unity
ELECTION DATA MANAGER

User’s Guide

Proven Solutions for the World of Elections
Election Data Manager

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Vision Statement

Recognized global leader in providing innovative solutions and services to the election industry. These quality solutions and services are developed and delivered by people dedicated to the highest standards of ethics, integrity and the process of continuous improvement.

The result will allow our present and future customers to have a positive and lasting impact on the growth of democracy worldwide.

Who We Are

The World Leader in Automating the Election Process

ES&S is a company of dedicated people building integrated systems and developing solutions for the election official's total management needs.

- Election and voter registration management software
- Ballot counting and tabulation hardware
- Election information management software
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Chapter 1: Introduction

The Election Data Manager is a single entry system that stores all precinct, office and candidate information in a single database. After entering initial county and office data, election information can be recalled and edited to make programming elections fast and easy. Use the Election Data Manager in conjunction with other Unity software to format and print ballots, program ballot scanning equipment and produce Election Day reports. This manual provides instructions for creating complete county and election databases in the Election Data Manager.

Note: This documentation assumes that you already know how to perform basic PC operations and are comfortable using Microsoft Windows. You should also be familiar with the election process and ballot data collection before using the Election Data Manager.

System Requirements

The Election Data Manager is designed to run on Windows 95 or later.

Election Data Manager system requirements:

- Pentium 266MHz
- 2.0-GB hard drive
- 32-MB RAM
- 24x CD-ROM
- 3.5-inch disk drive
- Printer
Installing Election Data Manager

To install the Election Data Manager, determine which drive operates the Compact Disc player (usually this is drive d:\) and begin the installation process.

To install the Election Data Manager:

1. Insert the Election Data Manager CD into the CD drive.

2. In the Windows desktop, click the Start button on the taskbar and select Run, the following window will appear:

3. Type "D:\Setup.exe" in the Open box and click OK. The following screen will appear:
When the Setup window reaches 100 percent, the Welcome screen will appear:

4. Click Next. The Software License Agreement window will appear:
5. Read and accept the license agreement by clicking Yes. The User Information window will appear:

![User Information Window]

6. Enter a user name in the Name box and a company name in the Company box and click Next. The following window will appear:

![Choose Destination Location Window]
7. Select the directory where the Election Data Manager will be installed. The installation utility will create a directory (c:\Unity\Edm) to use as a default location. To install Data Manager to a different directory, click Browse, and select the appropriate location. Click Next after the location has been selected. The following window will appear:

The setup utility will add program icons to the folder listed in the Program Folders box. Type a different name in this box or select a folder from the Existing Folders list to change the directory that Data Manager will be installed to. ES&S recommends using the default folder.
8. Click Next after a folder has been selected, the setup window will appear:

9. The following window will appear after the installation is complete. Click Finish to return to Windows:
Setting up a File Structure for Unity Software

ES&S recommends using a standardized filing system when storing election data for use by the Unity software. Follow the instructions below to set up the Unity file structure before programming an election with the Election Data Manager.

Understanding the Data Manager File Structure

The Election Data Manager is a database program that allows county and election files to be reused as many times as desired.

The Election Data Manager file structure is created automatically when you create a county (see, “Creating a New County” in chapter 2) and when you create an election (see “Creating a New Election” in chapter 3).

To view Data Manager files in Windows:

1. Open Windows Explorer and locate the Election Data Manager folder. If you used the default settings when you installed Data Manager, the path to this folder will be C:\Unity\EDM.

2. Double-click the folder labeled EDM to open the Data Manager folder.

3. The County folder will be visible below the Data Manager folder. If you follow the instructions for creating a county in chapter two, the county folder name will be an eight-character code identifying the state and county for the election files it contains. The first two characters of this name are the state code (for example, NE for Nebraska) and the last six characters are the first six letters of the county name (for example, Dougla for Douglas). The file structure for the Election Data Manager should look like the following graphic when viewed in Windows Explorer where “St” is the state code and “county” is the abbreviation for the county name:

```
- Unity
  - Ais
  - ces
  - Edm
    - Stcounty
      - Dougla
    - optech
    - V2000
```
Note: The folder beneath the county folder is the election folder. Instructions for naming the election folder can be found in “Chapter 3: Creating an Election.”

Creating a File Structure for the Ballot Image Manager

If you are using the Ballot Image Manager to design ballots, the Image Manager file structure must be created before merging election information in the Election Data Manager.

Note: Following these instructions carefully will help you to set up an election database that can be used many times to program elections and format ballots. The more care you take when setting up the initial file structure, the easier it will be to access election information in the future.

Creating a State File

1. Open Windows Explorer and locate the folder for the Ballot Image Manager. If you used the default settings when installing, the location of the Image Manager will be C:\Unity\(name of Image Manager Hardware).

   Note: Different versions of the Ballot Image Manager are used to format ballots for different ballot scanners. The name of the Ballot Image Manager folder corresponds to the type of ballot the program is designed to format. For example, a folder called “OPT” in the “Unity” directory is the Ballot Image Manager for Optech ballots.

2. Select the correct Image Manager folder and right-click in the right hand portion of the Windows explorer screen to access an options menu.
3. Select New and then Folder in from the options menu. A new folder will appear in the Image Manager directory.

4. Highlight the folder’s name and type the name of the state you are programming elections for.

5. Use the above instructions to create another new folder in the Image Manager directory. Name this second folder “Text Files.” Store general text that can be used for every ballot formatted with the Ballot Image Manager in this folder.

Creating an Election Type File

1. Select the state folder that you created by following the instructions above.

2. Create a new folder under the state folder and name it after the type of election that you are programming. Include the election date before the election type. For example, if you will be storing general elections from the year 2001 in this folder, name the folder “2001 General.”

3. Create a second folder under the state folder called “Text Files.” Use this folder to store text files that can appear on every ballot used in the state.

Creating a County File

1. Select the election type folder that you created using the above instructions.

2. Create a new folder under the election type folder and name it after the county you are programming elections for. Copy election information to this file when merging an election in Data Manager. See “Chapter 5: Merging Election Files,” for more information on merging Data Manager files.

3. Create a second folder under the election type folder called “Text Files.” Store any text files in this folder that can be used for the type of election you are programming.
The Ballot Image Manager file structure should look like the following when viewed in Windows Explorer:

Starting Election Data Manager

1. Click Start on the Windows desktop, and select Programs.

2. Select the Ballot Data Manager icon. The Data Manager login window will appear:
3. Contact ES&S for the Data Manager user name and password. Then, enter your user name and password and click Login. The Data Manager Information window will appear.

Note: The Product Version number is the version of the Unity suite that the current version of Data Manager belongs to. The File Version number identifies the version of Data Manager being used.

4. Click OK, the Election Data Manager main screen will appear:
Chapter 2: Entering County Data

Use the following instructions to set up data for your county. County and office data entered into Data Manager can be reused and edited for future elections. Take full advantage of the system's database functions by entering all county and office information for a four-year election cycle. The more information that you include when performing initial data entry, the easier it will be to program elections in the future.

Note: If you are programming an election at an ES&S coding center, make sure that you have all of the necessary data from the county before entering election information. Contact the proper county election official and have him or her send all necessary county and office information to ES&S.

Creating a New County

DataManager will automatically create a file folder with the county name when the county is created in the program. All county information is stored in this folder. Use the following instructions every time you begin programming for a new county.

To set up county information:

1. Select New County from the File menu. The following window will appear:

![New County Window](image)
2. Enter the appropriate county information. The name entered in the **County Name** box will be the name that appears on election reports. The name entered in the **County Abbreviation** box (maximum 45 characters) will appear on the ballot. Leave this box blank if the county name is not going to appear on the ballot.

3. Entering a name in the **County Directory Name** creates the folder where county election information is saved on your hard drive. The default location for this folder is “c:\Unity\EDM\County Directory Name’.”

   The **County Directory Name** is limited to eight characters. The first two letters should be the state code and the last six letters should abbreviate the county name. For example, to enter a name for Madison County, Illinois, type “ILMADISO” in the **County Directory Name** box.

4. Select the **Create from another County** box to copy the Master Office file, the Party Affiliation file and the Office Headings file from another county directory. It is sometimes easier to edit files from another county than it is to create county files from scratch.

   **Caution:** This is the *only* way county information should be copied. Copying file folders in Windows is not recommended by ES&S and can cause serious problems when election information is compiled.

**Opening a County**

Use the following instructions to access a county that has already been set up in Data Manager.

**To open a county for Data Entry:**

1. Select **Open County** from the File menu, the following screen will appear:
2. Click the Select County arrow and select a county from the list.

3. Click OK, the selected county name will appear in the title bar at the top of the screen.

Setting up a County

Use options under the County menu to set up precinct and county information. County data is saved in the program’s database and can be reused every time an election is held in the county.

Entering Party Information

Select the Parties option to add the political parties voting in the county.

Note: NONPARTISAN (NON) is preprogrammed into the Election Data Manager as a party for general elections and nonpartisan races. The NONPARTISAN party name is uppercase by default but can be changed to lowercase lettering if necessary.

Note: Enter parties in the same order that they are to appear as straight party options on the ballot. Also, if you are going to sort candidates by party, enter parties in the same order that you want candidates sorted within.

Adding, Editing and Deleting Parties

1. Select Parties from the County menu, the following window will appear:
2. Select Add to add a new party to the list or highlight an existing party and click Edit to edit party information. The following window will appear:

![Party Selection Window]

**Entering Party Information**

1. Enter the sequence number for the selected party in the **Order** box. This number determines the order that candidates will appear within a race when sorting by party order. This number also determines the order that straight party options will appear on the ballot.

   For example, entering a 1 in the **Order** box places the selected party's straight party option first on the ballot and candidates from the selected party will appear first in their races. This feature is usually used with paper ballots and optical scan ballots that do not require exact ballot positions for candidates.

2. Enter a three-letter party abbreviation in the **ID** box. This abbreviation will become the party code when election files are sent to the Hardware Programming Manager.

3. Enter the device code for the ballot-scanning machine being used in the **Device Code** box. This code sets the device code in the Hardware Programming Manager. This code will also create separate ballot types for each party if you select **Use Party Device Code** under the **Election Preferences** tab in the Merge Preferences window. Use the Device Code to separate types by party when you are programming a primary election.
Note: If you are programming a primary election, assign the Nonpartisan party the last sequence number on the list and enter the device code for the Nonpartisan party as zero. These settings must be entered so that the Hardware Programming Manager can create the correct election definition for a primary.

**Entering Additional Party Information**

1. Enter the party name (Democrat, for example) in the **Party Name** box.

2. Enter any additional party text in the **Additional Text** fields. Type the information and press ENTER or click OK.

3. Click **Browse** next to the **Party Graphic File** box to import a party graphic. Search directories for the appropriate file, highlight it, and click OK or click Clear to clear the file path from the **Party Graphic File** box.

4. Click **Close** to return to the **Party Name** window. To edit a party file, highlight the file and click **Edit**. To delete a party, highlight the file and click **Delete**. Click Close to finish.

5. If you are using a Votronic or iVotronic touch screen scanner, enter the **English Party Title** and **Spanish Party Title** in the available boxes. These titles will appear on the Votronic or iVotronic touch screens.

   Note: The **English Party Title** and **Spanish Party Title** boxes will only be available if Votronic is selected as the ballot type under **Merge Preferences**.

**Adding Precincts**

Select **Precinct** under the **County** menu to enter information for all of the precincts in the county. Most counties describe their geographic locations as Districts, Wards or Precincts, (i.e. Ambler Township, District 1, 3rd Precinct). Add precincts to the Master Precinct File in the same order that ballots are to be printed. For example, if ballots for Precinct 3 are to be printed first, information for Precinct 3 should be entered first in Data Manager.
To add a precinct:

1. From the County menu, select Precincts. The following window will appear:

   ![Edit Master Precinct File](image)

2. Click **Delete** to remove a precinct from the list, **Append** to add a new precinct to the end of the list or highlight an existing precinct and click **Edit** to change precinct information. Click **Insert** to add a new precinct before the precinct that is highlighted. The Edit Precinct Information window will appear:

   ![Edit Precinct Information](image)

   Thirteen fields and two dialog boxes will be visible under the **Precinct Information** tab. Press TAB to advance through the boxes.
Entering Precinct Identifiers

1. Enter the full name of the first precinct in the Precinct Name box. Precincts should be entered in the same order that ballots are to be printed. For example, if the ballots for Precinct 3 are to be printed first, Precinct 3 should be the first precinct added to the precinct list. Press TAB to move to the next box. The precinct name will appear in the Precinct Abbrev box.

2. If the precinct is split, enter a number in the Split Name box to designate a split precinct in Data Manager. For example, Enter a 1 in the Split Name box for Precinct 1, Split 1 and enter a 2 in the box for Precinct 1, Split 2. Leave this box blank if the precinct is not split.

Precincts are split when a portion of the precinct falls into a different voting area than the rest of the precinct. For example, Precinct 1, School District 1 and Precinct 1 School District 2 would vote the same contests except for school board races.

3. The name entered in the Precinct Abbrev box will be used in the Hardware Programming Manager as the precinct name. The name entered in the Precinct Name box will appear automatically when you press TAB to advance fields. The split name will also appear automatically here and must be deleted before data is sent to the Hardware Programming Manager.

4. Enter the precinct code in the Precinct ID box. The Precinct ID is a six-digit code used by the Hardware Programming Manager to identify precincts and splits. The first four numbers in this code make up the precinct identifier and the last two numbers are the split code. For example, the Precinct ID for Precinct 1, Split 3 would be entered “000103.” If the precinct is not split, enter “00” as the last two digits of the Precinct ID.

Entering Additional Text and Ballot Flags

1. The next four boxes are Additional Text fields. These fields may be used for listing polling place locations, a second language for the ballot, hard codes, variable names or any other text that must appear on the ballot. Polling place locations must be entered here if they are to appear on the ballot. Information entered in the Additional Text fields is limited to 80 characters per line.
2. Information entered in the five Flag boxes is used by the Ballot Image Manager to place special characters or text on a ballot. For example, if an X is placed in a Flag field to designate a polling location accessible to physically challenged voters, the Image Manager system will read the X and place a wheelchair symbol on that polling place's ballot. Any letter or number may be used in these fields but flags must be set up identically in both the Ballot Image Manager and Data Manager to make sure that the correct symbols are placed on the correct ballots. See the Ballot Image Manager User's Guide for more information.

Selecting the Poll Ballot and the Absentee Ballot

1. Only select options from the Poll Ballot and Absentee Ballot lists if the county is part of a statewide voting system or if different ballot scanners are being used to count Election Day ballots and Absentee ballots. Select the Election Day scanner type from the Poll Ballot list and the absentee scanner type from the Absentee Ballot list.

   Leave these boxes blank if the same scanner is being used for both Election Day and Absentee ballots.

2. After precinct information is entered, click OK or press ENTER. The Precinct Name box will be highlighted and information for the next precinct can be entered.

   Note: The name of the last precinct entered will appear in the Precinct Name box. Edit this name when entering information for a new precinct.

3. Click OK and then Cancel after information for the final precinct has been entered to return to the Edit Master Precinct File window. You must click OK to save the information for the last precinct entered.

4. The most recently entered precinct will appear at the bottom of the precinct list in the Edit Master Precinct File window. If a new precinct must be added somewhere other than at the end of the list, highlight the precinct that the new precinct should appear before, and select Insert to enter new precinct information. To change the order of existing precincts, highlight the precinct that must be moved and use the up and down arrow keys in the upper right-hand corner of the Edit Master Precinct File window to move the precinct up or down the list.

   Note: Click OK or press ENTER after entering data for each Precinct. The last precinct information entered into the system will be lost if Close is selected without pressing ENTER or selecting OK.
Entering Election Information

Depending on the type of ballot scanner you are using, there may be an additional tab in the Edit Precinct Information window labeled Election Information. The following window will appear when this tab is selected. The name of the open precinct will appear above the registered voter entry box in blue lettering:

Entering Registered Voter Totals

1. The registered voter entry box is below the precinct name. Triple-click the zeros next to the party names to enter registered voter totals by party for the selected precinct. The registered voter numbers are added for all of the parties and the total for the county will appear in the Total Registration box. These numbers are usually required when the number of registered voters determines the rotation for an election.

2. If you are not entering registered voter totals by party, triple-click the zero next to NONPARTISAN and enter the registered voter total for the entire precinct. This number will appear in the Total Registration box below the registered voter entry box.

Entering Ballot Styles

1. Under the Sequence-Split Code Generation heading, select System Generated Seq-Split Codes to let the Election Data Manager generate the sequence and split codes for the current precinct.
2. Select **Override Generated Seq-Split Code** to manually enter the sequence and split codes for the current precinct. Enter the sequence and split numbers in the Seq and Split boxes.

3. Select the box labeled **Create an Unique Ballot Style when Grouping Ballots** to have the Data Manager create a unique ballot style for every precinct and split in the county. This option will create unique ballot styles even if races and rotations are identical for multiple splits and precincts.

4. Select **First** to enter election information for the first precinct in the Master Precinct File list. Select **Prev.** to view and enter election information for the previous precinct, **Next** to change election information for the next precinct on the list and **Last** to change election information for the last precinct on the list.

5. Select **OK** to save all of the data entered and return to options under the Precinct Information tab. Select **Cancel** to return to the Edit Master Precinct File window without updating registered voter numbers or ballot styles.

**Editing Precinct Information**

1. Select **Precincts** under the **County** menu. When the Edit Master Precinct File window appears, select the precinct that must be edited and click **Edit**. The Edit Precinct Information window will appear.

2. Make your changes. Note the four buttons on the right hand side of the window labeled **First**, **Prev.**, **Next**, and **Last**. These buttons are shortcuts to the next precinct, the previous precinct the first precinct or the last precinct in the Master Precinct File list.

