Dominion Voting Systems: Exporting Guide

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PDF

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AuditEngine performs ballot image audits. To audit an election independently, we need the district to export three kinds of files:

- the ballot images,
- the cast vote records (CVR),
- the ballot style masters (BSM).

The instructions below show how to export these files from the Dominion Voting System. A separate page, Sending Election Data to AuditEngine, explains how to send them to us.

Exporting Dominion ballot images

The following section is clipped from the DVS "Democracy Suite" User Guide.[1]

Please use the precinct, ballot type and group filters, and choose all precincts, all ballot types and all groups. Do not filter by ballot exception or by any other parameter.

It may be necessary to export one group or one set of precincts at a time, so that each export has a reasonable size. Try to keep each export between 10,000 and 50,000 ballot sheets, counting front and back. Very large archives are hard to upload, because each one takes so long. It is better to retry a small file than to redo a huge one.

Please combine the exported files into a few ZIP archives, for ease of handling. We recommend the free utility from 7-zip.org. It works much better than the compression utility built into Windows.

If the full CVR is provided, the folder tree of the export needs no added structure. The Dominion JSON CVR has all the information we need about each ballot. Please use the JSON format rather than CSV, because JSON includes the adjudication records.

14.3 Exporting Audit Images

The **Export audit images** functionality will go through each scanned ballot image that was extracted previously from the tabulators and will categorize each image and export them into separate subfolders per category. For each export a separate subfolder will be created.

The export audit images screen either applies to all result files or to the currently selected result file.

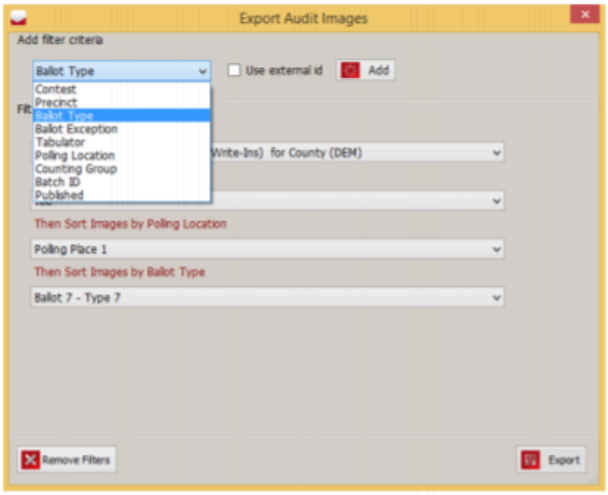


Figure 14.11: Export Audit Images Screen

The manual describes the filter criteria as follows.

The user can define which images to export and how they should be exported by adding and selecting filter criteria. The following lists the different filter criteria, some of which allow sub selection:

- **Contest**: adding this filter criterion splits images per contest in separate subdirectories prefixed with "Contest_"and followed by contest name. The filter allows the user to select a specific contest, resulting in an export where only images for ballots containing that contest are included.
- **Precinct**: adding this filter criterion splits images per precinct in separate subdirectories prefixed with "Precinct_" followed by precinct name. The filter allows the user to select a specific precinct, resulting in an export where only images for ballots cast in that precinct are included.
- **Ballot Type**: adding this filter criterion splits images per Ballot Type in separate subdirectories prefixed with "BT" and followed by the name of the Ballot Type. The filter allows the user to select a specific Ballot Type, resulting in an export where only the images of ballots that belong to the specified Ballot Type are included.

- **Tabulator**: adding this filter criterion splits images per tabulator in separate subdirectories prefixed with "Tabulator_" and followed by tabulator name. The filter allows the user to select a specific tabulator, resulting in an export where only images of ballots cast in that tabulator are included.
- **Polling Location**: adding this filter criterion splits images per polling location in separate subdirectories prefixed with "PollingLocation_" and followed by polling location name. The filter allows the user to select a specific polling location, resulting in an export where only images of ballots cast at that polling location are included.
- **Counting Group**: adding this filter criterion splits images per counting group in separate subdirectories prefixed with "CountingGroup_", followed by the counting group name. The filter allows the user to select a specific counting group, resulting in an export where only images of ballots cast in that counting group are included.
- **Batch ID**: adding this filter criterion splits images per batch in separate subdirectories prefixed with "BatchId_", followed by the batch id.
- **Published**: adding this filter criterion separates images depending on if an image has been published. The subdirectories will be prefixed with "Published_" followed by either "notpublished" or "published".

