace text.
< >	<p>Edit the source code.</p> <p>If you know HTML, you can edit the source code directly. You can use only the following HTML tags:</p> <ul style="list-style-type: none"> • <p> • •

	<p>View the Ballot text editor in full-screen mode.</p> <p>To return to the default size, click the icon again.</p>

C.4 Formats menu

The Formats menu (Figure C-2) in the toolbar of the Ballot text editor contains options that determine how text appears. To use the Formats menu, select (highlight) the desired text or paragraph and select one of the options listed in Table C-3.

If you know HTML and CSS, you are not limited to the options available from the Formats menu. You can edit the markup for the HTML and CSS style specifiers directly by clicking the <> selection for the tool bar.

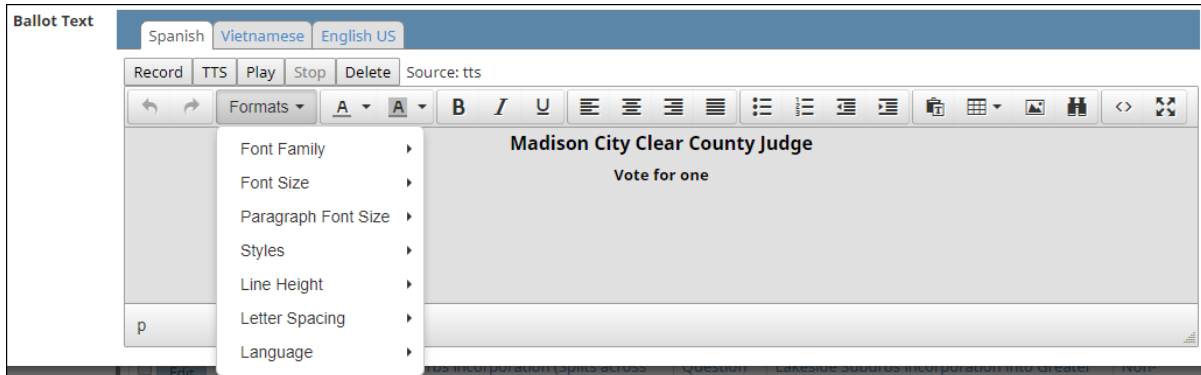


Figure C-2. Formats menu

Table C-3. Options available from the Formats menu

Option	Description
Font Family	<p>Applies a font family to the selected text.</p> <p>The default font family is Noto Sans, a cross-platform sans-serif font.</p> <p>You can also load additional fonts. See Chapter 3, "Adding fonts and images" on page 52.</p>
Font Size	<p>Applies a font size to the selected text. The Font Size option provides a range from 36 points to 6 points.</p>
Paragraph Font Size	<p>Applies a font size to the current paragraph. The Paragraph Font Size option provides a range from 36 points to 6 points.</p>

Table C-3. Options available from the Formats menu (continued)

Option	Description
Styles	<p>Applies a style to the current paragraph. In ClearDesign, styles are called <i>subheaders</i>.</p> <p>Example: You can define a subheader that applies both a specified font and font size to the selected paragraph.</p> <p>To define and edit subheaders (styles), see "Setting up layout styles" on page 185.</p>
Line Height	Controls the amount of space between lines of text in the current paragraph. The Line Height option provides a range from 2.0 line to 0.5 lines.
Letter Spacing	Controls the amount of space between letters in the currently selected text. The Letter Spacing option provides the following selections: Very Compressed, Compressed, Normal, Expanded, and Very Expanded.
Language	Specifies the language for the currently selected text. This option is useful when using text-to-speech.

C.5 Inserting and formatting tables in the Ballot Text editor

The Ballot Text editor enables you to edit and edit tables. Tables provide a grid for positioning and aligning text and images.

The following guidelines apply to tables:

- Any measurement parameters, such as **Width**, **Height**, **Border**, and **Cell Padding**, are in pixels. (96 px = 1 in; 38 px = 1 cm).
- All color parameters, such as **Border Color** and **Background Color**, and require valid HTML color names or hex codes.
- If you know HTML, you can click the source code icon (< >) to format and edit a table.
- Do not use any of the table-alignment properties. ClearDesign sets the table to match the width of containing header. Setting the table-alignment properties of a table in header can result in undesirable formatting of the printed ballot.