3. Click **OK** after making changes to return to the Edit Master Precinct File window.

**Deleting Precinct Information**

1. To remove a Precinct, highlight the precinct name in the Edit Master Precinct File window and select **Delete**. Click **Yes** when the confirmation message appears to delete the file or select **No** to leave the file unchanged.

**Entering District Types**

District Types are the types of political boundaries found within a county. District types might include municipal districts, congressional districts, school districts, and legislative districts.
To add a district type:

1. Select District Types from the County menu, the following window will appear:

2. Click Add. The Insert/Edit District Type window will appear:

3. Enter the name of the district type in the District Type Name box, and click OK. The district type will appear in the District Types list. Continue entering data until all necessary district types have been added to the list.

4. Once all district types have been added, click Close in the Insert/Edit District Type window to return to the District Types window where all of the added district types will be displayed.
Creating a Countywide District Type

Create a countywide district type to link offices that will be contested in every precinct to every ballot in the county.

To create a countywide district type:

1. Select District Types from the County menu. The District Types window will appear.
2. Click Add. The Insert/Edit District Type window will appear.
3. Enter “County” in the District Type Name box and click OK.
4. Click Close to return to the District Types window. The “County” district type will appear in this window.

Editing District Types

1. Select the district type that must be changed.
2. Click Edit. The Insert/Edit District Type window will appear.
3. Make your changes then click OK to save the edited district type and return to the District Types window.

Deleting District Types

1. Select the district type that must be removed.
2. Click Delete. The following window will appear:

![Election Data Manager](image)

3. Click Yes to delete the district type or No to return to the District Types window without deleting the selection.
Entering District Names

Use the District Names option to create district names and link them to district types. Make sure that district names are entered exactly as they are to appear on the ballot. When ballot information is merged, these names will be combined with offices and sent to the Ballot Image Manager for typesetting.

Adding District Names

1. Select **District Names** from the **County** menu. The District Names window will appear:

![District Names Window](image)

This window is divided into two halves, **District Types** are on the left and **District Names** are on the right.
2. Select a type from the District Type list and click Add District. The following window will appear:

![District Name window]

3. Enter the district name, as it is to appear on the ballot, in the District Name box. For example, “75th Congressional District.”

4. Tab to the box labeled District Name 2. Enter additional district text, if necessary.

5. Enter the code that the Hardware Programming Manager will use to recognize this district in the District ID box. This code is limited to seven characters. The first three characters should be the abbreviation for the district type and the last four characters should be the district number. For example, the code for the 75th Congressional District should be entered as “CNG0075.”

**Note:** You must enter a District Name for the “County” district type. The District ID for countywide offices must be entered (in all capital letters) as “COUNTY” so that the Hardware Programming Manager will recognize offices contested countywide.

**Note:** Make sure that the three letter abbreviations used to identify the district type in the District ID box match the district type abbreviations in the Hardware Programming Manager.

6. Click OK to add all of the necessary district names to the selected district type, then click Close, select the next district type and add all of the necessary names.

7. Click Close to return to the District Names window when all of the district names have been added and linked to district types.
Editing District Names

1. Select District Names from the County menu.

2. Select the district type from the list on the left.

3. Select the district name to be edited from the list on the right.

4. Click Edit District. The following window will appear:

![District Name Window]

5. Make your changes and click OK to return to the District Names window.

Deleting District Names

1. Select District Names from the County menu.

2. Highlight the district type in the District Types box.

3. Select the district that must be removed from the District Name list.

4. Click Delete, the following window will appear:

![Election Data Manager Window]

5. Click Yes to delete the district or select No to return to the District Name window without making changes.
Setting up District Relations

Use the **District Relations** option to link districts defined with the **District Names** option to precincts created using the **Precincts** option. If, for example, residents of Precinct 1 vote in Judicial District 3 and School District 4, the precinct must be linked to those specific districts by using the **District Relations** option.

**To edit precinct and district relations:**

1. Select **District Relations** from the **County** menu, the following window will appear:

   ![District Relations Window](image)

   Three boxes will be visible; **Precinct Name** (left), **District Name** (top right), and a second **Precinct Name** box (bottom right). Select a district name from the **District Name** box. Notice that when a district name is selected, that name appears under the **Precincts linked to** heading and the district type appears above the **District Name** box.

2. Select a district from the **District Name** list, then go to the **Precinct Name** list on the left of the screen and select all of the precincts that must be linked to the selected district by holding down the CTRL key and clicking the necessary precincts.

3. Click **Add to District** after all of the necessary precincts are selected. All of the selected precincts will appear under the **Precincts Name** box in the bottom right of the screen.
4. Click Save Changes when all of the necessary precincts have been linked to the selected district. Green arrows will appear next to linked precincts in the left window indicating that the precincts have been linked to a district. Dark blue Xs will appear next to precincts assigned to the selected district. A light blue X indicates that the precinct is assigned to a district that is the same type as the selected district. A red X indicates that the precinct is assigned to more than one district of the same type.

Note: Select Save Changes every time you link a precinct to a district. If you click Close before selecting Save Changes, the district relation will not be saved.

5. Select the next district from the District Name box and link the necessary precincts to the district by following the above instructions. Continue until all precincts have been linked to districts.

Note: Link all precincts to the “COUNTY” district name if there are offices in the current election that will be contested on every ballot in the county.

Deleting a District Relation

To remove a district relation:

1. Select the district that must have a relation removed.

2. Select the precinct to be removed from the Precinct Name box at the bottom right of the screen.

3. Click Delete from District and then select Save Changes.

4. There is also an option called Remove All. If all of the precincts must be removed from a district, select the district name, highlight the first precinct in the Precinct Name box at the bottom right of the screen and click Remove All.

Entering Office Headings

Some counties categorize races on a ballot by office type. For example, all federal offices can appear together on a ballot and judicial and municipal offices can be grouped as well. The Election Data Manager uses Office Headings to group these offices.

Note: The Office Headings option is not available for all ballot styles.
Adding Office Headings

1. Select Office Headings from the County menu, the following window will appear:

![Office Headings Window]

2. Click Add. The Add/Edit Office Heading window will appear:

![Add/Edit Office Heading Window]

3. Enter an office heading and click OK. Select Close after all entries are made to return to the Office Headings window.

Note: Text can be formatted in the Office Heading box by entering hard codes. For example, if you want the office heading to appear in English and then in a foreign language a line below the English heading, you would enter "English Heading <NL> Foreign Language Heading." <NL> is the hardcode for new line.
Editing Office Headings

To edit an office heading, select the entry in the Office Headings window and click Edit. Make your changes and click OK.

Deleting Office Headings

1. To delete an entry, select the entry from the Office Headings window and click Delete. The heading will be removed.

2. Select Close to return to the Data Manager main screen.

Setting up the Master Office File

Enter office information after precinct and party data has been saved. The Data Manager saves office information in the Master Office File. The Hardware Programming manager uses the information saved in this file to define the offices being contested in an election. Data in the Master Office File can be used and reused many times. For this reason, ES&S recommends entering all of the offices contested in a county for at least the last four years during initial data entry.

Opening the Master Office File

1. Select Master Office File from the County menu, the following window will appear:
From left to right, the column headings in the Master Office File are Sequence Number, Write-in Line, Rotation, Office Title, Vote for Number, Term Length, District Type and Office Heading.

2. Click **Add**. The following window will appear:

![Edit Office Information](image)

**Note:** The **Hardware Programming Manager** tab is only available if that software is being used. The **Votronic** tab is only available if Votronic is selected under **Ballot Type** in the Merge Preferences window.

**Entering Contest Information**

Begin by entering contest information under the **Office** tab.

1. Enter the name of the office, such as President, in the **Office Title** box. This office title will appear on Election Day reports.

2. Enter the office’s sequence number in the **Seq #** box. The sequence number designates the order that an office will appear on the ballot. Lower numbers will appear early on the ballot and higher numbers will appear later.

**Note:** Assign Statistical Contests lower sequence numbers than regular contests so they can appear first on election reports.
Note: Do not use consecutive numbers to order offices (for example 1, 2, 3, and 4). Start at 100 and advance in increments of 25 or 50. For example, assign President a sequence number of 100 so it will appear first on the ballot and assign Inspector of Elections a sequence number of 11000 so it will appear last on the ballot. Also, it is helpful to categorize offices when assigning sequence numbers. For example, state and county offices can be represented with three digit numbers, district offices with four digit numbers and local offices with five digit numbers.

3. Enter a number in the Vote for # box to set the number of candidates that can be elected to an office. For example, enter the number 2 if two candidates may be elected to the current office in a typical election year. This number can be changed for the upcoming election only by selecting Edit/Add Offices for this Election under the Election menu. This number also determines the number of write-in targets that will appear for a contest.

4. Enter the number of years a candidate will hold office in the Term # box. For example, entering the number four means that the candidate elected to the office will serve a four year term.

**Entering Additional Information**

1. Select the Allow Write-ins box if you want write-in targets to appear on the ballot.

2. Select the Generate No Candidate Records to include a no candidate message on the ballot if there are no candidates running. No candidate text is entered by selecting Merge Preferences under the Merge menu. Voting selection marks (ovals, arrows, etc.) will not be printed under the contest when this option is selected.

3. Select the Omit if no candidates box to leave the contest off of the ballot if there are no candidates running.

**Entering General Office Information**

1. Select a district type from the District Type list to link it to the selected office. For example, if the office is Mayor, select Municipal as the District Type.

   **Note:** Instead of selecting the arrow in the District Type list, type the first letter of the district type desired. For example, if the district type is Legislative, type “L” in the District Type box and Legislative District will appear. If there is more than one district type with the same first letter, such as Legislative and Local, press the L key a second time to cycle through additional district types beginning with the letter L.
Note: Do not link offices that will be contested countywide to the default "<countywide>" selection. Instead, link them to the "County" district type that you created using the instructions in "Chapter 2: Creating a Countywide District Type."

2. Select All under the Party list if you are programming a general election. Only select a party from this list if you are programming a closed primary and there are partisan offices that will not appear ballots for all parties. For example, select Republican if you are entering office information for the Republican State Committee.

3. Select an office heading from the Office Heading list.

4. Select the rotation type from the Rotation list. There are five options available for selection:

- **Standard Can > 1**: This selection rotates all candidates when there is more than one. Standard refers to the precinct number. Therefore, the first precinct’s rotation will be 1, 2, 3, 4, the second precinct’s rotation will be 2, 3, 4, 1, the third precinct will be 3, 4, 1, 2, and so on.

- **District by Reg Voter by Party**: This option is used during a primary. The rotation is based on which precinct has the highest number of registered voters for a specific party.

  On the Republican or Democratic ballot, the precinct with the highest number of registered Republican or Democratic voters would use the following rotation: Candidate 1, Candidate 2, and Candidate 3.

  2nd highest: Candidate 2, Candidate 3, Candidate 1.

  3rd highest: Candidate 3, Candidate 1, Candidate 2.

  4th highest: Candidate 3, Candidate 1, Candidate 2.

  5th highest: Candidate 2, Candidate 3, Candidate 1.

  6th highest: Candidate 1, Candidate 2, Candidate 3.

- **Standard Can > Vote For**: This selection rotates candidates only if there are more candidates running for an office than the specified "Vote For number." For example, if the office of Congressman has a Vote for number of two and two candidates are running for the office, the candidates will not rotate. If three or more candidates are running for this office, the candidates will rotate. The candidates rotate in the same order as the Standard Can > 1 rotation.
- **District by Total Reg Voters (non-partisan):** Used during a primary election, this rotation works the same as the **District by Reg Voter by party** selection, except that registered voters are not broken down by party. Therefore, the total number of registered voters is used for each precinct.

- **District by Total Reg Voters Within Party (General):** This rotation is used during a general election and works the same as the **District by Total Reg Voters (non-partisan)** with one exception. The candidates rotate within each party, while the specified party order will remain the same.

5. Enter text in the **Vote Text** box to create a vote for message specific to the selected office. The entry in this box will override the default vote for text set up under the **Merge Preferences** tab.

6. Enter text in the **Term Text** box to create a term message specific to the current office. The entry in this box will override the default term text set up under the **Merge Preferences** tab.

**Entering Data under the Additional Information Tab**

There are seven extra text boxes under **Additional Information** tab that can be used to enter additional office information. Use these boxes if:

- The Office Title is too long to fit in the Office Title box.

- A foreign language is needed.

- The District Name or Precinct Name is to appear on the ballot. For example, if the District Type is Magisterial and the number of the district is to appear on the ballot (Magisterial District 10-6-16, for example). In this case, type the hard code required to display the district number (<GNAME>) in the Additional Text1 box.

**Note:** Use hard codes to format text entered in these boxes and variable names to enter data that repeats for all offices of the same type.
Setting up Hardware Programming Manager Options

This tab is only available if the Hardware Programming Manager is being used.

There are two options under the tab labeled Hrd Prg Mgr, Statistical Contest and Special.

To select Programming Manager options:

1. Select the Statistical Contest box if you are including statistical contests in Election Day reports. Statistical Contests are programmed into the Hardware Programming Manager to keep track of voting information such as the number of ballots cast and the number of registered voters participating in the election. These contests are not actively voted on and do not appear on the ballot.

2. Some states require specific software configuration for certain special elections. Select one of the following options in the Special list:

   - **Group:** Used in Massachusetts to cast a single vote for a group of candidates. This option is for a single contest, unlike a straight party vote that allows the voter to select a candidate for every race on the ballot by voting only one contest.
• **Recall:** Used in some western states to tie two races together for removing an official from office by popular vote.

• **Exact:** Select this option for a contest that has a vote for number greater than one and the voter must vote for a number of candidates equal to the vote for number. If the voter does not vote for a number of candidates equal to the vote for number in an Exact contest, his or her vote will not be counted.

• **Cross-Endorse:** Some northeastern states allow a candidate to appear on the ballot as many times as they have been endorsed by different political parties. Select this option if you are programming a contest that allows cross-endorsement.

3. Click OK to enter Hardware Programming Manager preferences for the next office on the list.

4. Select Cancel after preferences have been set for all of the offices being entered to return to the Edit Master Office File window. Click Close to exit to the Data Manager main screen.

**Setting up Votronic Options**

This tab is only available if Votronic is selected as the ballot type under Merge Preferences from the Merge menu.
To select Votronic options:

1. Enter the office title that will appear on the Votronic or iVotronic touch screen in the Office Title box. Office titles on the Votronic screen are limited to 40 characters. The title that will appear on election reports will be the title entered under the Office tab.

2. Enter the number of write in lines needed for the selected office in the Number of Write-in Characters box. The number of write-in lines must be equal to the vote for number of the contest. For example, If there are three candidates for a City Council race and two open seats on the Council, two write-in places must be available.

3. Determine whether the write-in lines will appear first on the page or alone on a page and select the appropriate box.

4. Use the Controlling Contest Name option if two or more races are linked on the ballot. For example, if you are programming a recall election where the voter must determine both the need for a recall and vote for a replacement if the recall is upheld. In this case, you would enter the need for recall race as the controlling contest for the replacement contest because the voter must vote for the recall in order to vote for a candidate.

5. The final two buttons on this screen format the ballot language (English or Spanish) on the Votronic Voter Terminal. To create a bilingual ballot, click Build Spanish Office Title. To create an English ballot, click Build English Office Title.

Creating Instruction Text for the Votronic or iVotronic

Most ballot instruction text is created using text frames in the Ballot Image Manager but if you are using the Votronic or iVotronic ballot instruction text must be entered in the Master Office File.

To create Votronic ballot instruction text:

1. Select Master Office File from the County menu and click Add.

2. Enter the ballot instruction text in the Office Title box under the Office tab and assign the instruction text a sequence number of one.

3. If the text does not fit in the Office Title box, click the Additional Information tab and enter additional ballot instructions in the Additional Information boxes. Up to 80 characters can be entered in each box.

4. Select the Votronic tab and click Instruction Text to place the ballot instructions on the ballot.
5. If you entered additional ballot instructions under the **Additional Information** tab, click **Build English Office Title**.

6. **Edit** the Default style sheet and click **Add** under the **Select fields from .bdf** heading. **Add** each of the Additional Information boxes you used for instruction text and click **OK** after adding each one.

7. Click **OK** in the **Style Dialog window** and **OK** again in the **Style Sheets window** to place the instruction text on the ballot.

**Evaluating District Relations**

Use the **Evaluate District Relations** option to locate any problems with the options set up in the **County menu**. Although this is a useful tool, do not rely on this option alone. Carefully check the **District Relations file** for errors.

**To evaluate district relations:**

1. Select **Evaluate District Relations** from the **County menu**, the following window will appear:

   ![District Relations Report window](image)

2. Click **Start** to begin the evaluation. Click **Stop** to cancel the evaluation at any time. The evaluation, along with any errors found, will be displayed in the bottom portion of the window after the report is generated.
Note: Select District Relations from the County menu to correct any mistakes found by this utility.

3. Click Close to return to the main menu after reviewing the evaluation.

Importing Files

Use the Import option to load precinct, district and office information files from another source eliminating the need to retype (and proof) election information if it has already been entered in another database.

Data can be imported multiple times, but only imported information that is new or different will be added or changed in the Election Data Manager. Use this feature to update Data Manager files with changes made in another system.

Election Data Manager maintains county and election information in the following database tables:

<table>
<thead>
<tr>
<th>County Tables</th>
<th>Election Tables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master Precinct</td>
<td>Election Precincts</td>
</tr>
<tr>
<td>District Type</td>
<td>Election Offices</td>
</tr>
<tr>
<td>District Name</td>
<td>Office Relations</td>
</tr>
<tr>
<td>District Relations</td>
<td>Candidate</td>
</tr>
<tr>
<td>Master Office</td>
<td></td>
</tr>
</tbody>
</table>

The Election Data Manager import options allow these tables to be populated with data from other programs, such as voter registration files or a candidate filing system.