The user can add each filter criterion once. The order in which they are added determines the folder structure that is created on export. Once the export is started using the Export button the system will create an "AuditImages" directory in the project's "Results" subfolder. Within that directory a subfolder named "Audit" is created named followed by a timestamp (for example: Audit2013_12_17_13_58_00). Within that subfolder a hierarchy of subfolders are created matching the order of the filter criteria added by the user. The user can clear all filter criteria by pressing the **Remove Filter** button.

- **Ballot Exception**: adding this filter criterion splits images per ballot exception in separate subdirectories prefixed with "BallotException_" followed by each of the following categories:
  - **Blank Ballot**: no marks were detected for any of the contests.
  - **Blank**: no marks were detected for the current contest, or if no contest criterion was added, no marks were detected for at least one contest.
  - **UndervotedNotBlank**: the current contest was undervoted, but not blank, or if no contest criterion was added, undervoted contest detected was not blank.
  - **Regular**: current contest was marked equal to the vote for, or if no contest criterion was added, all contests were marked equal to their vote for.

- **Writein**: current contest had one of the write-in positions marked, or if no contest criterion was added, a contest had one of their write-in positions marked.
- **Overvoted**: current contest was overvoted, or if not contest criterion was added, a contest was overvoted.

Exporting Dominion cast vote records

This section is clipped from the Dominion User Guide, page 110. AuditEngine needs only the JSON files, described in the manual as "a set of well-defined JSON files packaged together in a zip file."

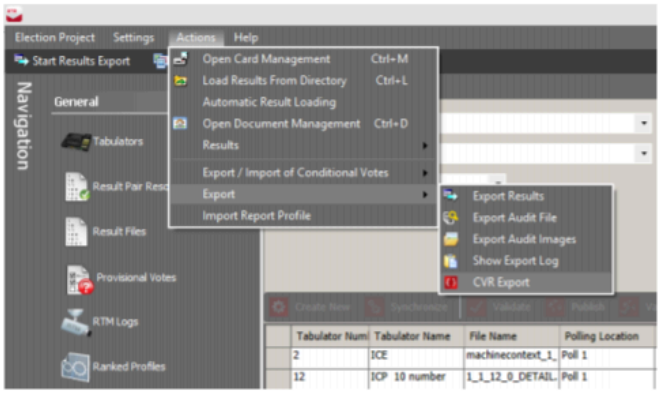


Figure 14.1: Export Data Screen

1. Navigate to the **Actions** menu, click the **Export** menu item and click the **CVR Export** sub-menu item.
2. The *CVR Export* screen will appear.

In the CVR Export screen, choose ALL for every filter. Then please:

- check "Create separate file per batch",
- check "Published batches only",
- uncheck "Use tabular format".

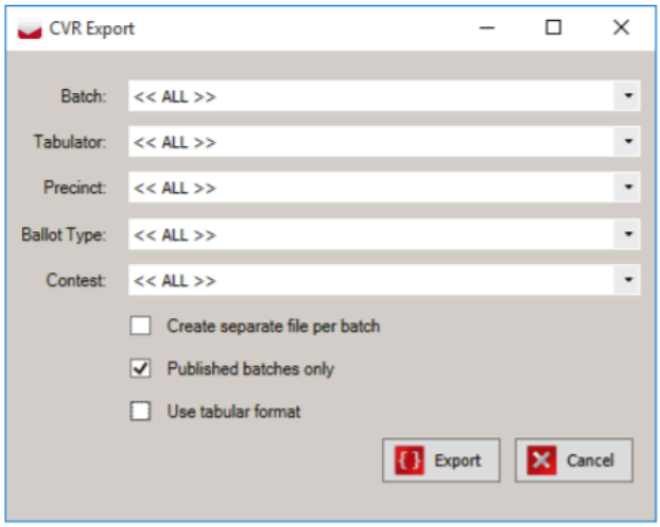


Figure 14.2: CVR Export Screen

3. Select criteria for filters if applicable, or leave as **ALL** in case no filter is required.
4. Perform additional settings, if applicable:
   - Create separate file per batch check this if the export should create a separate export file for each results batch being exported.
   - Published batches only check this if the export should only contain data from published result batches.
   - Use tabular format - If this option is selected the export will be in the form of a tabular text file format, which can be opened in Excel instead of the default JSON format.
5. Click **Export**.

Dominion CVR files

The latest generation of Dominion software produces the following CVR files. Please zip them all into one ZIP archive.

```
BallotTypeContestManifest.json
BallotTypeManifest.json
CandidateManifest.json
Configuration.json
ContestManifest.json
CvrExport_0.json
CvrExport_1.json
    ... there may be hundreds or thousands of these
CvrExport_nnnn.json
DistrictManifest.json
DistrictPrecinctPortionManifest.json
DistrictTypeManifest.json
ElectionEventManifest.json
OutstackConditionManifest.json
PartyManifest.json
PrecinctManifest.json
PrecinctPortionManifest.json
TabulatorManifest.json
```

Creating ballot style masters

These files were probably created to send to the printer. So they are probably already in the files archived for this election.