C.5.1 Inserting tables

To insert a table:

1. In the Ballot Text editor, position the cursor in the location where you want the table to appear.
2. Click the Table icon and select **Insert Table**.

The table-size grid appears.

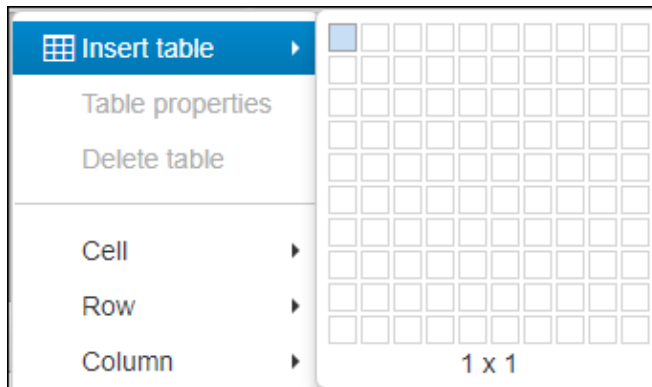


Figure C-3. Ballot Text editor, table sizing grid

3. In the grid, highlight the required columns and rows.

Used the table formatting options describes in the remainder for this topic to format the table according to your requirements.

C.5.2 Setting table properties

Table properties control attributes, such as measurements and colors.

To set table properties:

1. In the Ballot Text editor, click to select the table that you want to format.
2. Click the Table icon and select **Table properties**.

ClearDesign displays the Table properties dialog (Figure C-4). The General tab is selected.

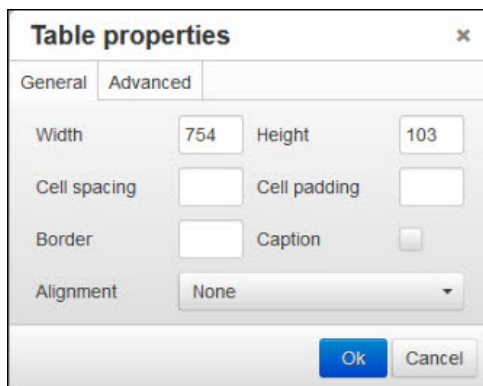


Figure C-4. Table properties dialog: General tab

- From the **General** tab, set any of the properties listed in Table C-4.

Table C-4. Table Properties: General

Property	Description
Width	Overall table width, which can force scaling of columns.
Cell spacing	The width of individual table cells (if scaling does not occur).
Border	The width of the overall table and individual cell borders.
Alignment	Table placement on the ballot: None, Left, Center, or Right.
Height	Overall table height, which can force the scaling of columns.
Cell padding	Amount of empty space between the content in each cell and its borders.
Caption	Provides a text box for a caption immediately above the table.

- Click the Advanced tab (Figure C-5).

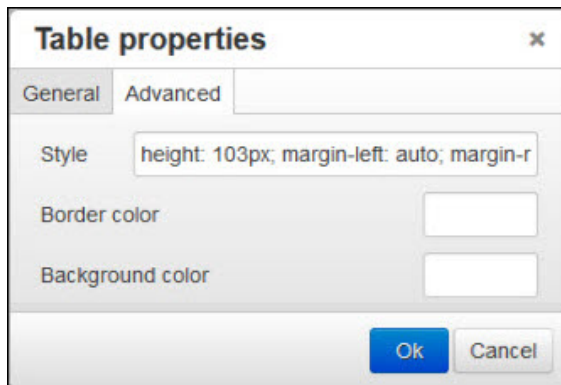


Figure C-5. Table properties dialog: Advanced tab

- Set any combination of the Advanced properties listed in Table C-5.

Table C-5. Table properties: Advanced

Property	Description
Style	Embedded table-level style sheet. If you know HTML, you can modify this style sheet.
Border color	A valid HTML color name or hex value to apply to the background of all cells

- Click **OK**.

C.5.3 Resizing tables manually

To resize a table manually:

1. In the Ballot Text editor, click the table to select it.

Small squares appear around the perimeter of the table.