Imported files must be ASCII files with fixed length fields. The Election Data Manager allows fields to be in any order. Upon request, ES&S will provide the file layouts and field sizes for each of the Election Data Manager’s tables.
Importing Precincts

To import precinct information files:

1. Select **Import Precincts** from the **County** menu, the following window will appear:

2. Click **Browse** and select the path to the desired precinct files. The selected file path will appear in the **Precinct Import File** box.

3. Select from one of the three available options: **Master Add/Update**, **Master Update Only**, or **Election Update Only**.

   - Selecting **Master Add/Update** will automatically update precinct information and add any new precincts to the Master Precinct File.
   
   - Selecting **Master Update** will automatically update the Master Precinct File, but not precinct information for the current election, if the two are different.
   
   - Selecting **Election Update** will automatically update the Precinct File for the current election only. The Master Precinct File will not be updated.
Note: To update a precinct with imported data, the imported precinct name must match an existing name in the Election Data Manager exactly. To update a split precinct, the imported precinct name and split name must match existing names. When an update is started, the Data Manager will locate the matching precinct name and overwrite existing data with imported information even if the imported files are blank.

4. Click Add to select specific fields within the precinct file that will be imported. The following window will appear:

![Select the Destination Field and the Size of the Import Field](image)

5. Click the Field Name arrow to select specific precinct information to be imported, then select the Field Size by using the up/down arrows next to the Field Size box or typing a number manually. Available precinct fields and the maximum size (number of characters) for each field appear in the following chart:

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Max Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precinct Name</td>
<td>49</td>
</tr>
<tr>
<td>Split Name</td>
<td>49</td>
</tr>
<tr>
<td>Precinct Abbrev</td>
<td>25</td>
</tr>
<tr>
<td>Precinct ID</td>
<td>10</td>
</tr>
<tr>
<td>Additional Text1</td>
<td>80</td>
</tr>
<tr>
<td>Additional Text2</td>
<td>80</td>
</tr>
<tr>
<td>Additional Text3</td>
<td>80</td>
</tr>
<tr>
<td>Additional Text4</td>
<td>80</td>
</tr>
<tr>
<td>Header Code</td>
<td>5</td>
</tr>
<tr>
<td>Poll Ballot Type</td>
<td>20</td>
</tr>
<tr>
<td>Absentee Ballot Type</td>
<td>20</td>
</tr>
<tr>
<td>Party</td>
<td>50</td>
</tr>
<tr>
<td>Registered Voter Count</td>
<td>5</td>
</tr>
</tbody>
</table>
Note: Consult the following list for special instructions or information for some of the import fields:

- **Split precincts** are identified by the Precinct Name and Split Name fields. All of the splits in a precinct have identical precinct names and unique split names. Do not import the Split Name field if the precinct is not split.

- The following is a list of acceptable names for Poll and Absentee Ballot Types:

<table>
<thead>
<tr>
<th>LEVER</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PAPER</td>
<td></td>
</tr>
<tr>
<td>OPTECH</td>
<td></td>
</tr>
<tr>
<td>OPTECH 3P</td>
<td></td>
</tr>
<tr>
<td>OPTECH 3P</td>
<td></td>
</tr>
<tr>
<td>OPTECH EAGLE</td>
<td></td>
</tr>
<tr>
<td>OPTECH EAGLE</td>
<td></td>
</tr>
<tr>
<td>CES</td>
<td></td>
</tr>
<tr>
<td>BRC PUNCH CARD</td>
<td></td>
</tr>
<tr>
<td>VOTAMATIC</td>
<td></td>
</tr>
<tr>
<td>DATAVOTE</td>
<td></td>
</tr>
<tr>
<td>PUNCH CARD OTHER</td>
<td></td>
</tr>
</tbody>
</table>

- Up to eight **Parties** can be entered with registered vote counts. The party name in the Election Data Manager must match the imported party name in order for the Registered Voter Count to be updated. If a party name does not exist in Data Manager, the imported party name and registered vote count will be added to the updated precinct record.

6. Click **OK** to return to the Import Precincts window where the selected field will appear in the **Field Name** box. Continue this process until all necessary fields are selected.

   **Note:** Click **Edit** to change the field name or **Delete** to remove a field name.

7. Click **Start**. All of the information within the specified files will be imported. Click **Stop** if the import must be canceled for any reason while in progress.

8. The names of all imported files, as well as the number of files processed, added and/or updated, will appear at the bottom of the import window. Click **Close** to return to the main screen when the import process is complete.
Importing District Tables

1. Select Import District Tables from the County menu, the following window will appear:

![Import District Type, District Name, and District Relations Information](image)

Three tables must be built to import district information: District Type, District Name and District Relations. Each of the three import files must contain specific fields to match up to the files in Data Manager.

2. Click **Browse** next to the **District Type Import File** box and select the path from which district type files are to be imported. Once selected, the path name will appear in the **District Type Import File** box.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Exact Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>District Type Name</td>
<td>40</td>
</tr>
</tbody>
</table>

3. Click **Browse** next to the **District Name Import File** box and select the path where the appropriate district name files are located. Once selected, the path name will appear in the **District Name Import File** box.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Exact Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>District Name</td>
<td>40</td>
</tr>
<tr>
<td>District Type Name</td>
<td>40</td>
</tr>
<tr>
<td>District ID (optional)</td>
<td>7</td>
</tr>
</tbody>
</table>
Note: Enter district names exactly as they are to appear on the ballot.

4. Click **Browse** next to the **District Relations Import File** box and select the path where the appropriate district relations files are located. Once selected, the path name will appear in the **Precinct Import File** box.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Exact Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>District Name</td>
<td>40</td>
</tr>
<tr>
<td>District Type</td>
<td>40</td>
</tr>
<tr>
<td>Precinct Name</td>
<td>49</td>
</tr>
<tr>
<td>Precinct Name2</td>
<td>49</td>
</tr>
</tbody>
</table>

Note: Information entered in the District Relation Table determines what offices and candidates appear on what ballots.

5. Click **Start**. The following warning will appear for each of the three district import options:

6. All existing district information is overwritten when data files are imported. Click **Yes** to continue or click **No** to cancel the import. All of the information within the specified files will be imported. If the import must be canceled while in progress, click **Stop**. The processing information will appear at the bottom of the screen.

7. Click **Close** when finished to return to the Data Manager main screen.
Importing Offices

To import office information files:

1. Click Import Offices under the County menu, the following window will appear:

2. Click Browse to select the file path where office import files are located. The path name will appear in the Office Import File box when a file is selected.

3. Select an option to both add to and update office files or to update files without adding to them.

4. Click Add to select specific fields to import. The following window will appear:
5. Click the **Field Name** list and select the type of office information that is going to be imported. Enter the **Field Size** by clicking the up and down arrows next to the **Field Size** box or typing the size in manually. Consult the following list for the available field types and the maximum size (in characters) of the field:

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Max Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Title</td>
<td>80</td>
</tr>
<tr>
<td>Sequence</td>
<td>5</td>
</tr>
<tr>
<td>Term (in years)</td>
<td>3</td>
</tr>
<tr>
<td>Vote For (# of candidates)</td>
<td>3</td>
</tr>
<tr>
<td>Additional Text1</td>
<td>80</td>
</tr>
<tr>
<td>Additional Text2</td>
<td>80</td>
</tr>
<tr>
<td>Additional Text3</td>
<td>80</td>
</tr>
<tr>
<td>Additional Text4</td>
<td>80</td>
</tr>
<tr>
<td>Additional Text5</td>
<td>80</td>
</tr>
<tr>
<td>Party</td>
<td>50</td>
</tr>
<tr>
<td>District Type</td>
<td>40</td>
</tr>
<tr>
<td>Vote for Phrase</td>
<td>80</td>
</tr>
<tr>
<td>Term Phrase</td>
<td>80</td>
</tr>
<tr>
<td>Location 1</td>
<td>5</td>
</tr>
<tr>
<td>Location 2</td>
<td>5</td>
</tr>
</tbody>
</table>

**Note:** Party and District Type import data must match exactly with existing records in order for office information to be imported. To update an existing office record, the import data must match the Office Title, Term, Vote For and District Type of the Data Manager file.

**Note:** If the district type is designated as "COUNT," the office is contested countywide and will appear on all ballots. If the district type is "Local" the office is contested on one ballot only.

6. Click **OK** to return to the Import Offices for this Election window. The names of the selected office fields will be listed in the **Field Name** box. Continue selecting fields until all necessary files have been added to this list.

**Note:** To edit or change a field name, click **Edit** and make the necessary changes. Click **Delete** to remove a field from the list.

7. Click **Start**. All of the information within the specified files will be imported. To cancel the import in progress, click **Stop**.
8. Information on all of the files imported as well as a report on how many files were processed, added and/or updated during the import process will appear in the bottom portion of the screen. Click Close to exit to the Data Manager main screen.
Chapter 3: Creating an Election

The Election Data Manager automatically creates a file folder with the county's name in the Unity folder when you create your county. An election folder is created and stored in this county folder when you select the New Election option under the File menu. All election specific information is stored in the election folder. The following directory path shows the default locations of a sample county and election created using Data Manager:

C:\Unity\EDM\CountyName\ElectionName

Note: Multiple elections can be created and stored in the county folder.

Creating a New Election

A new election must be created before election specific information can be entered.

To start a new election:

1. Select New Election from the File menu. The following window will appear:
2. Enter the name of the election (up to eight characters) in the New Election Name box. The first two characters of the election name should be the year and the next character should identify the election type. The fourth and fifth characters are the state abbreviation and the last three characters should be an abbreviation for the county name. For example, the election name for a general election held in Douglas County, Nebraska in 2001 should be entered as “01GNEDOU.” A folder with this name is automatically created by the Election Data Manager.

Note: Common one letter election type codes include:

• G: General
• P: Primary
• S: Special

3. Enter the full election name in the Election Name/Description box. Enter the election year, the election type, and the county and state name. For example, “2001 General Election, Douglas NE.” This name will appear on election reports and on the ballot. The variable name flag <ELECTIONNAME> will recall this name when it is entered in a text box.

4. Enter the date of the election in the Election Date box. The variable name flag <ELECTIONDATE> will recall this date when it is entered in a text box.

5. Enter the name of the election official in the Clerk’s Name box.
Importing Election Data

To import data from a previous election:

1. Select the Create from another election check box in the New Election window to use data from a previous election to create the current election. The following screen will appear:

   ![Select the Election Ballot File (BDM)](image)

2. Select a previously created election that contains data the current election can be created from. For example, a general election from a previous year may be selected to use as a template for a new general election. It is often easier to create a new election by editing information from an old election than it is to create the new election from scratch.

   Warning: Only use this function to copy files from an election programmed for the same county. Use the import options in Data Manager to copy files from elections programmed for other counties.

   Note: Election files must have the extension (.bdm) to be used in the Election Data Manager.

3. Click Open to select an election (if creating from an old election) and return to the New Election window.

4. Click OK to create a new election, the election name will appear in the title bar at the top of the screen.
Opening an Existing Election

Use this option to open an election that has been previously programmed in Data Manager.

To open an election:

1. Select Open Election from the File menu. The following window will appear:

2. Locate the election and double-click the file name. The name of the selected file will appear in the File name box.

   **Note:** The election file must have the extension (.bdm) to be used in the Election Data Manager.

3. Click Open to select the election or Cancel to return to the Election Data Manager main screen without selecting an election.

4. The name of the selected election will appear in the title bar at the top of the screen.
Editing Election Information

Select this option to change information for the current selected election.

To edit election information:

1. Select Edit Election Information from the File menu. The following window will appear:

   ![Edit Election Information Window]

2. Edit your election information and click OK to save the changes and return to the main screen. Click Cancel to return to the main screen without saving changes.

Programming an Election

Selecting Precincts from the Master Precinct File

Select all of the precincts that will be active in the upcoming election from the Master Precinct File.
To select precincts from the Master Precinct File:

1. Click Select Precincts from Master Precinct File under the Election menu. The following window will appear:

   ![Select Precincts for this Election](image)

   - Bloomingdale 1
   - Dillard 2
   - Dayton 3
   - Dayton 4
   - Kath 5
   - Target 5
   - Target 6
   - K-Mail 6
   - Yonkers 7
   - Yonkers 7
   - Sax 8
   - Eko 9
   - Obars 10

2. Select the precincts participating in the upcoming election from the Master Precinct List on the left side of the window. Hold down SHIFT while clicking precincts to select multiple precincts in sequence or, hold down the CTRL key while selecting to highlight multiple precincts that are not in order.

3. Click Add Precinct after necessary precincts have been highlighted. Green arrows will appear next to the selected precincts. Click OK to save the precinct selections, the green arrows next to the selected precincts will change to blue Xs.

   Highlight a precinct in the Precincts This Election box on the right side of the window and click Delete Precinct to remove it from the active precinct list.

4. Click Sort to arrange the selected precincts in the same order as the precincts in the Master Precinct list. The following window will appear:

   ![Election Data Manager](image)
5. Click Yes to sort the Precincts for this Election list or click No to return to the Select Precincts for this Election window without sorting. If a precinct is selected more than once, the following window will appear:

This window identifies which precincts were not sorted due to duplication.

6. Click OK to save the precinct selections and exit to the Data Manager main screen. Click Cancel to return to the main screen without saving.

Editing Precincts for the Upcoming Election

After precincts are selected, precinct information can be changed for the current election without altering precinct data saved in the county folder. Use the Edit Precincts for this Election option to double-check precinct information or change precinct information for the upcoming election.

To edit precincts for the current election:

1. Select Edit Precincts for this Election under the Election menu, the following window will appear:
2. Select the precinct that must be changed and click Edit. The following window will appear:

![Edit Precinct Information](image)

3. Refer to the precinct section of Chapter 3 for more information on the options in this window. Make any necessary changes and click OK to save. A prompt will appear allowing you to update the Master Precinct Table with the changes made for the upcoming election.

![Election Data Manager](image)

4. Click No to save the changes for the upcoming election only. Precinct data will be saved in the folder for the current election.

Click Yes to update the Master Precinct File in the county folder as well as precinct data in the election folder.
Note: To remove a precinct file from the current election, highlight the precinct in the right window and click **Delete**. Click **Yes** when the confirmation message appears to continue with the deletion or click **No** to cancel the action.

5. To sort precincts that are active in the current election to match the order in the Master Precinct list, click **Sort**. The following window will appear:

6. Click **Yes** to sort precincts or **No** to abort the sorting process and return to the Edit Election Precinct File window.

7. Select **Close** to save your selections after making changes.

**Selecting Offices from the Master Office File**

Use the **Select Offices from Master Office File** option after precincts have been selected and formatted to select the offices that will be contested in the upcoming election.
To select an office from the Master Office File:

1. Click Select Offices from Master Office File under the Election menu. The following window will appear:

![Select Offices for this Election](image)

2. Select the offices being contested and click Add Office.

   Note: To select more than one office at a time, hold the CTRL key while highlighting offices from the Master Offices list.

3. Click Add Office. The selected offices will be added to the Offices This Election list on the right side of the window.

4. Click OK to save your selections or click Cancel to exit to the Data Manager main screen without saving changes.

   Note: To remove an office from the current election, select the office under the Offices this Election heading and click Delete Office.
Linking Districts to Offices

After offices have been selected for the current election, the offices must then be linked to the districts where they are being contested. Use the Link Districts to Offices option to place contests on ballots for the correct precincts.

To link districts to offices:

1. Select Link Districts to Offices from the Election menu. The following window will appear:

![Link Districts to this Election's Offices window]

The top right window contains all of the offices selected for the current election. The left window contains all of the districts defined with the District Names option and the District Types option under the County menu.

2. Assign each office to the district or districts where it is being contested. For example, if there is an election for State Senator, select State Senator from the Offices list in the top right of the window and link districts to the office by selecting the appropriate districts and clicking Add Districts. The districts linked to the selected office will appear in the box on the bottom right of the window. Click Save Changes when all of the necessary districts have been linked to the selected office.

Note: It is not necessary to link an office that is contested countywide to any districts on this screen. The Election Data Manager assumes that offices are contested countywide until the office is linked to a specific district or districts.

3. Click Save Changes after linking districts to an office or select Cancel Changes to exit to the Data Manager main screen without saving.
Note: If a district has been assigned to an office incorrectly, select the district in the bottom right box of the Link Districts to this Election’s Offices window and click Remove District. Click Save Changes to remove the district from the selected office and save the change.

Editing and Adding Offices for the Upcoming Election

Use the Edit/Add Offices for this Election option if an office must be added or changed for the upcoming election without saving the changes to the Master Office File.

To edit/add offices for this election:

1. Select Edit/Add Offices from the Election menu. The following window will appear:

![Edit Election Office File Window]

2. Modify the office assignments as needed.

3. Click Save Changes to apply the changes.

4. Close the window when you are finished.
2. Click Add to add a new office for the upcoming election. To edit an existing office, highlight the office that must be changed and click Edit. Both options will open the Add Office Information window.

3. Enter additional office title information, or guidelines for the current election in this window.

Note: The Add Office Information window is nearly identical to the Master Office File window. See the Master Office file section in Chapter 3 for descriptions of most of the options in this window. New options are listed below.

Note: If AVM or Shoup voting machines are being used, two additional fields will be available:

- **From:** Sets the first lever position for the current office.
- **To:** Sets the last lever position for the selected office.

Note: Determining the lever positions for an office allows the county to decide where office text will be located on the ballots. When lever positions are not set, the Election Data Manager will automatically base office text locations on candidate lever positions. If no candidates are contesting an office, the system will determine the location of the office text by using the Vote For number. If the Vote For number is a 2, the program will create enough space for two lever positions below the office text.
4. Click OK after all of the necessary office information has been entered to exit to the Edit Election Office File window.