In case they are not, here are the detailed instructions. We do not need the audio files.

The rest of this section is excerpted from the Dominion documentation. Our comments are in square brackets, [LIKE THIS].

Chapter 5: Generating ballots for your election project

Once you have styled all of the properties needed for the proper generation of your ballots for your Election Project, proceed to the Ballots Generated stage. If you have not yet styled your ballots, return to Chapter 5 before continuing with this chapter.

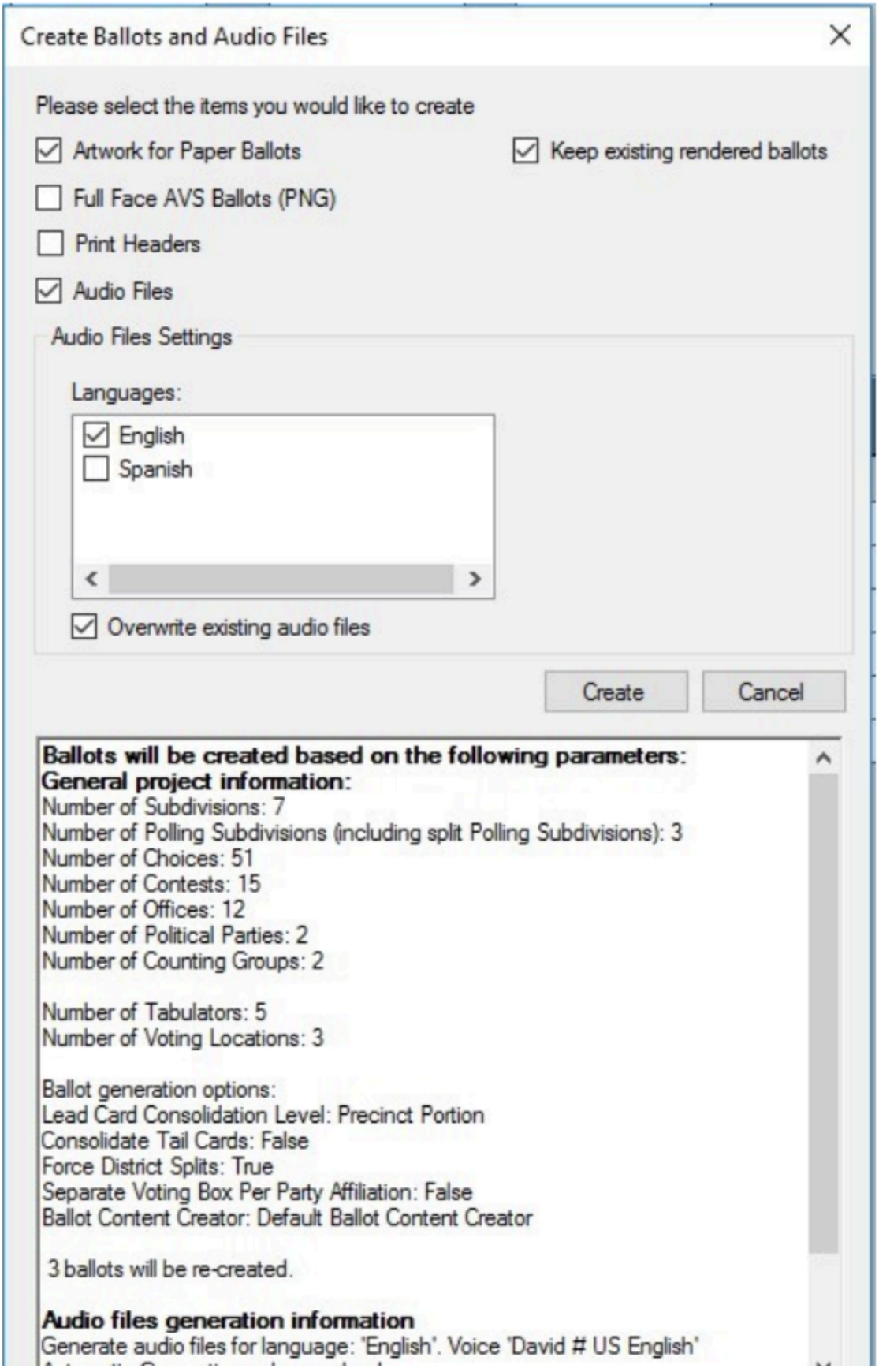
5.1 Generating official ballots

Once you are satisfied with the appearance and content of the ballots, you can proceed with the creation of the official ballot artwork and other elements such as audio files. [WE DO NOT NEED