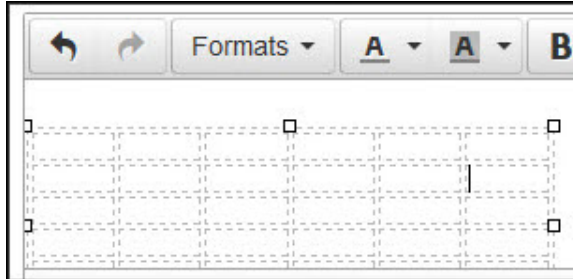


Figure C-6. Selecting a table to resize it

2. Hover over one of these squares until the cursor turns into a double-headed arrow.
3. Click and drag the table to the desired size.
4. Release the mouse button.

C.5.4 Deleting a table

To delete a table:

1. In the Ballot Text editor, click to select the desired table.
2. Click the Table icon and select **Delete table**.

C.5.5 Setting table cell properties

To set the properties of a selected table cell:

1. In the Ballot Text editor, select the table cell or group of cells that you want to modify.
2. Click the **Table** icon and select **Cell > Cell Properties**.

ClearDesign displays the Cell properties dialog. The General tab is selected.

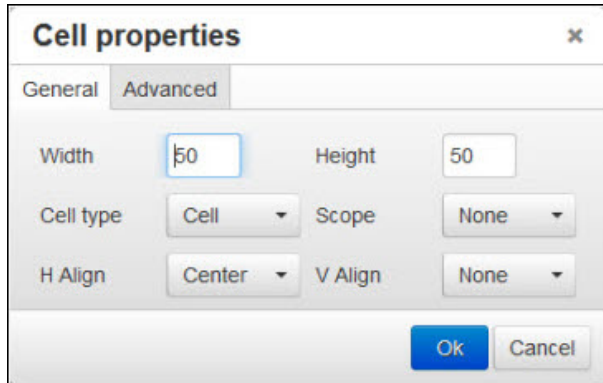


Figure C-7. Cell properties dialog, General tab

3. On the **General** tab, set any of the desired properties listed in Table C-6.

Table C-6. Cell properties: General tab

Property	Description
Width	The width of the cell, including units. Enter a value such as 15% or 50px.
Cell type	Select: Cell or Header Cell
H Align	The horizontal alignment in the cell. Select: None, Left, Center, or Right.
Height	The height of the cell, including units.
Scope	Select: None, Row, Column, Row Group, or Column Group
V Align	The vertical alignment in the cell. Select:

4. Click the **Advanced** tab (Figure C-8 on page 252).

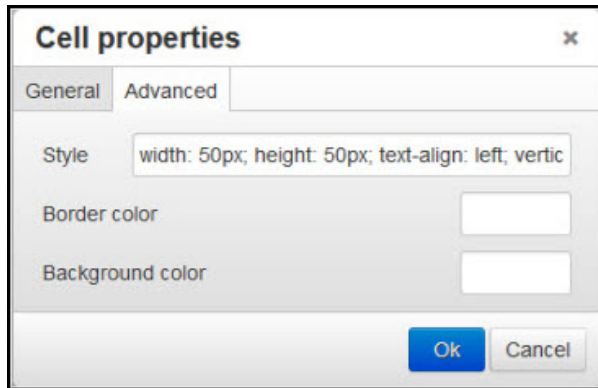


Figure C-8. Cell Properties dialog: Advanced tab

5. On the Advanced tab, set any of the desired properties listed in Table C-7.

Table C-7. Cell properties: Advanced tab

Property	Description
Style	The embedded table style sheet. If you know HTML, modify this style sheet to meet your formatting requirements
Border color	A valid HTML color name or hex value to apply to all borders.
Background color	A valid HTML color name or hex value to apply to the background.

6. Click **OK**.

C.5.6 Merging table cells

To merge table cells:

1. In the Ballot Text editor, select the cells that you want to merge.
2. Click the Table icon and select **Cell > Merge cells**.
ClearDesign merges the selected cells.
3. Click **Save**.

C.5.7 Splitting table cells

To split a table cell in the Ballot Text editor:

1. Select the cell to split.
2. Click the **Table** menu and choose **Cell > Split cell**.
ClearDesign splits the selected cell.