5. Click Close to save the office information and exit to the Data Manager main screen.

Note: To remove an office from the current election, select the office in the Edit Election Office window and click Delete. Click Yes when prompted to delete the office.

**Setting up Straight Party Options**

Including a *Straight Party* option on the ballot allows the voter to choose candidates from one party for all of the races on a ballot by selecting a single ballot target. For example, if a voter wanted to select a Republican candidate for all of the races on a ballot, he or she could select the Republican option under the *Straight Party* contest.

To include a straight party option on the ballot:

1. Select *Straight Party* from the *Election* menu. The following window will appear:

![Straight Party Dialog](image)
2. Click Add, the following window will appear (To edit an existing Straight Party option, select the option and click Edit):

![Add/Edit Straight Party Block](image)

3. Enter the sequence number for the straight party text in the **Sequence Number** field. This number positions the straight party contest on the ballot relative to Office and Question Sequence numbers. Place the Straight Party option before the first regular contest that will be affected by a straight party vote.

   **Note:** ES&S recommends numbering races in intervals of 100.

4. Enter the description of the Straight Party option in the **Description** box. Normally, "Straight Party" is used as the description.

   **Note:** The description will not appear on the ballot.

5. Select the boxes next to the offices that will be affected by a straight party selection. Clicking **Select All** will allow a straight party vote to influence all of the contests on the ballot. Use the **Deselect All** option to cancel all of the office selections.
5. Click OK to return to the Straight Party Dialog window where the Straight Party option(s) will be listed.


Note: To remove a Straight Party option from an election, select the option and click Delete. Click Yes when prompted to delete the office.

**Entering Candidate Information**

After offices have been selected and linked to the proper voting districts, select the Candidates option to enter candidate data into the Election Data Manager.
Adding Candidates

To enter the candidates for the current election:

1. Select Candidates from the Election menu. The following window will appear:

   ![Candidates for this election](image)

   All of the candidates contesting offices in the upcoming election will appear in this window. The total number of candidates appears in the Candidates box at the bottom of the window.

2. Click Add. The following window will appear:

   ![Edit Candidate Information](image)
3. Enter the candidate’s last name, first name and middle initial in the boxes at the top of the window. Data Manager will automatically fill in the Full Name box with this information.

4. Click the arrow next to the **Office** box and select the office that the candidate is running for.

5. Select the arrow next to the **District or Precinct** box and select the district or precinct where the candidate is contesting an office.

   **Note:** If the candidate is running for an office that will be contested countywide, *do not* select the default “<countywide>.” Instead, select the “COUNTY” district that you created using the instructions in Chapter 2, “Entering District Types.”

6. Depending on the voting machine selected in **Merge Preferences**, one of the following boxes will be available: **Relative Position, Column, Line, or Row/Lever**. A description of each of these options follows:

   - **Relative Position:** This determines where the candidate’s name will appear on the ballot relative to other candidates contesting the same office. If relative positions are not entered, the Data Manager will automatically sort candidates’ names in the order selected using the **Merge Preferences** option under the **Merge** menu (Chapter 5).

   - **Column:** When Shoup is selected for machine type, a column number must be entered for every candidate name.

   - **Line:** This may be used for relative positioning or exact positioning. When used for relative positioning, the automatic check box must be turned on under **Merge Preferences** (Chapter 5).

   - **Row/Lever:** When AVM is selected for machine type, enter the row letter and lever number for every candidate name appearing on the ballot.

7. Click the arrow next to the **Party** box and select the candidate’s party affiliation. The default selection, **No Affiliation**, should not be selected when the final election file is to be sent to the Hardware Programming Manager.

8. Tab to the **Candidate #** box. The **Candidate #** will not appear on the ballot, but will appear on reports. Use this option to assign a number to each candidate.
Entering Additional Parties

Use the Additional Parties/Locations option if candidates must appear on ballots for more than one party in a closed primary. For example, if a nonpartisan contest for School Director must appear on all of the ballots in a closed primary, you must enter this screen for the school director contest and enter positions for the school director candidates. Click Additional Parties/Locations under the Candidate Information tab. The following window will appear:

1. Enter a value in the Relative Position field to place the candidate’s name on the ballot relative to other candidates contesting the same office and select the arrows next to the party box to select the ballots for every party that the candidate must appear on.

2. Click OK to return to the Add Candidate Information window after additional party information has been entered for every party ballot the candidate must appear on.
Entering Additional Candidate Information

Select the Additional Information tab in the Add Candidate Information window to add text to the ballot in the following situations:

- If the candidate’s name does not fit in the space provided in the Add Candidate Information window.
- If nicknames are to be included on the ballot.
- If the candidate’s hometown is to appear on the ballot.
- If any other text must appear with the candidate text on the ballot.

Note: Hard codes and variable names may be used to format text under the Additional Information tab.

1. Select Browse for Candidate BMP if a picture of the candidate must appear on the ballot. Enter the location of the file in the File Name box.

2. Click OK to save the additional text and return to the Add Candidate Information Window.

3. Click OK or press ENTER to save candidate data after entering data for all of the candidates in the current election to save candidate information.

4. Click Close to exit to the Data Manager main screen. Be sure to click OK before clicking Close or candidate data will not be saved.

Formatting Votronic Candidate Titles

If the Votronic is being used in the upcoming election, a Votronic tab will be available for selection in the Add Candidate Information window.

1. Select Build English Candidate Title to format candidate text for the Votronic screen in English.

2. Select Build Spanish Candidate Title to format candidate text for the Votronic in Spanish.

3. If either selection is made, a style sheet window will appear allowing you to format candidate text for the Votronic screen. This style sheet follows the same conventions as the style sheets used in the Ballot Image Manager. Consult the Ballot Image Manager User’s Guide for more information on filling in style sheets.

4. Select First, Prev, Next or Last to move through the list of available candidates.
5. Select OK to save changes or Cancel to return to the Add Candidate Information window without saving.

**Editing Candidate Information**

To edit a candidate:

After adding candidates, the candidate list will appear in the Candidates for this Election window.

1. To edit candidate information, select a candidate and click Edit. The Edit Candidate Information window will appear:

   ![Edit Candidate Information Window]

   This window operates in the same manner as the Add Candidate Information window described in the previous section. Refer to that section for information on this window.
Sorting Candidates

To sort candidates:

To sort a candidate’s name within a race by party, name, office or position, select the candidate in the Candidates for this Election window and click Sort. The following window will appear:

1. Sort candidates by party, then by name, office or candidate position. To sort by party, click Sort Using Party Order. To also sort by name, office or candidate position, click the appropriate option.

2. Click Sort Now before saving changes to display how candidates will be ordered on the ballot.

3. Click OK to save the sorted list after selections have been made.

Deleting a Candidate

To remove a candidate from the election:

1. Select the candidate in the Candidates for this Election window and click Delete.

2. Click Yes when prompted to delete the candidate.

3. To delete more than one candidate at a time, hold the CTRL key while selecting the desired candidates and click Delete.
Importing Files

Use the Import option to load precinct, district and office information files from another source eliminating the need to retype (and proof) election information if it has already been entered in another database.

Data can be imported multiple times, but only imported information that is new or different will be added or changed in the Election Data Manager. Use this feature to update Data Manager files with changes made in another system.

Election Data Manager maintains county and election information in the following database tables:

<table>
<thead>
<tr>
<th>County Tables</th>
<th>Election Tables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master Precinct</td>
<td>Election Precincts</td>
</tr>
<tr>
<td>District Type</td>
<td>Election Offices</td>
</tr>
<tr>
<td>District Name</td>
<td>Office Relations</td>
</tr>
<tr>
<td>District Relations</td>
<td>Candidate</td>
</tr>
<tr>
<td>Master Office</td>
<td></td>
</tr>
</tbody>
</table>

The Election Data Manager import options allow these tables to be populated with data from other programs, such as voter registration files or a candidate filing system.

Imported files must be ASCII files with fixed length fields. The Election Data Manager allows fields to be in any order. Upon request, ES&S will provide the file layouts and field sizes for each of the Election Data Manager’s tables.

Importing Office Information for the Current Election

Importing offices for the current election follows the same process as importing information to the master office file. Refer to the “Importing Offices” section of chapter 2 for instructions on importing these files.
Importing Office Relations

The office relations file links offices to districts active in the current election.

To import office relations:

1. Under the Election menu, click Import Office Relations. The following window will appear:

   ![Import Office Relation Information Window]

2. Click Browse to select the location of the office relation files to be imported. Once selected, the file path will appear in the Office Relations File box. The Office Relations File contains the following fields:

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Exact Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Title</td>
<td>80</td>
</tr>
<tr>
<td>District Name or District ID</td>
<td>40</td>
</tr>
<tr>
<td>or Precinct ID</td>
<td></td>
</tr>
<tr>
<td>District Type</td>
<td>40</td>
</tr>
</tbody>
</table>

Note: The office title is case sensitive and the title in the import file must be spelled exactly the same as in Data Manager. The office title format is ‘Office Title V:v T:t’ where v is equal to the Vote For # and t is equal to the term number (the number of years an official will serve before the next election). For example, “U.S. President V:1 T:4.”

Note: Use the first seven characters of the District ID if the office is being linked using the District ID. Use the first 10 characters of the Precinct ID if the office is being linked using the Precinct ID.
3. Click Start after selecting the office relations file. The following warning will appear:

4. All existing office relation information is overwritten when new office relation files are imported. Click Yes to continue with the import or Stop to cancel the import process. Information about the import will appear in the bottom portion of the window. Click Close when finished to return to the main screen.

Importing Candidate Information

To import candidate information files:

1. Click Import Candidates under the Election menu. The following window will appear:

Click Browse to select the location of the files to be imported. Once selected, the file path will appear in the Candidate Import File box.
2. Determine whether to add to and update the candidate files with the import files or simply to update them and select the appropriate option.

3. Select the **Apply Candidates to Splits** box to include imported candidates in all split precincts that their race is being contested in.

4. Click **Add** to select the specific candidate information that will be imported to the Data Manager. The following window will appear:

   ![Select the Destination Field and the Size of the Import Field](image)

5. Click the arrow in the **Field Name** box to select the specific type of candidate information to be imported. Then, select the field size by clicking the up and down arrows next to the **Field Size** box. The candidate import file contains the following fields:

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Max Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Name Middle Initial</td>
<td>80</td>
</tr>
<tr>
<td>Last Name</td>
<td>80</td>
</tr>
<tr>
<td>Full Name</td>
<td>80</td>
</tr>
<tr>
<td>Party</td>
<td>50</td>
</tr>
<tr>
<td>Additional Text1</td>
<td>80</td>
</tr>
<tr>
<td>Additional Text2</td>
<td>80</td>
</tr>
<tr>
<td>Additional Text3</td>
<td>80</td>
</tr>
<tr>
<td>Additional Text4</td>
<td>80</td>
</tr>
<tr>
<td>Additional Text5</td>
<td>80</td>
</tr>
<tr>
<td>Location 1</td>
<td>5</td>
</tr>
<tr>
<td>Location 2</td>
<td>5</td>
</tr>
<tr>
<td>Candidate number</td>
<td>5</td>
</tr>
<tr>
<td>Office Title (V:n T:n)</td>
<td>80</td>
</tr>
<tr>
<td>District Type</td>
<td>40</td>
</tr>
<tr>
<td>District Name or Code</td>
<td>40</td>
</tr>
<tr>
<td>Precinct ID</td>
<td>10</td>
</tr>
</tbody>
</table>
Note: The full name of the candidate in the import file must match the full name of an existing candidate if the candidate record is being updated.

Note: The party name and office title must be spelled exactly the same as in the Party table and Election Office table. The office title must appear in the same format as described in the “Importing Office Relations” section earlier in this chapter.

6. Click OK to return to the Import Candidates for this Election window. The selected candidate information will appear in the Field Name box. Continue adding candidate information until all of the required data is listed in the Field Name box.

Note: To change an import field, select the name and click Edit. Highlight a name and click Delete to remove a field name from the list.

7. Click Start to import the specified files. To cancel the import process at any time, click Stop.

8. The names of the imported files and the number of files processed, added and/or updated will appear in the bottom portion of the import window. When all of the required files have been imported, click Close to return to the Data Manager main screen.
Chapter 4: Text and Questions

Use the Text/Referendum option to create ballot question and referendum text in the Election Data Manager. Use this option if the text must float on the ballot with office and candidate text. If text is to remain in a fixed position on the ballot, create the text using the text editor in the Ballot Image Manager. Questions created using the Data Manager text editor can be saved in as either .rtf (Rich Text Format) files or .txt (Text Format) files.

Note: Questions formatted using this option can only have four responses. For a question with more than four responses, enter the question as an office and the responses as candidates.

Creating Ballot Text

To format ballot text and questions:

1. Select Text/Referendum from the menu bar. The Question and Ballot Text window will appear.
2. Click **Add** to create new text. Click **Edit** to alter existing ballot text. The following window will appear when either option is selected:

![Questions and Text Window]

**Entering Question and Text Information**

1. Enter a description of the question in the **Description** box. Up to 80 characters may be used in the **Description** box. This text will not appear on the ballot but the description will appear on Election Day reports.

2. Enter the file name where the question will be saved in the **File Name** box. The file name can be no more than eight characters and does not need a file extension (for example, .txt).

   **Note:** You can create question and ballot text in Microsoft Word. Save the text to the election folder as a Rich Text File (.rtf) or a Text file (.txt).

3. Select the **Heading Category** list and choose from the available heading types. Select the default choice, <NONE>, for a blank heading.

4. Select a party from the **Party** list to link the selected question or text to a specific party for a primary election.

5. Select the **Place Text on Ballot** box for the text to appear on the ballot. This is the default setting. Cancel the selection in the **Place Text on Ballot** box to leave the text off of the ballot.
Entering Referendum/Question Information

1. Select the Referendum/Question box if the text is a question that requires a special response. For example, a referendum requiring the voter to select what percentage of state sales tax will be used to finance schools would require more than a yes or no response.

2. When the Referendum/Question box is selected, the Yes Verbiage, No Verbiage, 3rd Response and 4th Response boxes will be open for entry. Enter the appropriate response text in these boxes. Entering text in these boxes will overwrite the default Yes and No verbiage set up with the Merge Preferences option.

3. Select the Rotate Ref/Questions box for the response text to use the same rotation as candidates on the ballot.

Entering Position Information

1. Enter the sequence number for the ballot text in the Sequence box. This number determines where the text will appear on the ballot relative to the sequence numbers of other contests. For example, if the sequence number for the presidential race is set at 100 and the sequence number for ballot text is set at 200; the ballot text will appear after the presidential race on the ballot.

2. If Shoup or AVM voting machines are selected under Merge Preferences, Location1 and Location2 boxes will appear in this window. Enter data in these boxes to position the question or text on the ballot. Enter a value in the Location 1 box to determine the first ballot position. Enter a number in the Location 2 box to determine the last position that the text will appear. Consult documentation for Shoup and AVM machines for more information on how text is positioned on these ballots.
Selecting Districts and/or Precincts

1. Click Select Districts/Precincts to place the questions and text on ballots for specific precincts. The following window will appear:

2. Select the boxes for the district or districts where the text must appear on the ballot. If Local is selected, a box containing a precinct list will appear on the right side of the Select Districts/Precincts window. Select the precincts and click OK to return to the Questions and Text window.

3. The Referendum/Question option must be selected if AVM or Shoup is selected as the ballot type under Merge Preferences and the ballot text is a question. Enter a value for each of the Yes positions and No positions on the ballot. For example, If a Yes target appears in column A, row 3, A3 should be entered in the Yes Position box.

Note: Shoup and AVM machines are the only voting systems that require ballot positions to be formatted. Targets on paper ballots are placed automatically. ES&S recommends that you allow the system to determine Yes and No positions if Shoup or AVM is selected as the ballot type.
Creating Question Text

1. Click Create File to open the Data Manager text editor. The following window will appear:

![Data Manager Text Editor Window]

2. Enter ballot text exactly as it is to appear on the ballot. The text will be formatted as a .rtf (Rich Text Format) file. The Rich Text Editor functions are similar to other word processing programs. This format does not require hard codes, except when full justification is necessary (\<J\> must be inserted). However, hard codes may be used within a .rtf file. Refer to “Appendix C: Hard Codes and Variable Names” for further guidance.

Note: Hard codes must be used to format text if you want to save your text as a .txt file.

Note: The Election Data Manager text editor will only recognize postscript fonts. Do not use a True Type font when creating text in Data Manager.

3. Click Save As under the File menu of the text editor. Make a note of the save location in the election folder and click Save. Select Close to return to the Questions and Text menu.

4. Click OK to save information entered in the Questions and Text window. Click Close to return to the Questions and Ballot Text window. To delete a text file, select the file in the Questions and Ballot Text window and click Delete. Click Close to finish.
Creating Question Text for the Votronic and iVotronic

If you are programming an election for the Votronic or iVotronic select Votronic under the Referendum/Question Information heading of the Questions and Text window. The following window will appear:

1. Select First On Page or Alone on Page to place the selected ballot text first on the Votronic or iVotronic screen or alone on the screen.

2. Select Browse next to the Formatted English File Name box and locate the .rtf file you created with the Data Manager Text Editor. Locate the Spanish text file by clicking Browse next to the Formatted Spanish File Name box if you created Spanish ballot text.

3. Enter response text in the boxes under the Formatted English Response heading and the Formatted Spanish Response heading.

4. Click OK to save the information and return to the Questions and Text window or click Cancel to return to the Questions and Text window without saving Votronic information.