AUDIO FILES]

To generate official ballots:

1. Click Actions in the top menu. Click Create Ballots and Audio Files.
2. The Create Ballots and Audio Files screen appears, see Figure 5-1. It contains the available options for advancing into the next project phase, as well as general statistics and information about the project in its current state. The user can choose to create the following:
    - **Artwork for Paper Ballots.** This option is used for creating print-ready artwork for official paper ballots. [THIS IS THE OPTION WE NEED]
    - **Print Headers.** The headers are printed on the electronic ballots when the voter generates the ballot as part of completing their voting session. However, to speed up the process, headers are prepared in advance for each possible ballot manifestation. Headers for electronic mobile ballots are not created automatically. The creation of headers must be initiated by the user, and this can be performed only in Election Project Styling and Ballots Generated project phases. [NOT NEEDED]
    - **Full Face AVS Ballots (PNG).** This option can only be selected if Artwork for Paper Ballots has already been created, or is selected. This allows the user to create the necessary files for devices where electronic ballots can be displayed to the voter in the Full Face AVS mode (see Project Parameters 4.7). If there are tabulator types that support this mode of AVS, this option is still available in case PNG files are required. [NOT NEEDED]
    - **Audio Files.** This option is used for generating audio for all necessary election event objects. This audio is used for playback on the various voting devices where Accessible Voting Session modes are supported. [NOT NEEDED]
    - The user has the ability to specify which Languages the audio should be generated for. [NOT NEEDED]
    - The user has the ability to Overwrite existing audio files, in case they already exist. [NOT NEEDED]


Create Ballots and Audio Files
Please select the items you would like to create
Artwork for Paper Ballots
Keep existing rendered ballots
Full Face AVS Ballots (PNG)
Print Headers
Audio Files
Audio Files Settings
Languages:
English
Spanish
Overwrite existing audio files
Create
Cancel
Ballots will be created based on the following parameters:
General project information:
Number of Subdivisions: 7
Number of Polling Subdivisions (including split Polling Subdivisions): 3
Number of Choices: 51
Number of Contests: 15
Number of Offices: 12
Number of Political Parties: 2
Number of Counting Groups: 2
Number of Tabulators: 5
Number of Voting Locations: 3
Ballot generation options:
Lead Card Consolidation Level: Precinct Portion
Consolidate Tail Cards: False
Force District Splits: True
Separate Voting Box Per Party Affiliation: False
Ballot Content Creator: Default Ballot Content Creator
3 ballots will be re-created.
Audio files generation information
Generate audio files for language: 'English'. Voice 'David # US English'

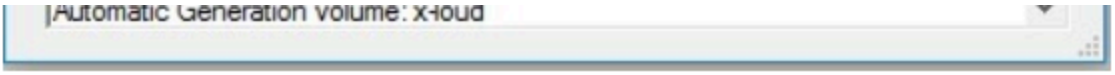


Figure 5-1: Create Ballots and Audio Files screen

3. Click Create to begin the process. The system will collect data from your definitions and calculate the ballots that need to be created. This process can take a significant amount of time depending on the number of precincts, contests, choices, etc. [YES, DO THIS]