C.5.8 Editing table row properties

To edit the properties of a selected row:

1. In the Ballot Text editor, select the desired table row.
2. Click the Table icon and select **Row > Row properties**.

The **Row properties** dialog appears. The General tab appears selected.

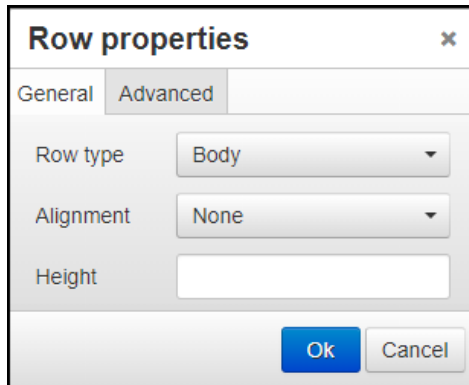


Figure C-9. Row properties dialog: General tab

3. Set any desired properties listed in Table C-8.

Table C-8. Row properties: General

Property	Description
Row type	Select one of the following: Header, Body, or Footer
Alignment	Select one of the following: None, Left, Center, or Right.
Height	Height of the row in pixels. Example: 75px

4. Click the **Advanced** tab.

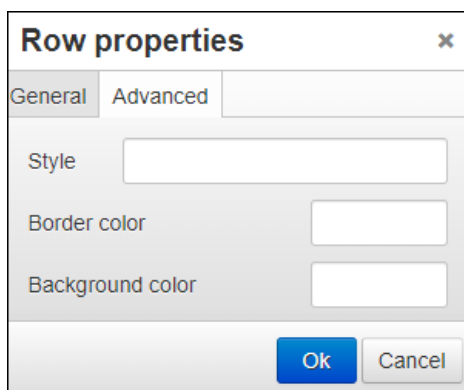


Figure C-10. Row properties: Advanced tab

5. Set any combination of the following:
 - **Style**—Summarizes the existing row styles.
 - **Border color**—Valid HTML color name for the border around the row.
 - **Background color**—Valid HTML color name for the background of the row, expressed by name.

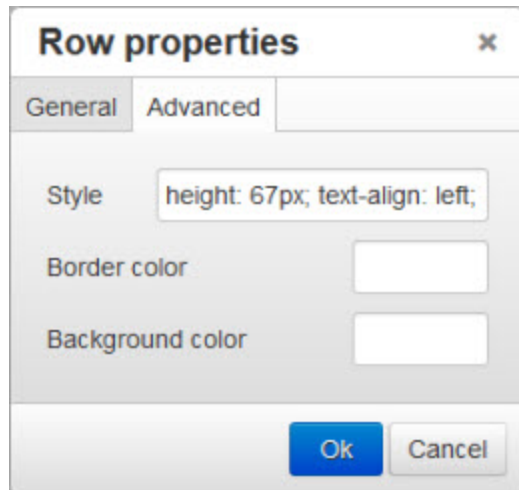


Figure C-11. Row properties dialog: Advanced tab

6. Click **OK**.

C.5.9 Adding, deleting, or moving table rows

To add, delete, or move a table row in the Ballot Text editor:

1. Select the row that you want to modify.
2. Click the Table icon and hover over **Row**.

3. Select one of the options listed in "Row properties" below.

Table C-9. Row properties

Property	Description
Insert row before	Place a new empty row above the selected row.
Insert row after	Places a new empty row below the selected row.
Delete row	Deletes this row.
Cut row	Cuts the row so that you can paste it elsewhere.
Copy row	Copy the row so that you can paste it elsewhere.
Paste row before	Paste the cut or copied row above the selected row.
Paste row after	Paste the cut or copied row below the selected row.

C.5.10 Adding or deleting columns

To add or delete a column:

1. In the Ballot Text editor, select the column you want to modify.
2. From the **Table** drop-down menu, hover over **Column**.
3. Select one of the following menu options:
 - **Insert Column Before**—Places a new empty column to the left of the selected column.
 - **Insert Column After**—Places a new empty column to the right of the selected column.
 - **Delete Column**—Deletes the selected column.