Creating a Recall Race

A recall race is actually two contests. The first contest is the recall question that determines if a recall vote is necessary and the second contest is the disputed office. Voters must vote the recall question before they can select a candidate for the disputed office.
To create a recall race, program the recall question, create the disputed office and then link the two contests in the Master Office File under the County menu.

**Creating a Recall Question**

To create the recall question:

1. Select Text/Referendum from the menu bar. The Questions and Text window will appear.

2. Use the instructions for creating ballot text found earlier in this chapter, to create the recall question. Make sure that Place Text on Ballot and Referendum/Question are selected so that the recall question will appear as a question on the ballot.

3. Enter the Sequence of the recall question. Make sure that the Sequence is set so that the recall question will appear directly before the disputed office on the ballot.

4. Select Type C (Yes vote) or Type D (Yes or No vote) from the Recall list to set the type of recall question you are programming.
   - Select Type C (Yes vote) to place a question with one positive response on the ballot. Only one voting target will appear below the recall question next to the Yes Verbiage for this type of recall question.
   - Select Type D (Yes or No vote) from the Recall list to place a recall question with both a positive and negative response on the ballot. Two voting targets, one next to the Yes Verbiage and one next to the No Verbiage will appear beneath this type of recall question. Type D (Yes or No vote) must be selected if you are programming an election for the iVotronic, Votronic or Model 550 ballot scanner.

5. Enter yes text in the Yes Verbiage box. Then, enter no text, if necessary, in the No Verbiage box.

6. Click Select Districts/Precincts and link the recall question to the districts and precincts that will vote on the recall in the upcoming election.

**Creating the Disputed Office**

Use the instructions in chapter 2 “Setting up the Master Office File” to create the disputed office. Remember to set the sequence number of the disputed office so that it appears directly after the recall question on the ballot and to link the disputed office to the same districts and precincts that the recall question is linked to.
Linking the Recall Question to the Disputed Office

For most ballot scanners, the recall question is linked to the disputed office by the sequence numbers of the two contests. When the recall question is formatted with the Text/Referendum option, Data Manager will automatically designate the office that will appear after the recall question on the ballot as the disputed office. It is not necessary to select Recall from the Special list under the Hrd Prg Mnr tab in the Master Office File.

Linking the Recall Question and Office for the iVotronic and Votronic

There are some special instructions for linking the recall question to the recall office for the iVotronic and Votronic voting machines.

To link the recall question and office for the iVotronic and Votronic:

1. Select Master Office File under the County menu and select the disputed office in the Edit Master Office File window.

2. Click Edit. Then, click the Votronic tab in the Edit Office Information window.

3. Select the recall question from the Controlling Contest Name list to link the disputed office to the recall question.
Chapter 5: Merging Election Files

Merge the Files created in the Election Data Manager into a format that can be understood by the Ballot Image Manager and Hardware Programming Manager. Merging files in Data Manager creates a ballot data file (.bdf) that contains all contest, candidate and precinct information for the upcoming election. Set up merge preferences to configure this file for use by other Unity software products.

Selecting Merge Preferences

Select Preferences under the Merge menu, the following window will appear:

The Election Preferences tab will not be available if one of the following voting systems is selected as the ballot type: PA PAPER ABSENTEE, AVM, Shoup, DATAVOTE PUNCH CARD or V2000 DRE. All other scanners require specific data to be entered under this tab. Election Preferences options are described later in this chapter.
Choosing Options under the Merge Preferences Tab

Use the options under the Merge Preferences tab to select the following:

- Ballot generation options
- Rotations
- Rotation exceptions
- Grouping by style or district type

Selecting Ballot Generation Options

1. Click the arrow next to the Ballot Type box and select the ballot type for the current election. This selection will tell the Hardware Programming Manager what type of ballot scanning equipment will be used in the upcoming election.

2. Make the appropriate selections for the Automatic Layout box and the Exclude Nonpartisan box. The functions of these two boxes are described below:

   - Select the Automatic Layout option for any voting system that does not have exact positioning. Automatic Layout is selected automatically and can not be canceled if the selected ballot scanner does not support exact positioning.

   - Select Exclude Nonpartisan if you are programming an primary and want to leave nonpartisan off of party ballots.

3. Choose the option that will control the merge. Select All Offices and Candidates to use all offices and candidates entered in the current election. Select All Except Local to exclude local offices and candidates. Click Local Only if only local offices and candidates are to be included on the ballot.

Note: Select All Offices and Candidates unless you are programming an election for Illinois. Illinois elections require local offices to be merged separately from state and county offices.
Setting up Rotations

1. Select Rotation if candidate names rotate on the ballot. Select Rotation After Grouping to rotate candidate names on ballots after Data Manager groups ballots by style. When this option is selected, identical ballot styles will have identical rotations even if the ballots are being used in different precincts.

2. Enter the candidate Home Position if Rotation is selected. This is the position where the candidate with the lowest party sequence number will appear beneath the contest text. For example, if the party sequence for Democrat is set at 1 but 2 is selected as the home position, the democratic candidate will be the second candidate listed for a contest’s first rotation.

3. Select Rotate Splits for the selected rotation to change the candidate order for splits. Otherwise, select Don’t Rotate Splits. Some counties require candidates to appear in the same ballot position for an entire precinct, even if the precinct is split.

Configuring Rotation Exceptions

1. Rotation can be customized for any precinct by selecting Exceptions to change the rotation order. Set the rotation for all precincts or none. The Exceptions option can be used with either standard rotation Candidate > 1 and Standard Rotation Candidate > Vote For. The following window will appear when this option is selected:

![Change Rotation Behavior for a Precinct](image-url)
2. To add an exception, click Add. The following window will appear:

3. Select the precinct where the rotation must be customized from the Select the Precinct list.

4. Select the contests that must have rotations customized from the Select the Offices list.

5. Select either Static or Flow. Static will change the rotation for the precinct selected only. All precincts after the selected precinct will rotate using the original settings. In the following example, the City of Boston 3, School District has an original rotation of three out of the five candidate rotations.

- 1st Rotation: 1,2,3,4,5
- 2nd Rotation: 2,3,4,5,1
- 3rd Rotation: 3,4,5,1,2
- 4th Rotation: 4,5,1,2,3
- 5th Rotation: 5,1,2,3,4

Example: City of Boston 4, Board of Education rotates using the fourth rotation, City of Boston 5 uses the fifth rotation and City of Boston 6 uses the first rotation, etc. If the rotation for City of Boston 3 is changed to rotation type 5 and Static is selected, only the rotation for City of Boston 3 will change on the list above. If Flow is selected, the rotation for all precincts following City of Boston 3 will change as well.

If Flow is selected and City of Boston 3 is set to rotation type 5, the rotation for City of Boston 4 will change from the 4th rotation to the 1st rotation. City of Boston 5 will then be set to the 2nd rotation and all precincts after City of Boston 5 will follow this sequence.
6. Enter the number of candidate rotations for the upcoming election in the New Rotation box.

7. Existing rotations can be sorted, edited, or deleted. The Exceptions option is only available if either Standard Rotation Can > 1 or Standard Rotation > Vote for # is selected as the rotation type.

**Grouping Ballots by Style**

If precincts are using identical ballots, these precincts can be grouped into the same ballot style. Grouping ballots saves time during the merge process. Only precincts with identical ballots can be grouped into a ballot style.

**To group ballots by style:**

1. Click Group by Ballot Styles to arrange ballots in ballot style order. Only one ballot face will be formatted for each ballot style when the finished Ballot Data File is sent from Data Manager to the Ballot Image Manager. Grouping ballots by ballot style saves time when programming an election but the ballots for every precinct within a style will be identical. For this reason, precinct names and numbers should be set up in the Image Manager instead of the Ballot Data Manager when ballots are grouped by style.

**Example:** If there are 200 precincts in a county, but no local offices are contested in the current election, there is no need to create 200 different ballot styles because many of the ballots will be the same. Select Group by Ballot Styles to have Data Manager group identical ballots resulting in far fewer ballot faces.

**Note:** Do not select Group by Ballot Styles if local offices are being contested in the upcoming election, if <GEONAME> (which will place the precinct name on the ballot) or "ALL" are hard-coded into a ballot text file or if the Rotation box is checked. A ballot face must be formatted for each precinct if any of these selections are made.

2. The Group Splits (if the same) option and the Splits Always Unique Style option are only available if Group by Ballot Styles is selected. Click Group Splits (if the same) to organize split precincts by ballot style. Select Splits Always Unique Style to retain individual ballot styles for each split in a precinct.

**Grouping by District Type**

Select a district type from the Group by District type list to arrange ballots by district types. This option is similar to Group by Ballot Style except that instead of grouping identical ballot faces, ballots will be organized according to the district type selected from the list.
Example: If there are 100 precincts in a county, but only two legislative districts, select Legislative as the district type. Only two ballot styles will be created by the Data Manager. Be aware that when this option is selected, the number of ballot styles is limited to the number of districts that fall within the selected district type.

Note: You can group ballots in the Election Data Manager to print identical code channels on ballots that are the same style. You can then ungroup these ballots in the Ballot Image Manager and place different precinct names on the ballot faces to differentiate ballots that have the same style but will be used in different precincts.

**Choosing Options under the Office Preferences Tab**

Select options under the Office Preferences tab to configure the appearance of office text on the ballot.

![Merge Preferences](image)

**Selecting Office Preferences**

Select options under Office Preferences to format the appearance of office text and enter vote for and term phrases.

1. Select Office Title All Capital Letters if the office title is to appear on the ballot in all capital letters.
Note: Use this option only if necessary. Instead, enter all text in the Election Data Manager exactly as it is to appear on the ballot.

2. Enter a default vote for phrase for offices where only one candidate can be selected in the Vote for Phrase when only 1 box.

3. Enter a default vote for phrase for offices where more than one candidate can be selected in the Vote For Phrase box.

Note: Use hard codes to format vote for text. Enter the code <NUM> to include the vote for number as a numeral. Input the code, <ALPHA>, if the vote for number is to appear in all capital letters. Enter <Alpha> as the code if the vote for number is to be spelled out in title caps.

Note: The phrases entered here will not appear on the ballot for offices where a vote for phrase has been entered in the Vote For if not default style box of the Master Office file. Text entered in the Master Office file will take precedence. This is also true for the Term Phrase.

4. Select a term phrase from the Term Phrase list or manually enter a phrase. The codes for formatting the term phrase are identical to those used in the Vote For Phrase boxes.

**Formatting “No Candidate” Messages**

Use the following instructions to format “No Candidate” text for all ballot scanning equipment except for the Votronic.

1. Select No Candidate under the No Candidate Information heading to place a message on the ballot for races not being contested indicating that no candidates are available.

2. Select One per Office to place a “No Candidate” message below each office that is not being contested.

3. Select One per Vote For # to place “No Candidate” text beneath uncontested offices a number of times equal to the vote for numbers of the offices.

4. Enter a phrase in the No Candidate Text box exactly as you want it to appear on the ballot (for example, “No Petition Filed,” “No Nomination Made,” or “No Candidate”).
Formatting "No Candidate" Messages for the Votronic and iVotronic

Use the following instructions to set up "No Candidate" text for the Votronic and iVotronic.

1. Select the No Candidate box under the Office Preferences tab and enter a phrase in the No Candidate Text box.

2. Exit the Merge Preferences window and select Candidate under the Election menu. Refer to the "Adding Candidates" instructions in chapter 3 for a description of the options on this screen.

3. Place the "No Candidate" text on the ballot by entering the text as a candidate.

To enter Votronic "No Candidate" information:

1. Select Add in the Candidate window.

2. Enter the "No Candidate" text in the Last Name box of the Add Candidate Information window.

Note: Enter the "No Candidate" text in this box exactly as you entered it in the No Candidate Text box in the Merge Preferences window.

3. Select the office that the "No Candidate" text will appear for from the Office list. Then, select the district or precinct that the "No Candidate" text will appear for from the District or Precinct list.

4. Select Nonpartisan or No affiliation from the Party list.
5. Select the Additional Information tab.

6. Enter the "@" symbol and then "No Candidate" text in the Additional Text 1 box. Enter the "@" symbol before the text so that the information will be properly formatted when it appears on the Votronic screen.

7. Select the Votronic tab to create a style sheet for the "No Candidate" text.

To create a style sheet for Votronic "No Candidate" text:

1. Select Build English Candidate Title and click Add in the Style Sheets window to create a style sheet for the "No Candidate" text.
2. Enter a style name in the Style Name box and click the Select button at the bottom of the window.

3. Select Add and then select Additional Text 1 (where you entered the "No Candidate" text) from the Contents list.

4. Format the text for the Votronic screen by selecting the font and alignment for the "No Candidate" text.

5. To format "No Candidate" text in a different language, repeat the instructions above and select Build Spanish Candidate Title instead of Build English Candidate Title under the Votronic tab in the Add Candidate Information window.

Omitting Offices

Use the Omit Office option only if office information is being left off the ballot because no candidates are running or if the vote for number is greater than or equal to the number of candidates running and the county is not allowing write-ins in the upcoming election. For example, if three seats are available in a contest but only two candidates are running, leave the contest off the ballot by selecting Omit Office.

To omit an office:

1. If there are no candidates for an office and all office text is to be left off the ballot, select the Omit Office when box.

2. Click # of Candidates = 0 to omit contests that are not being contested by any candidates.

3. Select # of Candidates < or = Vote For if you want to omit contests that have a vote for number greater than or equal to the number of candidates running.

Using Write-in Spaces

Select Use Write-ins to direct Data Manager to determine the number of write-in targets for an office based on the Vote For # entered in the Master Office File.

Selecting Straight Party Options

1. Select Straight Party on Ballot to include straight party options on the ballot.

2. Select All Parties to include a straight party option for every party included in the party file.
3. Select **Parties with an Office** to include a straight party option only for parties that have an office on the ballot.

4. Select **Parties with a Candidate** to include a straight party option only for the parties that have a candidate contesting an office on the ballot.

5. Click **Do Not Use Independent** to exclude the straight party option on Independent ballots in a primary.

**Selecting Options under the Candidate Preferences Tab**

Select options under the **Candidate Preferences** tab to configure the appearance of candidate text on the ballot.

![Merge Preferences dialog box](image)

**Selecting the Candidate Sort Order**

The **Candidate Sort Order** sets the order of the candidates on the ballot. Candidates can appear in party order, last name order or can be ordered by candidate position.

**To select the Sort Order:**

1. Select **Sort Candidates by Party Order**, to sort candidates by their party order set up in the **Party** file under the **County** menu.
2. Select Last Name to alphabetically sort candidates in a contest by last name.

3. Select Candidate Position to sort candidates according to their positions set up in the Candidates file under the Election menu.

Setting Candidate Preferences

Use Candidate Preferences options to format the appearance of candidates’ names on the ballot. Select from the following options:

1. Select the appropriate box if all or part of a candidate’s name is to appear in all capital letters. Leave all of the boxes blank for candidate names to appear exactly as they were entered in the Candidate file under the Election menu.

   Note: Do not use capitalization options unless absolutely necessary. Instead, enter candidate names in the Candidate file exactly as they are to appear on the ballot and leave all capitalization options unselected.

2. Check the Expand Crossfiled Candidates box during a primary election when a candidate must appear on ballots for more than one party. Select the order the candidate will appear in by clicking the Additional Party button after candidate data is entered. Candidate data is accessed by selecting Candidates under the Election menu.

Selecting Options under the Election Preferences Tab

Options under the Election Preferences tab will vary depending on the ballot type selected under the Merge Preferences tab. The following sections of this manual contain descriptions of all of the options available under the Election Preferences tab though most counties will use only one or two ballot types. Consult documentation for the type of equipment being used in your county for information on programming an election for a specific ballot scanner.
Selecting Votronic and iVotronic Preferences

If Votronic is selected as the ballot type under the Merge Preferences tab, the following options will be available under the Election Preferences tab:

Selecting Straight Party Options

Select one of the straight party boxes to format a straight party option on the Votronic terminal.

1. **Select Early Cast Mode** under Straight Party Options to allow the voter to cast a straight party ballot without scrolling through all of the contests on the ballot. A message instructing the voter to press the VOTE button to cast a Straight Party ballot or to press the screen to vote individual contests will appear on the Votronic screen immediately after a voter selects a Straight Party option. If non-partisan contests appear on the ballot, pressing the screen will take the voter directly to the first page of nonpartisan contests.

   If **Early Cast Mode** is not selected, the voter will be required to scroll through each page of the ballot after a straight party option is selected.

2. **If Clear Mode** is selected, the Votronic will clear all straight party votes when a vote is canceled for any contest. If this option is not selected, only the selected vote will be canceled.
Setting Coded Ballot Options

Alphanumeric codes can be attached to Votronic ballots. These codes make ballots retrievable after they are cast. Typically, codes are only attached to challenged or provisional ballots that must be reviewed by election officials for eligibility.

1. Select Not Allowed to make the coded ballot option unavailable in every polling location participating in the upcoming election.

2. Selecting either of the next two options allows poll officials to code ballots. However, it is up to the Election Administrator to determine whether votes from coded ballots will be added to election totals.
   - Select Allowed to allow the poll official to assign a coded ballot to a voter, and include coded ballot votes with election totals.
   - Select Not Counted to allow poll officials to assign coded ballots but not to include coded ballot votes with election totals.

3. Enter the description that will appear on the Votronic or iVotronic screen when a coded ballot is selected. For example, “Challenged Voter” or “Coded Ballot.”

Once added to the ballot, the Coded Ballot option will be available in the Votronic Ballot Selection screen. Coded ballots are assigned by poll officials before a ballot is activated for the voter. Read the operations guide for the Votronic voting system for more information on how this process works.

Creating a Bilingual Ballot

Select Spanish Enabled and enter Spanish ballot text in the appropriate boxes to create a bilingual ballot. This option allows the voter to select a ballot language (English or Spanish) on the Votronic Voter Terminal.