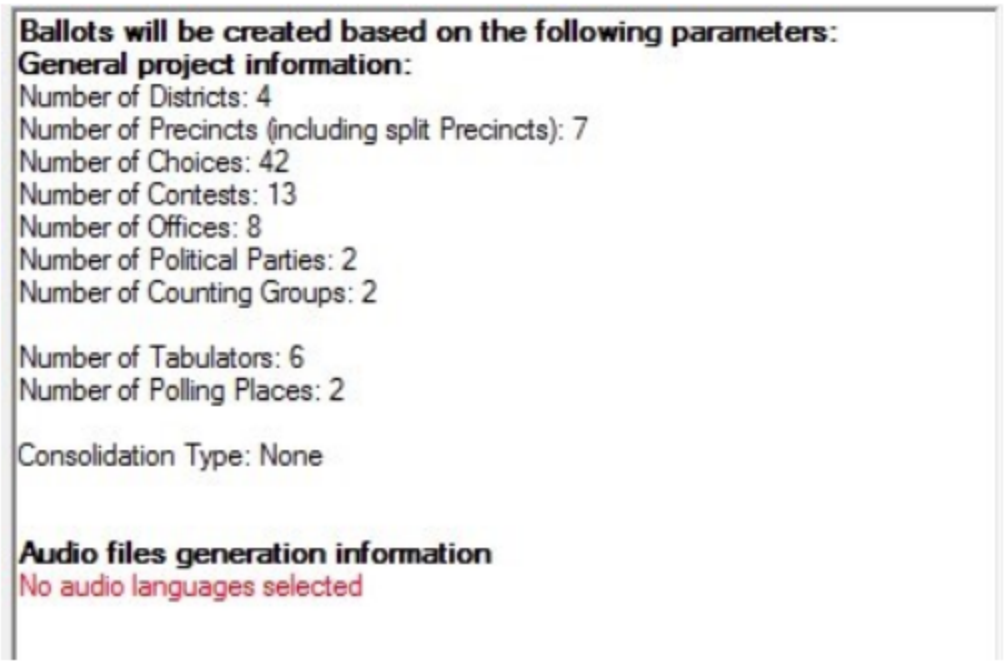


Figure 5-2: Errors Preventing Creation Screen

4. Note that if you have not properly defined and styled your Election Project, an error will appear, see Figure 5-2. This screen will list the components of your Election Project that are inconsistent or improperly defined. Use the list as a reference for addressing the errors that may be preventing your Election Project from generating ballots.
5. Note that you may come across a warning, see Figure 5-3, that lists potential errors that could occur once ballots are generated. Click Close.

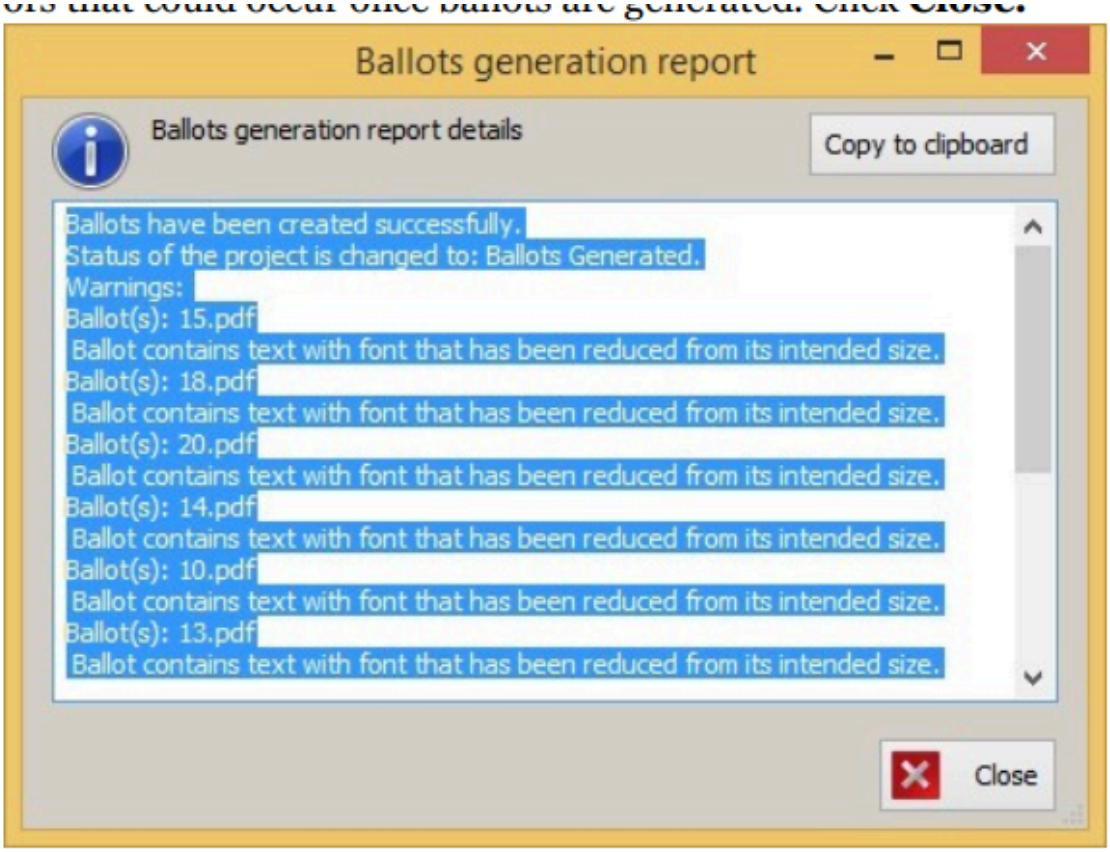


Figure 5-3: Warnings of possible errors during creation Screen

6. Once ballot content has been generated successfully, without any warnings, you will receive a confirmation dialog, see Figure 5-4. Click Close to continue. Your Election Project will now enter the Ballots Generated stage.

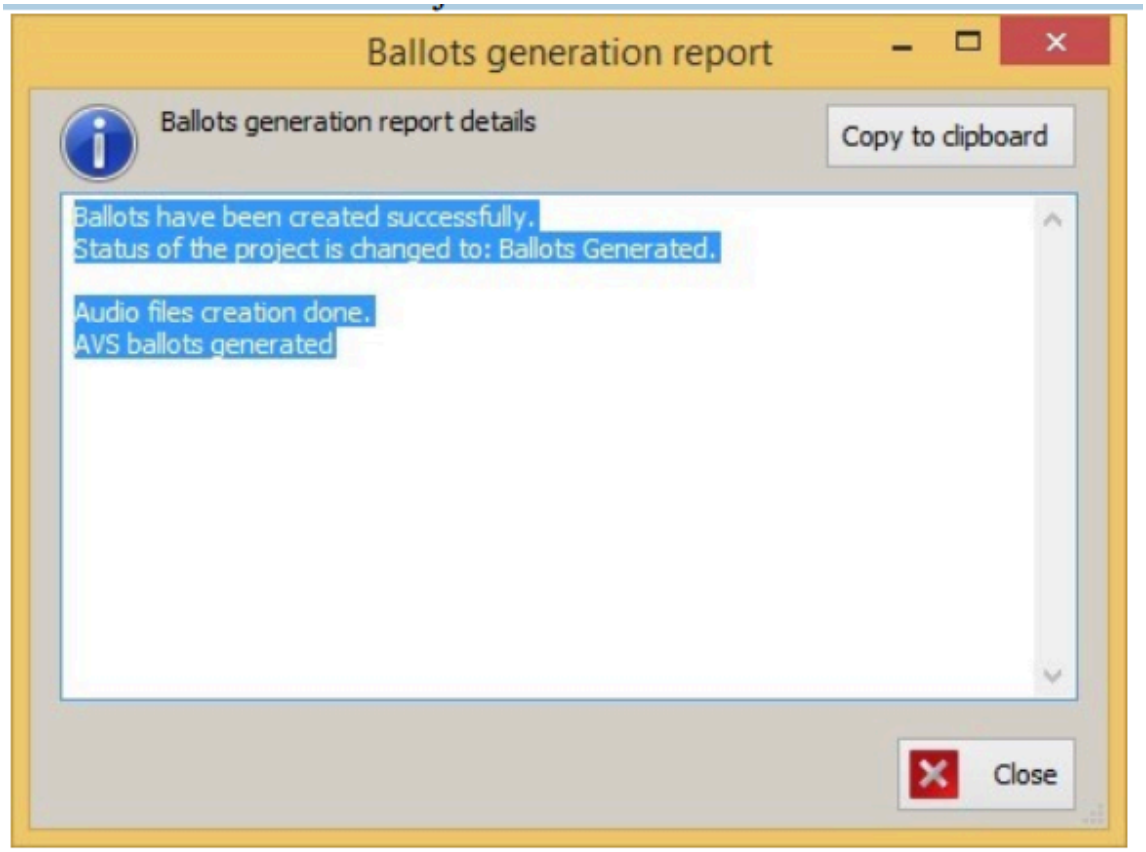
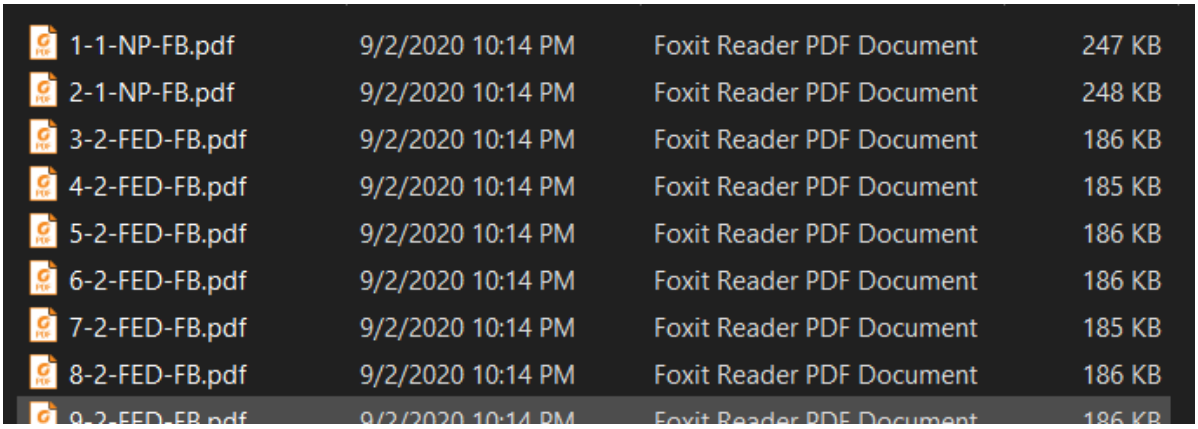