Selecting Ballot Cancellation Options

This option is used when a voter does not cast a ballot properly or a precinct worker gives a voter an incorrect ballot. Select one of the following options from the Ballot Cancel Mode list:

- Cast Vote or Cancel: Select Cast Vote to allow precinct workers to cast as left by voters. Any races already voted are counted and any races left blank remain blank. The public vote count will be increased by one. The Cancel option allows the poll worker to disregard the ballot in its entirety.
• **Cast Blank or Cancel:** Select Cast Blank to allow poll workers to cast abandoned ballots as blank ballots. Votes cast will not be counted but the public vote count will increase by one to show that a blank ballot was cast. The Cancel allows the poll worker to disregard the ballot in its entirety.

**Selecting Union Ware Options**

Union Ware options are typically used in private, non-government elections. Basic voter response requirements can be programmed into the Votronic for these types of elections:

• **Disabled:** Union Ware options are almost always disabled for government elections.

• **All Contests:** The voter must vote the maximum allowed number in every contest before continuing to the next page of the ballot when this option is selected.

• **Weighted Value:** Select this option to allow a multiplying factor for each vote cast. The Weighted Value option is used when someone is voting on behalf of a constituency. In this case, the vote cast will be “weighted” as multiple votes.

• **All or Nothing:** Select this option to read the ballot as blank unless voters cast the maximum number of votes allowed for every contest.

**Selecting Tape Options**

Select from the options under the Tapes heading to set the number of Zero and Results Reports that will be automatically printed at polling locations.

• **Report:** Enter a value in the Report box to set the number of Results Reports that will be printed in every polling place in the precinct. This type of report combines all results and terminal information on a single tape.

• **Zero:** Enter a value in the Zero box to set the number of Zero Reports that will be printed at every polling place in the precinct. A Zero report accumulates all terminal information on a single tape. To print both zero and results reports, enter values in the two top boxes (cumulative) or the two bottom boxes (individual). A combination of individual and cumulative tapes in polling locations may not be used.

• **Individual Report:** Enter a value in the Individual Report box to set the number of Results Reports that will be printed from each Votronic terminal. This type of report does not combine results from multiple Votronic Terminals on a single tape. Each terminal will print its own information reports on a separate tape.
- **Individual Zero**: Enter a value in the Individual Zero box to set the number of Zero reports that will be printed from each Votronic terminal. This type of report does not combine results from multiple Votronic Terminals on a single tape. Each terminal will print its own information on a separate tape.

**Selecting Additional Options**

1. Select **Summary Report Only** to exclude overvotes and undervotes from final election reports.

2. Select **Require One Vote** to require at least one vote from a precinct before the precinct can be included on an election report.

3. Select **Full Area Candidate Selection** if you want to program the iVotronic to read a candidate selection when the voter presses anywhere on the candidate name. When this option is not selected, the iVotronic will register a vote only when the candidate box is pressed.

4. Select **Report Under-Votes** to include undervotes on Election Day reports.

5. Select **Summary Review Ballot** to include a review ballot as the last ballot page that will appear on the iVotronic during voting. Voters can use the review ballot to verify selections and change votes if a mistake is made.

6. Select **iVotronic Mode** if you are using an audible ballot with the iVotronic. Selecting this option will name the .wav files that make up the audible ballot so that when a contest is selected, the proper recording will play.
Selecting Optech Preferences

The following screen options will be available under the Election Preferences tab if Optech is selected as the ballot type under Merge Preferences:

Selecting the Election Type

1. Select the Election Type from the following list:
   - SPEC: Special
   - GEN: General
   - CPRI: Closed Primary
   - OPRI: Open Primary
   - PICK: Pick a Party

Formatting Numbering Options

1. Use options under the Start Numbering heading to generate Header Codes for Optech ballots. Enter a value in the Precinct box to change the precinct that will have the first header code sequence. Enter a number in the Ballot Style box to change the ballot style that will be first in sequence.
2. Use the options in the Add To field to add a number to the left and/or right Header Code for each Ballot Style. Enter the applicable number in the Left Hdr and/or Right Hdr boxes to use this option.

**Formatting Header Codes**

The Header code on Optech ballots is the two series of black boxes that appear on the top left and top right of the ballot. The header code contains all of the administrative information on the ballot and serves the same function as the code channel on other ES&S ballots.

1. Select the User Supplied Header Codes box to have Data Manager create header code information with the data entered in the Precinct option under the County menu. When this option is selected, the lists under the Left Header and Right Header labels are disabled. If User Supplied Header Codes is not selected, you can select the definition for each bit in the header code by selecting from the lists in the Left Header and Right Header boxes.

2. Enter data in the Use Precinct ID box to override the system generated Precinct ID.

3. The Left and Right Header codes usually set the ballot sequence by precinct code but you may have to reset the bits for a primary. Select the applicable definition from the list for each bit.

**Setting up the IFC File**

1. Select **IFC for BTS** to create an election database for the Ballot Image Manager with candidate positioning determined by information entered in Data Manager. When this option is selected, the .ifc interface file is generated in the Image Manager after data is exported.

   *Note: The above option should almost always be selected.*

2. Select **IFC (No Positioning)** to create an election database without candidate positioning. You can position candidates later in either the Hardware Programming Manager or the Ballot Image Manager. See Appendix B for import requirements for the Hardware Programming Manager.

3. The Election Data Manager codes local contests, such as Precinct Committee members, as PRC records. If the county uses an Optech IV-C in mixed mode and there are local contests, the local contests must be coded using PCM records instead of PRC. PRC records fail to appear as accumulated contests on the IV-C. To instruct Data Manager to code local contests as PCM records, click 4C in Mixed Mode (FL).
4. If contests are set up in sequence order on the ballot and need to appear in a different order on reports, select **IFC Group Offices** to set the order that contests will appear on Election Day reports.

The **IFC Group Offices** option is primarily used to group district type offices that are alike. To change the contest order, *triple-click* the applicable contest number and make the changes.

**Note:** Consult documentation for Optech ballot scanners for more information on setting up elections for these machines.
Selecting Votamatic Preferences

The following screen options are available under the Election Preferences tab when Votamatic is selected as the ballot type under Merge Preferences:

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Selecting the Election Type

1. Select the Election Type from the following list:
   - SPEC: Special
   - GEN: General
   - CPRI: Closed Primary
   - OPRI: Open Primary
   - PICK: Pick a Party

Formatting the IFC File

1. Select IFC for BTS to create an election database for the Ballot Image Manager with candidate positioning determined by information entered in Data Manager. When this option is selected, the .ifc interface file is generated in the Image Manager after data is exported.

Note: The above option should almost always be selected.
2. Select IFC (No Positioning) to create an election database without candidate positioning. You can position candidates later in either the Hardware Programming Manager or the Ballot Image Manager. See Appendix B for import requirements for the Hardware Programming Manager.

3. If contests are set up in sequence order on the ballot and need to appear in a different order on reports, select IFC Group Offices to set the order that contests will appear on Election Day reports.

This option is primarily used to group district type offices that are alike. To change the contest order, triple-click the applicable contest number and make changes.

**Configuring Ballot Numbering and Styles**

1. Options under the Start Numbering field are used to automatically generate Header codes. Select the Use Precinct ID box to override system generated Precinct IDs. Enter a precinct number in the Precinct box to reset the selected precinct as the first in the precinct sequence. Enter a ballot style number in the Ballot Style box to change the selected ballot style to the first in the ballot style sequence.
Configuring Punch Options

To determine ballot style, cards are pre-punched in four locations at the bottom of the ballot. Currently, elections programmed for the state of Washington are the only elections that require these options to be altered.

1. Click the applicable punch location down arrow and make a selection to have the system automatically generate the ballot style, precinct number, split number, or party number value for each punch card.

2. Click Use Constant, to make a constant number field available. Enter the applicable punch value for each respective punch location.

Note: Consult Votomatic documentation for more information on setting up elections for this type of machine.

Selecting Preferences for Optical Scan Voting Machines

If Model 100, 150, 550, 115, 315 is selected as the ballot type under the Merge Preferences tab, the following options will appear under the Election Preferences tab:
Selecting the Election Type

Select the Election Type from the available list:

- SPEC: Special
- GEN: General
- CPRI: Closed Primary
- OPRI: Open Primary
- PICK: Pick a Party

Note: Select PICK as the Election Type if you are programming an open primary for the Model 100 ballot scanner.

Determining the Ballot Type

1. Select Use Party Device Code to have the ballot styles determined by party codes entered under the County menu.

2. Select Use Value Below and enter a number in the box to manually set the ballot style of the election you have programmed using the Data Manager. Select this option if the county requires an extra ballot for referendums or races that will not fit on the front and back of a single ballot sheet. Set the first page as type one and the second page as type two.

Configuring Split Precincts

1. Click Use Assigned Split Number to use the system generated split numbers.

2. Click Use Precinct ID to make the split numbers the same as Precinct IDs.

Note: This feature is rarely used in Election Data Manager.

Formatting the IFC File

1. Select IFC for BTS to create an election database for the Ballot Image Manager with candidate positioning determined by information entered in Data Manager. When this option is selected, the .ifc interface file is generated in the Image Manager after data is exported.

   Note: The above option should almost always be selected.

2. Select IFC (No Positioning) to create an election database without candidate positioning. You can position candidates later in either the Hardware Programming Manager or the Ballot Image Manager. See Appendix B for import requirements for the Hardware Programming Manager.
3. If contests are set up in sequence order on the ballot and need to appear in a different order on reports, select IFC Group Offices to set the order that contests will appear on Election Day reports.

![IFC Group Offices window]

This option is primarily used to group district type offices that are alike. To change the contest order, triple-click the applicable contest number and make changes.

**Setting the Ballot Sequence**

Options under the Sequence field set the sequence for precincts to appear on the ballot. Select between using the Precinct Number or the Ballot Style Number to identify the precinct.

1. Select Use Assigned Seq Number to use sequence numbers set up in Data Manager to set up the Precinct order.

2. Select Use Precinct ID field to use precinct IDs to dictate the ballot order.

3. The Start Numbering fields will be available if Use Assigned Seq Number is selected. The sequence normally starts at one but you can enter a value in either the Precinct or Ballot Style box to start at another number.

   **Note:** For a general election Use Precinct Number and Use Assigned Seq Number should always be selected.

4. Enter a value in the Precinct box under the Start Numbering heading to start the ballot sequence with the precinct entered.

5. Enter a value in the Ballot Style box under the Start Numbering heading to start the ballot sequence with the ballot style entered.
6. Use options under the *Add To* field to manually add a value to the one already generated. Type a value in the *Type*, *Sequence*, and *Split* fields.

*Note:* Options under the *Add To* heading are rarely used in the Election Data Manager.

*Note:* Consult documentation for the voting machine being used for more information on setting up an election.

**Selecting Preferences for the V-2000 (DRE and AVM)**

If you select V-2000 DRE or V-2000 AVM as the ballot type under the *Merge Preferences* tab, the following options will be available under the *Election Preferences* tab:

![Merge Preferences Window]

**Selecting the Election Type**

Select the *Election Type* from the available list:

- **SPEC:** Special
- **GEN:** General
- **CPRI:** Closed Primary
- **OPRI:** Open Primary
- **PICK:** Pick a Party
Formatting the IFC File

4. Select **IFC for BTS** to create an election database for the Ballot Image Manager with candidate positioning determined by information entered in Data Manager. When this option is selected, the .ifc interface file is generated in Image Manager after data is exported.

   **Note:** The above option should almost always be selected.

5. Select **IFC (No Positioning)** to create an election database without candidate positioning. You can position candidates later in either the Hardware Programming Manager or the Ballot Image Manager. See Appendix B for import requirements for the Hardware Programming Manager.

Selecting Row and Lever Options (V-2000 AVM Only)

Select **Row & Lever** in IFC to access **Row** and **Lever** boxes in the Edit Candidate Information window. Enter values in the Row and Lever boxes to select exact positioning for candidates in the upcoming election. Select one of the following options to determine the order that candidate information is placed on the ballot:

- Select **Row/Lever** if you want to place the candidate on the V-2000 ballot first by row and second by lever.

- Select **Lever/Row** if you want to determine the candidate placement by lever position first and row position second.

   **Note:** Access the Candidate Information window by selecting Candidates under the Election menu.
Generating the Ballot Data File (BDF)

Select Generate Ballot Styles from the Merge menu to combine all files and create a galley.

Note: Use the instructions in chapter one to set up the Unity file structure before generating the final ballot data file.

1. Click Generate Ballot Styles from under the Merge menu, the following window will appear:

![Merge window for generating Ballot Data File]

2. If you are programming a primary election select the party from the General or Primary (select party) list. If you are programming a general election, select <ALL>.

3. Always select New BDF before generating a ballot data file.

4. Save ballot questions and text in the text files folder under the Image Manager election type folder you created earlier. Click the button next to Election Data & Question/Text and locate the proper folder.

5. Save ballot data under the Ballot Image Manager county folder you created using the instructions in chapter one. Click the button next to Ballot Data File and locate the proper folder.
Note: You must include the file extension (.bdf) for data to be saved correctly.

6. Click Start after selecting your save locations. Data Manager will list each step of the merge process errors will be detected and displayed in the gray area at the bottom of the window.

7. Click Close to return to the Data Manager main screen.

Special Instructions for Merging Primaries

Some ballot scanners require special settings when you are programming an open primary.

Programming an Open Primary for Model 100 Ballot Scanners

1. Select <ALL> in the General or Primary (select party) box to create the open primary IFC file for Model 100 ballot scanners.

2. If you are programming an open primary for Model 100 scanners, you must designate the election under Merge Preferences as a PICK (Pick your Party) election in the Election Type box under the Election Preferences tab.

3. Merge the Election files following the instructions earlier in this chapter.

4. Create a hidden ‘PICK’ race in the Hardware Programming Manager to match party codes with the ballots.

Note: Consult the Hardware Programming Manager User’s Guide for more information on using this program.

Programming an Open Primary or Closed Primary for Votronic or iVotronic Voting Machines

1. Merge the election separately for each party participating in the primary. For example, Select Democrat in the General or Primary (select party) box to create a Ballot Data File for Democratic contests and candidates. After the Democratic .bdf file is created, select Generate Ballot Styles from the Merge menu a second time and select Republican in the General or Primary (select party) box to merge the ballot file for the Republican contests and candidates.

2. Select Combine Elections from the Poll Setup menu to combine the Votronic .pxt files. See “Chapter 7: Setting up Polling Places” for more information about the Poll Setup menu.

3. Enter Ballot Image Manager and load the election you created in Data Manager. Consult the Ballot Image Manager User’s Guide for instructions on loading an election into that program.
4. Select Combine IFC under the IFC menu.

5. Click the Browse buttons under the Combine Party IFC’s into one Election window to select the merged IFC files for each party in your primary.

6. Click Start to combine the IFC files.

7. Locate the combined IFC file using Windows Explorer and copy the file to the c:\elecdata folder so it can be accessed by the Hardware Programming Manager.
Chapter 6: Reports and Backup

The Reports menu generates numerous types of reports. Definitions of these reports follow:

- **Master Precinct List:** Lists all Precincts.
- **District Names:** Lists all district names and the office contested in the district.
- **District Relations:** Defines all district relations.
- **Master Offices:** Lists all offices in sequential order.
- **Precincts This Election:** Lists all precincts selected for current election.
- **Offices This Election:** Lists offices for the current election in sequential order.
- **Office Relations:** Lists offices and the districts to which they are linked.
- **Candidates This Election:** Lists candidates in parties, offices and districts.
- **Offices and Candidates This Election:** Lists offices and the candidates running for those offices.
- **Ballot Style Reports:** Provides ballot reports organized by style or by precinct.
- **Ballot Galley - Precinct/Office/Candidate:** This report provides a preview of the final ballot. The ballot style number appears at the top of the page with all of the information contained on the ballot following.

**Note:** This report creates files called merge.dbf and mrg.dbf. These files can be found in the election directory and may be deleted after the report has been printed. These files are usually large, and take up hard disk space.

- **Rotation Reports:** Allows ballots to be sorted by different rotation schemes.

Selecting a Report

To generate a report, select it in the Reports menu.
Printing a Report

To set up the printer, click the printer setup icon, which looks like a printer with a wrench in front of it. Make the appropriate selections and click OK.

Exporting a Report

Reports may be exported into many different formats for a variety of uses. Click the envelope button with the red arrow on it. The Export window will appear:

![Export Window](image)

The Export window has two dialog boxes. Use the first to select the format of the files to be exported. The format will vary depending on use. The second box is the location where the exported file will be located. ES&S recommends leaving the file on the default (Disk File) and then selecting drives and folders to save into.

Backing up Election Files

It is very important to back up county and election information. This can be done through either DOS Copy or Windows Copy.
Backing up Files in DOS

County information is kept in the C:\EDM\"countynamer" directory. Copy these files by typing C:\EDM\countynamer directory “Copy *.* a:\”. This will copy all of the files onto the a:\ drive.

Election information is kept in a sub-directory of the county directory. For example, an election called 95prim is created, the sub-directory would then be 95PRIM. Go to the directory C:\EDM\countynamer95PRIM, and then type “copy *.* a:\”. This will copy all election information to the floppy drive.

Backing up Files in Windows

In Windows Explorer, click the county name folder and drag the file to the a:\ drive. This will copy the election directory to the a:\ drive.

Note: If necessary, delete the mrg.dbf file before copying to free up floppy disk space.
Chapter 7: Setting up Polling Places

Use the options under the Poll Setup menu to set up the polling locations for the upcoming election.