Figure 5-4: Information Screen

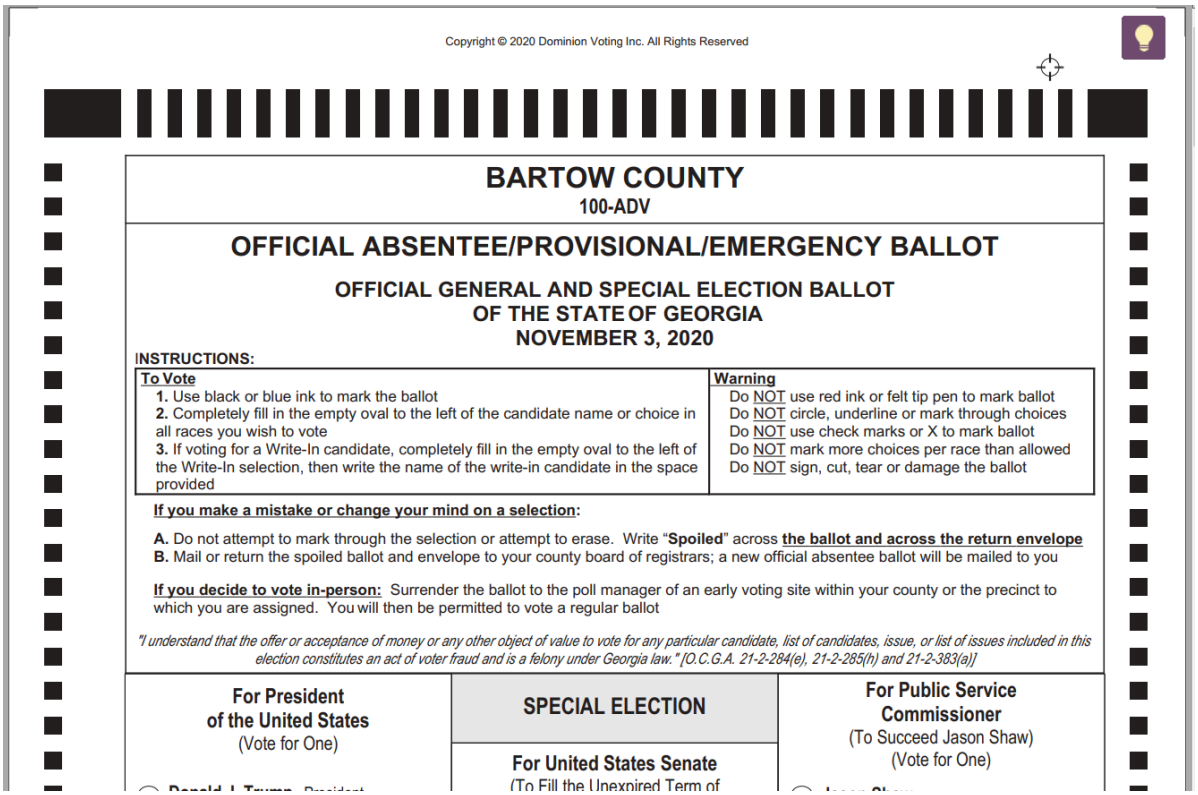
What the ballot style masters look like

Here is a typical list of the first few files generated.



Each of these PDF files is "searchable." You can tell because you can select text in it. It is not just a picture of the ballot.

Here is part of a PDF page generated by the Dominion Voting System for Bartow County.