1. Select Master Polling Place File from the Poll Setup menu, the following window will appear:

![Polling Place window](image1)

2. Click Add to enter the Add/Edit Polling Place window:

![Add/Edit Polling Place window](image2)
3. Enter the ID Number and Name of the first location in the appropriate boxes under the Location Information field. The ID number is usually assigned by the state to allow electronic results transmission on Election Night.

4. In the Closing Date/Time boxes enter the date and time that the election will close.
   - Click the down arrow next to the Closing Date box to open the calendar window.
   - Click the election closing date.
   - Use the arrows next to the Closing Time box, or highlight the time and enter numbers, to set the closing time.

5. In the Override Password box, set the override password for the polling location.

   The Votronic will require an override password for the following situations:
   - Closing the polls early.
   - Opening a Voter Terminal with a PEB that already contains votes.
   - Issuing a precinct report without closing all opened Voter Terminals.
   - Clearing and testing a terminal that has not been closed.

   Consult the Votronic Systems Operations Manual for more information.

6. If the Votronic is set to send results to Election Headquarters via modem, enter the Modem Initialization string (INIT) and the Telephone # for the receiving system in the text boxes under the Results Reporting Telephone Information field. Only enter a telephone number if a modem is being used.
7. Under the **Additional Information** field, select the box labeled **Votronic I mode** if the Votronic is to run in election mode I. Select the **Key in Precinct** box to use the selected polling location in the current election. Select the **Support VR Link** box if the Votronic is to be connected to voter registration records. Consult the Votronic System Operations Manual for more information.

8. Select the model of the printer where reports will be sent by clicking the **Printer Model** arrow and selecting a printer from the list. If report information is being transferred via modem, select None on this list.

9. Click **OK** to return to the Polling Place window.

## Selecting Polling Places for the Current Election

1. Choose **Select Polling Places for this Election** from the Poll Setup menu. The following window will appear:

![Select Polling Place Locations for this Election](image)

To open a polling location for the current election, it must be selected from this screen. Select the location that must be added from the **Master Polling Place List** on the left. Click **Add Poll** to open the location for the current election. The location will appear in the Polling Places for this Election window on the right.
Note: The total number of polling places in the Master Polling Place list are counted in the Number of Polling Places in Master box and the total number of polling places selected will appear in the Number of Polling Places Selected box.

2. To remove a polling place from the current election or to delete one from the Master Polling Place List, select the location in the appropriate window and click Delete Poll.

Note: Multiple locations can be selected by holding down the SHIFT key while clicking locations in sequence, or holding CTRL while selecting locations out of sequence.

3. Click Sort to order the locations in the Polling Places this Election field to match the Master Polling Place List.

4. Click OK to save and return to the main screen or Cancel to exit to the main screen without saving.

Editing or Adding Polling Places for the Current Election

Select Edit/Add Polling Places for this Election from the Poll Setup menu to open the Polling Place window. Use this option to make changes to any of the locations selected for the current election or to format polling places for a new location. Functions of this menu are identical to those described in the “Selecting Polling Places from the Master Polling Place File” section earlier in this chapter.
Assigning Precincts to Polling Places

1. Select Assign Precincts to Polling Places from the Poll Setup menu. The following window will appear:

   ![Assign Precincts to Polling Places window](image)

2. To assign a precinct to a polling location, select the poll location in the Poll Name field on the top right. Click the precinct(s) to assign to the polling place and click Add to District to finalize the link. The precincts linked to a given poll location will appear in the Precinct Name field on the bottom right. A green arrow will appear next to the precinct name indicating that the precinct has been linked to the specified polling location.

   **Note:** Multiple precincts can be assigned to a polling location by holding down SHIFT while selecting multiple precincts if in sequence, and holding down CTRL while selecting multiple precincts not in sequence.

3. Click Save Changes to finalize the precinct assignment, the green arrows will become blue X's to show that the link has been finalized (Red X's show that a precinct is linked to more than one location). Select Cancel Changes to abort the location assignments.

   **Note:** To cancel all of the location assignments, select Remove All.

4. Assign precincts to each location selecting Save Changes after each link is completed. Click Close to return to the main screen.
Setting up Ballot Styles

1. Select **Setup Ballot Styles** from the **Poll Setup** menu. The following window will appear:

![Ballot Style Setup Window]

2. Click **Browse** to select the Ballot Data Files (BDF) that contain necessary information for the current election. Selected files must have the `.bdf` extension.

3. When all of the necessary Ballot Data Files have been located, click **OK** to return to the main screen. The Election Data Manager will use the information in the specified files to format ballots for the election.
Changing Ballot Style Names

1. From the Poll Setup menu, select Ballot Style Names. The following screen will appear:

![Ballot Style Information]

2. The number of available ballot styles will appear in the # of Ballot Styles box at the bottom of the window. If the ballot styles are satisfactory, click Close. To edit a ballot type, select the ballot style and click Edit. The following screen will appear:

![Ballot Style]

3. Select the Two Column Ballot box for the ballot to appear in two columns on the Votronic touch screen.
4. Edit the name of the ballot style in the **Ballot Style Name** box.

5. Enter English and Spanish Selection Text in the appropriate fields if this text is different from the default text set in the Merge Preferences option.

6. Enter English and Spanish Title Text if it must be changed from the default text set by selecting **Candidates** under the Election menu.

7. Enter the Ballot Selection Text in the appropriate field if it must be changed from the default text.

8. Click **OK** to save any changes, or **Cancel** to exit this window without saving.
Chapter 8: Troubleshooting

Refer to the following instructions before calling ES&S customer support if you have problems while running Election Data Manager.

Troubleshooting the Printer

The following is a brief description of some common problems that may be encountered while printing from the Election Data Manager.

Refer to the following guidelines if printing problems are encountered. In addition, be sure to check printer configurations in Windows.

- Make sure the printer is turned on and getting power.
- Make sure the printer cable is properly connected.
- Make sure the printer cable is connected to the proper port on the computer.
- If a serial cable is being used, make sure it is the correct cable.
- If a serial cable is being used, and the computer contains more than one (1) serial port, make sure these ports are not configured identically (e.g. both set to Com1).
- If several printers are connected to the computer through a switch, ensure the switch is set in the correct position.
- Ensure that the printer is setup properly in the Windows Control Panel.
- Make sure the printer is on-line.
- Try to print from another program, such as a word processor.
Error Messages and Alerts

The following paragraphs define some of the error messages that may appear in the Election Data Manager and the corrective action (CA) that should be taken to resolve these problems. Self-explanatory messages are not included.

Printer Troubleshooting

- **Insufficient Memory**: The computer does not have enough memory to run the program.

  **CA**: Check that the computer has at least 8 Mg of RAM and that the autoexec.bat file and config.sys files are set up properly.

  **Note**: 60 files and 40 buffers are required in the config.sys file.

- **No Such File or Permission Denied**: The export path indicated does not exist.

  **CA**: Make sure there is an existing directory in which to export. The file name should be similar to this: “C:\opt\94prim.bdf”

- **Can Not Find EDM File**: When opening a deleted election file from the Main File Menu, the program will shut down.

  **CA**: Try starting over and opening another election.

- **Wingdi.cpp Error**: This error occurs when certain printers are set as the default driver, or there is no default driver set up in Windows.

  **CA**: Be sure to have a printer driver set up and try another driver if the error continues.
Troubleshooting the Modem

The following sections describe solutions for common modem problems.

- **Modem does not dial the number:** Hardware may be connected improperly, or the incorrect COM port is specified.

  **CA:** Try these:

  - Make sure the following cables are attached: the cable going to the modem, the cable going to the telephone jack and the cable between the two computers.

  - Ensure the proper COM port is specified in the Configure System Hardware dialog box in Windows. Choose Configure from the title bar, then Configure System Hardware, and the click Edit.

- **Cannot establish a connection**

  **CA:** If the modem dials and there is an answer, but no connection is established, the setting for the remote computer may be wrong. Communicating systems must use the same baud rate, although some modems can drop back to the rate of the remote modem and signal the change (For more information, consult hardware documentation for the PC).

  To transfer data, both systems must also use the same settings for data bits, parity type (none, odd, even, mark, and space), stop bits, and flow control. The two most commonly used setups are 8, N, 1 (8 data bits, 1 stop bit, parity none) and 7, E, 2 (7 data bits, 2 stop bits, parity even).
Appendix A: Interface to ES&S's Hardware Programming Manager

1. Create a Hardware Programming Manager "shell" file to use for a new election.
   - From the Creation/Definition Menu, create a new election with the same election name as the .IFC file.
   - Use option (01). Option (02) does not allow any use of information contained from the file from which it is being created, since the import program throws away all existing information.
   - Make the new election the current election.

2. Import the data from the .IFC file.
   - From the Utilities menu, select Import/Export (13).
   - Select Import (03). The data will now load into the election file.

3. Setup the Jurisdiction Master, Election Specification, Headings and Certification Messages. Either merge this information from a past election or key it directly.
   - To merge from a prior election, from the Creation/Definition Menu, select option (03). Enter the current election name to merge and enter the disk drive and the election name from which files are being copied. Enter 'Y' (yes) in both the Jurisdiction Mast: and Election Spec/Mesgs: fields.
   - If a district file is desired for use with Election Reporting Manager reports and the same election has a valid district file, 'Y' (yes) can be entered in Districts: with a 'N' in the Reset column and a 'Y' in the entire file column.
   - A 'N' (no) should be entered for all other fields in the copy column. After the information is entered, a warning message will display indicating that there is already information in the Jurisdiction Master. Press ENTER to accept the new information. Another warning message will appear indicating that there is information in the Party file. Type 01 to bypass accepting the new information.
• Click on the Change - Jurisdiction Master, Option (07). Verify or enter the desired Jurisdiction Title, State Code, Equipment type (3PE), System Type, Vote for selection, Vote for sequence, Vote for text and the list of District Codes and titles. Enter the revised information.

• When the Jurisdiction information is completed, go to Change - Election Specifications Master, Option (08). Verify or enter the Type of Election, Type of Ballot (1, 2 or 3 column), Special Contest types (Y or N), Over/under reporting? (usually Y), Need Rotation? (Y or N), the ballot disposition and other information that is identified. Enter the revised information.

• When the Election Specification information is completed, go to Change Headings or Certification Message, option (11), and enter or revise the election title. Press F9, and ENTER or revise the certification message, if desired. Enter the revised information.

4. Enter Statistical Contests and Print Only Contest (if applicable).

• All statistical contests, Precincts Counted (used by Optech IV-C only), Registered Voters and Ballots Counted are normally located at the beginning of the contest listing. To have sufficient contest numbers available for them, 100 (1000 if HPM 3.53) is added to all BGS contest numbers when importing them into the Hardware Programming Manager.

• All elections should at least contain a Ballots Counted Total. If a turnout percentage is desired, then Registered Voters Total is also required. If using an Optech IV-C, the Precincts Counted Total is also desired. Other optional statistics include Registered Voters and Ballots Counted by Party if the election is a primary and Registered Voters, Ballots Counted and Precincts Counted (if Optech IV-C without Reporting Manager) by desired districts (eg. Cong 1, Leg 2, etc.).

• If statistical contests are going to be imported (merged) from another election, from the Creation/Definition menu, go to Merge - Part of Another Election, Option (03), and merge in the statistical contests by contest number range. This could be done at the same time as step 3, if the statistical contests are in the same election as the Jurisdiction and Election Specification information.

• If the statistical contests have not been merged, manually enter them. If a statistical contest is associated with a specific district, use the proper district code and use district specific text in the title instead of the word TOTAL. In a primary, party statistical contests should contain the proper party designations.
• Enter any desired print only contests in the contest sequence location desired. A contest listing may have to first be printed to determine which contest numbers to use. Also note that Print Only contests are not used by Reporting Manager. They only print on the Eagle tape or on Optech IV-C reports.

5. Finalize Contest Title Text and Contest Order.

• Print a contest listing by selecting Option (04) from the Contests and Candidates menu. Use option (02) or (02) to print a full listing.

• Examine the listing for desired sequence of contests and contest title text. Contest titles may appear identically to the way they appear on the ballot. If the same contest name is associated with different districts, the contest name that appears in the Election Reporting Manager or Optech IV-C reports should contain the district name text in addition to the contest title (e.g. TOWNSHIP TREASURER should be SMITH TOWNSHIP TREASURER to distinguish it from other township treasurer contests). In some instances, abbreviation of contest titles might be desired for appearance on reports or display screens.

• Make any contest title changes that are desired (See section B above).

• If the contests on the contest listing are not in the desired order for reports, select Renumber Contests (11) from the Contest and Candidate menu, and renumber them so that they are in the desired order. Omit any referenda instruction contests that may exist, to eliminate them from both the contest listing and ballot styles.

• If changes have been made, print a new contest listing and verify changes.


• If this is a General election that uses a Straight Party contest or a Pick-A-Party type of Open Primary election, the following steps must be followed.

• Select Change - Straight Party Contests, Option (03) from the Contest and Candidate menu and select (01), File Maintenance. Enter the contest number of the Straight Party or Pick-A-Party contest.

• If the contest is a Straight Party contest, all contests affected by the Straight Party contest must also be entered. These may be entered individually by contest number, entered as one or more ranges of contest numbers, or as a combination.

• Page Down and enter all the above information.
7. Update Ballot Styles with Statistical and Print Only Contests.
   
   - All merged or manually entered statistical and print only contests must be inserted in all appropriate ballot styles. Whenever a ballot style is found which contains a matching district, it inserts the statistical/print only contest into the ballot style. All statistical/print only contests that do not contain district codes will be inserted in all ballot styles. In a primary, party specific statistical contests will only be inserted in ballot styles that contain contests of the same party, as well as the same district.

   - To run the program, select Add - Stats & Print Only to Ballot Styles on the Ballot Style Menu, Option (12) and select (01).

   Note: Any statistical or print only contests defined for districts that do not have contests in the election, will not be inserted in any ballot styles. These will have to be handled manually and may result in having to create extra ballot styles, if a style is to have different sets of statistics.

8. Finalize all Header Code definition.

   - Select Ballot Style Control, Option (1), on the Ballot Styles menu. Change the security class to N and set the mask positions to the definition used in the BGS system. If it is a closed primary election, place N’s in the party positions. If precinct ID is imbedded in the header, place P’s in the precinct ID positions (not used if using “Mixed Mode”). Place S’s in all other positions. Enter the revised information.

   - When the ballot style control information has been revised, select Create Ballot Styles/Precinct, Option (08) from the Ballot Styles menu and then option (01) and create ballot styles/precinct.

   - Print a ballot style by precinct listing by selecting Print Ballot Styles/Precinct, Option (10), on the Ballot Styles Menu and then 01 to print the listing.

9. Final Preparation

   - Select Create Final Data Base, Option (01) from the Final Preparations menu and then 01 to create it.

   - If using Eagles, select Create Parameter file, Option (03) on the Final Preparations menu. Select (01) and enter through the Final Preparations menu. Select (01) and enter through the 0001 starting precinct and 999 ending precinct to create all precinct parameters. If listings are not desired, enter N for printing the listings.
• If using Reporting Manager select Create AERO Database, Option (15) on the Final Preparations menu and the (01) to create it.

• If Eagles are being used, Memory Packs may now be programmed. Use Option (05) on the Final Preparations menu.

• When all the steps are completed, exit the Hardware Programming Manager and test the procedures.
Appendix B: Data Manager Import Setup

Use the following requirements when setting up import data for Data Manager.

<table>
<thead>
<tr>
<th>EMS Field</th>
<th>Max Size</th>
<th>Election Data Manager Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jurisdiction Name</td>
<td>30</td>
<td>County Abbreviation field when creating a new county</td>
</tr>
<tr>
<td>Election Title</td>
<td>30</td>
<td>Election Description field when creating a new election</td>
</tr>
</tbody>
</table>

**Party Information**

<table>
<thead>
<tr>
<th>EMS Field</th>
<th>Max Size</th>
<th>Election Data Manager Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Digit Party Code</td>
<td>3</td>
<td>Party ID</td>
</tr>
<tr>
<td>1 Digit Party Code</td>
<td>1</td>
<td>Party Device Code or USE generated sequential number 0-9, A, B, C, ...</td>
</tr>
<tr>
<td>Party Description</td>
<td>20</td>
<td>Party Name</td>
</tr>
</tbody>
</table>

**Precinct Information**

<table>
<thead>
<tr>
<th>EMS Field</th>
<th>Max Size</th>
<th>Election Data Manager Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precinct Number</td>
<td>4</td>
<td>Precinct ID or if blank</td>
</tr>
<tr>
<td>Precinct Name</td>
<td>30</td>
<td>Election Data Manager generated precinct number</td>
</tr>
<tr>
<td>Registered Voter</td>
<td>4</td>
<td>Precinct Abbreviation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Registered Voters for up to 20 parties</td>
</tr>
</tbody>
</table>

**Contest Information**

<table>
<thead>
<tr>
<th>EMS Field</th>
<th>Max Size</th>
<th>Election Data Manager Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contest Number</td>
<td>4</td>
<td>Election Data Manager starts at 100 and increments by 1 EMS import</td>
</tr>
<tr>
<td>Contest Title</td>
<td>56</td>
<td>Office Title + District Name or Precinct Name</td>
</tr>
<tr>
<td>District</td>
<td>7</td>
<td>Question Description</td>
</tr>
<tr>
<td></td>
<td></td>
<td>for &lt;Countywide&gt; District = blank</td>
</tr>
<tr>
<td></td>
<td></td>
<td>for &lt;Local&gt; or &lt;Split Local&gt; District =</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PRC + Precinct ID or Election Data Manager generated precinct number</td>
</tr>
<tr>
<td>Special Type Code</td>
<td>1</td>
<td>for 4cMixed Mode Florida PRC is PCM for district offices use District II</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ES&amp;S tab on Office dialog - Statistical, Group, Exact, ...</td>
</tr>
</tbody>
</table>
## Candidate Information

<table>
<thead>
<tr>
<th>EMS Field</th>
<th>Max Size</th>
<th>Election Data Manager Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candidate Name</td>
<td>34</td>
<td>Full Name</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W/I for Write-in</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N/C for no candidate with arrows</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N/N for no candidate without arrows</td>
</tr>
</tbody>
</table>
Appendix C: Hard Codes and Variable Names

Hard coding can be difficult because all text must be labeled in some manner. Text after the label will have the label attribute until it is changed. For example, if \textit{(italics)} is selected, text after the code will be in italics until \textbf{(bold)} is selected. If the text is to be a certain font, then that font’s code must be placed in front of the text.

A sample question using hard codes is displayed below. The first line of the question reads: \texttt{<F2><P14><B><L>12}. The means that the number 12 is in \texttt{<F2>>Times Roman Font, <P14>>Point Size 14, <B>>Bold, and <L>> Left Justified.

\begin{verbatim}
<F2><P14><B><L>12
<P11><S13><C>PROPOSED ORDINANCE\textless NL>  \textless NL>DOYLESTOWN VILLAGE\textless NL>  \textless NL>A Majority Affirmative Vote Is Necessary For Passage.\textless NL>\textless NL>
<J><P11><S11><N>SHALL AN ORDINANCE DIRECTING THE COUNCIL OF THE VILLAGE OF DOYLESTOWN TO ENACT LEGISLATION THAT REQUIRES THE POSTING OF A BOND OR OTHER SECURITY FROM PARTIES THAT WOULD PAY TAX ASSESSMENTS OVER TIME FOR VILLAGE OF DOYLESTOWN UTILITY EXTENSION AND/OR EXPANSION FOR THE PURPOSE OF SERVICING NEW DEVELOPMENT FINANCED BY MUNICIPAL BONDS ISSUED BY THE VILLAGE OF DOYLESTOWN\textless NL>\textless NL>
Shall the proposed Fluxing Financing of Development Control Ordinance of 1997 be adopted?
\end{verbatim}
Hard Codes

The following is a list of the Hard Codes used for entering text.

<F0> Ariel
<F1> Helvetica
<F2> Times Roman
<F3> Courier
<F4> MS Sans Serif
<F5> Pica
<F6> Elite
<F7> Ariel Super
<F8> Wing Dings
<F9> Symbol
<F10> Zapf Dingbats
<F11> Zapf Chancery
<F12> Ariel Narrow
<F13> BallotRight Font
<TC0> Reverse Type

<Pn> Point size n=Number, e.x.
P10 is equal to point size=10

<Sn> Line size

<> Justified
<=> Left Justified
<=> Right Justified
<> Bold
<> Normal (needed only after bold)
Variable Names

The following codes are used to place different fields on the ballot via a text file or question.

<GEO> Precinct Name part 1
<GEO2> Precinct Name part 2
<GEONAME> This will place the precinct name for each ballot style. This is commonly used in the Title Instructions for absentee ballots. For this feature to work, click Local for the district name and then select All for the precinct name.
<GEOABBRE> Precinct Abbreviation
<GEONUM> Precinct number (precinct number 1, 2, 3 etc.)
<GEOPROD> USE Production code
<GSTYLENUM> Ballot Style number (this is the middle number of the USE production code).
<GEOTXT1> Precinct Additional Text1
<GEOTXT2> Precinct Additional Text2
<GEOTXT3> Precinct Additional Text3
<GEOTXT4> Precinct Additional Text4
<GNAME> District Name - Within an office this code placed in the Additional Text1 field will place the district name on the ballot.
<GLEFTCODE>  Decimal value of left header code (ES&S Optech ballots)
<GRIGHTCODE>  Decimal value of right header code (ES&S Optech ballots)
<MERGE>  BDF Date stamp (the date the file was merged)
<DATETIME>  Current Date & Time
<VERSION>  Layout Version
<GPAPPCODE>  Pages Applicable
<G_____>  District type - place the first four letters of the District type name after the "G"
<GballotNumber>  Serial number (AIS BOD only)
<Gjurisdiction>  County Name
<GTYPECODE>  Two digit ballot type code (AIS only)
<GSEQCODE>  Four digit ballot sequence code (AIS only)
<GSPLITCODE>  Two digit ballot split code (AIS only)
<GTSSCODE>  Type Sequence Split Code
<GPAGENUM>  Page number (CES only)
<GPAGESIDE>  Sets whether the page is the left or right side (CES only)
<GELECTIONNAME>  Name of election
<GELECTIONDATE>  Date of election
<GCLERKNAME>  Name of County Clerk
<GEOID>  Precinct ID
<GCOLOR>  Color assigned to ballot pages (CES only)
Appendix D: Using the Audit Manager

The Election Data Manager stores an audit log of all actions taken within the program. Election Administrators can access the audit log by opening a utility called the Audit Manager.

Opening the Audit Manager

1. Click Start on the Windows desktop and select Programs.

2. Select Audit Manager from the program list. The following window will appear:

![Audit Manager Window]

3. Your initial user name and password will be supplied by ES&S when you purchase Data Manager. Enter the Audit Manager User Name and Password to access the Audit Manager main screen.
Managing the Users List

Assign all personnel with access to the Election Data Manager a unique user name and password to make sure that unauthorized users do not have access to Data Manager files.

Entering User Information

The Audit Manager keeps a history of who has accessed the Data Manager. You can view audit log information as an overview of all action taken within the program or you can sort the data to view the actions of individual users.

Adding a User Record

To add a user record:

1. Select Users under the Edit menu. The following window will appear:

![User Window](image1)

2. Select New User. The following window will appear:

![User Window](image2)
3. Enter the User ID that will be entered in the Data Manager logon window.

4. Enter a logon Password for the user.

5. Enter the user's Full Name.

6. Select Save to save the new user information or Cancel to return to the Users list without saving the new entry.

Deleting a User Record

To delete a user record:

1. Select Users under the Edit menu. The Users window will appear.

2. Locate the user that must be deleted by selecting the single right arrow to advance the user list by one entry or the single left arrow to go backwards one entry. Select the double left arrow to go to the first user on the list or the double right arrow to go to the last user on the list.

3. Select Delete User to remove an entry from the list. A confirmation message will appear.

4. Click Yes in the confirmation window to complete the deletion.

Editing a User Record

To edit a user record:

1. Select Users under the Edit menu. The Users window will appear.

2. Use the instructions under "Deleting a User Record" to locate the entry that must be changed.

3. Select Edit User and use the instructions above for "Adding a User Record" to change user information.

Locating a User Record

Use the Find User option if you have a large number of users and do not want to scroll through entries using the left and right arrows.

To find a user record:

1. Select Users under the Edit menu. The Users window will appear.
2. Select **Find User**. The following window will appear:

![AuditManager window](image)

3. Enter the ID of the user you want to locate and click **OK**. User information will appear in the Users window or the message “Could not find the user,” will appear. Click **Cancel** to return to the Users window.

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**Using the Audit Log**

The audit log keeps track of all of the actions performed in the Election Data Manager. You can view the audit log as a list of all actions performed in Data Manager or as a user specific record.

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**Viewing the Audit Log**

To open the audit log:

1. Select **View Log** under the **Audit** menu. The View Log window will appear:

![View Log window](image)
2. Select the user specific audit log you want to view from the Select User list. Select <all users> for a list of all actions taken in the Election Data Manager.

3. Click Ascending under the Select Sort heading to view the oldest records at the top of the log and the most recent actions at the bottom. Select Descending to view the most recent actions at the top of the log and the oldest records at the bottom.

4. Click Get Data to retrieve audit log data and display it on screen.

**Changing the Audit Log View**

You can change how audit log windows are displayed by selecting options under the Windows menu.

To format audit log window appearance:

1. Select Cascade under the Windows menu to have multiple audit log windows appear on top of one another.

2. Select Tile Horizontally to tile all open audit log windows horizontally across the screen. This feature is useful when you want to compare two or more audit logs.

3. Select Tile Vertically to tile all open audit log windows vertically across the screen. This feature is useful when you want to compare two or more audit logs.

4. Select which audit log will appear in the active window by selecting it in the Windows list under the Window menu.

**Printing the Audit Log**

1. Select Print from the File menu to print the audit log.
Erasing the Audit Log

To erase the audit log:

1. Select Purge Log from the Audit menu. The following window will appear:

   ![Purge Log window]

   Purge records older than [5/21/1]

   [Purge button] [Cancel button]

2. All records created before the date in the box will be erased. Control what records are deleted by highlighting the date and manually entering new numbers or select the arrow and click a date on the calendar.

3. Select Purge to erase audit log records or click Cancel to return to the Audit Manager main screen without erasing the audit log.
Contacting ES&S for Software Support

This manual and in-program Help should aid in accomplishing most of the tasks in the Election Data Manager. The first step towards solving any problem is understanding the problem itself.

If a question cannot be answered with the resources, or if a process or system error is encountered, ES&S's software support team is available to provide additional assistance and assistance in resolving the situation.

When calling ES&S for software support, please be near the computer. In addition, be prepared to provide the following information to the support representative:

- The version number of the product.
- The type of hardware used, including network hardware if applicable.
- The operating system (e.g., Windows 95).
- The exact wording of any messages appearing on screen.
- A description of what happened, circumstances under which the problem occurred and any solutions attempted.

Support representatives are available between 8:00 a.m. and 5:00 p.m. CST; however, support hours are extended during election periods.

To contact an ES&S support representative:

Telephone:  800-247-8683 (USA & Canada) or 402-593-0101 (International)
Fax: 402-593-8107
Write:  Election Systems & Software  11208 John Galt Blvd.
       Omaha, NE  68137 USA

ES&S's support services are subject to ES&S's prices, terms, and conditions in place at the time the service is used.
Glossary

ASCII Text Files: American Standard Code for Information Interchange. ASCII is a standard for an encoding of characters used to represent text in computer files. ASCII characters are added or deleted to create a file, which can then be saved, printed, or displayed.

Arrow Keys: On your computer keyboard, there are four arrow keys that move the cursor up, down, left, and right on your screen. Each key is marked with an arrow that is named for the direction in which the arrow points: There is an Up ARROW, Down ARROW, Left ARROW, and Right ARROW key. Also known as direction keys.

Attribute: Any style used to enhance readability of text. Typical attributes include bold and italic.

Ballot Style: The unique combination of races and candidates that appear on a ballot for any given election.

BIOS: The Basic input/output System or part of the computer operating system that communicates with the screen, the keyboard, printers, and other peripheral devices.

Bit: A binary digit is the smallest storage unit for data in a computer. Buffer: A temporary data storage area used by computers and some printers.

Check Box: A small, square box that appears in a dialog box which can be selected or cleared. When the check box is selected, an X appears in the box. A check box represents an option that you can turn on or off.

Choose: To use a mouse or keyboard to pick an item that begins an action in the Election Data Manager. You choose commands on menus to perform tasks, and you choose icons to start applications.

Click: To press and release a mouse button quickly.

Close: To remove a window or dialog box, or quit an application. You can close a window by using the Close command on the Control menu. When you close an application window, you quit the application.

Confirmation Message: A message that appears after you specify certain actions, prompting you to confirm that you want to continue with the action or to specify that you want to cancel it.

Command Button: In a dialog box, a button that carries out an action. A command button often has a label that describes the action it carries out.
Delimiter: Most commonly used to refer to a character or code that marks the beginning or end of an item such as a sentence, record, or field.

Dialog Box: The set of choices presented on the screen for each menu option selected.

Double Click: To rapidly press and release a mouse button. Double clicking with the mouse. Double clicking carries out an action, such as starting an application.

DOS: The Disk Operating System is software that directs the flow of data between disk drives and your computer. Without an operating system, your computer can do nothing.

Drag: To move or select several items on the screen by selecting the item(s) and then pressing and holding down the mouse button while moving the mouse.

DWP: Also known as District Maps. DWP is the combination of precincts and groups within a county.

Extension: The part of the file name to the right of the period. For instance, the extension in the file name “96prim.BDF” is BDF. Extensions are used by the Election Data Manager to differentiate between files of different types.

File: A collection of information that has been given a name and is stored on a disk. This information can be a document or an application. Filename is the name of a file.

Font: A specific typeface, point size, and weight (e.g. 10pt Helvetica Bold) Frame. A rectangular box used to hold text or graphics. The BIM uses the combination of different frames to create a unique ballot for an election.

Precinct: Also known as Voting Districts, Voting Assemblies. The smallest logical or physical entity (or area) your county breaks down into. It is also the smallest element for which a ballot can be produced.

Highlighted: Indicates that an object or text is selected and will be affected by your next action. Highlighted text appears in reverse video on monochrome monitors or in color on some color monitors. Highlighted objects might change color or be surrounded by a selection cursor.

Icons: Graphical representations of various elements in the Election Data Manager.

List Box: Within an application window or dialog box, a type of box that lists available choices - for example, a list of all files in a directory. If all the choices do not fit in the list box, there is a scroll bar.

Kilobyte (K): 1024 bytes of information or storage space.
Landscape: A page printed so that as you read it the width is greater than its height.

Layout: The arrangement of text and frames on any given page.

Line: Characters placed in the middle or at the end of a line. For example: John Doe, . . .

Leading: The distance in points from the baseline of one line of type to the next line of type.

Maximize Button: The small box containing an up arrow at the right of the title bar. Click the Maximize button to enlarge a window to its maximum size. Keyboard users can use the Maximize command on the Control menu.

Mechanical: A finished “camera ready” piece of artwork.

Megabyte (M): 1024 kilobytes (1,048,576 bytes) of information or storage space.

Memory: A computer’s temporary data storage area (see RAM below).

Menu: A list of available commands in an application window. Menu names appear in the menu bar near the top of the window. You open a menu by selecting the menu name.

Menu Bar: The horizontal bar containing the names of the application’s menus. It appears below the title bar.

Minimize Button: The small box containing a down arrow at the right of the title bar. Click the Minimize button to reduce a window to an icon. Keyboard users can use the Minimize command on the Control menu.

Modem: A communications device that enables a computer to transmit information over a telephone line.

Open: To display the contents of a file in a window or to enlarge an icon to a window.

Pathname: A full pathname includes the drive, root and any sub directory names. Each name is separated by a backslash (\). For example, C:\Opt refers to the AIS BMI directory on the C drive.

Parallel Interface: An interface in which several bits of information (usually 1 byte) are transmitted simultaneously.

Parallel Printer: A printer that accepts information by way of a parallel interface.

Point: Typographic unit of measurement equal to 1/72 of an inch.
Pointer: The arrow-shaped cursor on the screen that follows the movement of a mouse and indicates which area of the screen will be affected when you press the mouse button. The pointer may change shape during certain tasks.

Port: A communication device between a computer and a printer or terminal. They are connected by cables and can be different types of ports such as serial, parallel, and USB.

Printer: A piece of hardware that prints a page or document onto paper. It can be connected to a computer and is used to produce hard copies of computer documents.

PostScript: A language used to describe how to print a page that consists of both text and pictures. This description is completely independent of the printing device. This means that the page can be printed on any printer or typesetter that uses PostScript, and the page will be printed at the full resolution that each printer or typesetter can produce.

RAM: Random Access Memory is the working space or temporary storage area for the program you are using and the information on your screen. All information in RAM is lost unless it is saved prior to turning the computer off.

ROM: Read Only Memory contains information the computer uses to run the system. ROM is permanent and is not erased when the power is turned off.

Ruling Line: Any horizontal or vertical line used to separate text or frames from the surrounding layout.

Serial Interface: An interface in which information is transmitted one bit at a time.

Serial Printer: A printer that accepts information from the computer by way of a serial interface.

Scroll: To move through text (up, down, left, or right) in order to see parts of the file or list that cannot fit on the screen.

Scroll Arrow: An arrow on either end of a scroll bar that you use to scroll through the contents of the window or list box.

Scroll Bar: A bar that appears at the bottom and/or right edge of a window whose contents are not entirely visible. Each scroll bar contains a scroll box and two scroll arrows.

Scroll Box: In a scroll bar, the small box that shows the position of information currently in the window or list box relative to the contents of the entire window.
Select: To mark an item so that a subsequent action can be carried out on that item. You usually select an item by clicking it with a mouse or pressing a key. After selecting an item, you choose the action that you want to affect the item.

Static: The offices that are running either statewide or countywide.

Text Box: In a dialog box, a box in which you type information needed to carry out a command. The text box may be blank or may contain text when the dialog box opens.

Title Bar: The horizontal bar (at the top of a window) that contains the title of the window or dialog box. On many windows, the title bar also contains the Close menu box and Maximize and Minimize buttons.

Window: A rectangular area on your screen in which you view an application or document. You can open, close, and move a window, and change the size of most windows. You can open several windows at a time, and you can often reduce a window to an icon or enlarge it to fill the entire monitor screen. Sometimes windows are displayed within other windows.

The following products and services are available from ES&S:

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- Ballot Image Manager™
- Ballot on Demand™

**Profile Voter Registration Systems™**
- Power Profile™
- Mega Profile™
- State Profile™

**Ballot Counting Systems**
- Systems for use at the Precinct or Polling Place – Electronic Ballot:
  - Votronic® DRE Touch Screen Voting System
  - V-2000 Full Face DRE Touch Panel Voting System
  - EZ-Access Voting™ ADA Compliant Voting Kiosk
- Systems for use at the Precinct or Polling Place – Paper Ballot:
  - Model 100 OMR System
  - Model 2100 Punch Card System
- Systems for use at Central or Regional Locations – Paper Ballot:
  - Model 150 OMR System
  - Model 550 OMR System
  - Model IV-C OMR System

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If you would like more information on any of our products or services please contact us:

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