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BARTOW COUNTY
100-ADV

OFFICIAL ABSENTEE/PROVISIONAL/EMERGENCY BALLOT

OFFICIAL GENERAL AND SPECIAL ELECTION BALLOT
OF THE STATE OF GEORGIA
NOVEMBER 3, 2020

INSTRUCTIONS:

To Vote	Warning
1. Use black or blue ink to mark the ballot **2.** Completely fill in the empty oval to the left of the candidate name or choice in all races you wish to vote **3.** If voting for a Write-In candidate, completely fill in the empty oval to the left of the Write-In selection, then write the name of the write-in candidate in the space provided	Do NOT use red ink or felt tip pen to mark ballot Do NOT circle, underline or mark through choices Do NOT use check marks or X to mark ballot Do NOT mark more choices per race than allowed Do NOT sign, cut, tear or damage the ballot

If you make a mistake or change your mind on a selection:

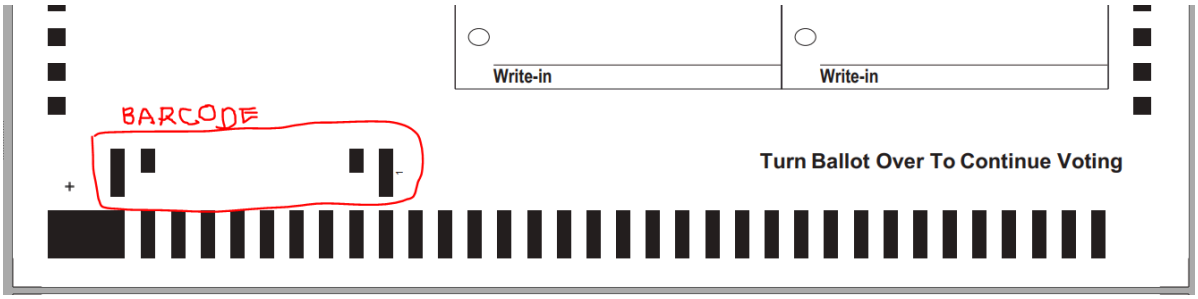
A. Do not attempt to mark through the selection or attempt to erase. Write "**Spoiled**" across **the ballot and across the return envelope**
B. Mail or return the spoiled ballot and envelope to your county board of registrars; a new official absentee ballot will be mailed to you

If you decide to vote in-person: Surrender the ballot to the poll manager of an early voting site within your county or the precinct to which you are assigned. You will then be permitted to vote a regular ballot

"I understand that the offer or acceptance of money or any other object of value to vote for any particular candidate, list of candidates, issue, or list of issues included in this election constitutes an act of voter fraud and is a felony under Georgia law." [O.C.G.A. 21-2-284(e), 21-2-285(h) and 21-2-383(a)]

For President of the United States (Vote for One)	SPECIAL ELECTION	For Public Service Commissioner (To Succeed Jason Shaw) (Vote for One)
	For United States Senate (To Fill the Unexpired Term of	

Note the timing marks around the edge. Most important, there is a barcode at the bottom.



Exporting EDM data

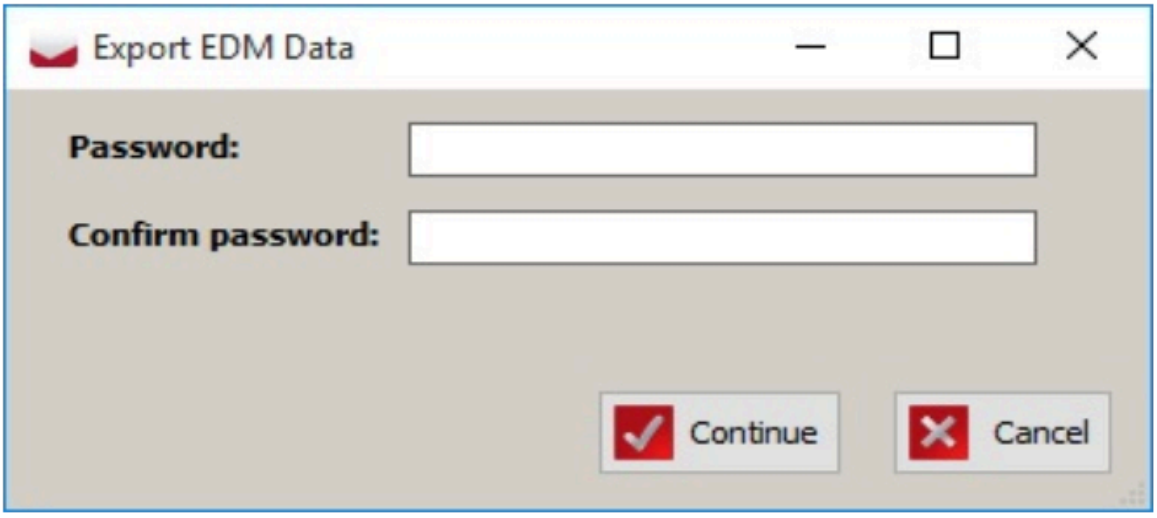


Figure 6-19: Export EDM Data screen

1. The system will ask for confirmation whether to continue creation of the EDM package, see Figure 6-20. If the user confirms, the system will start producing the EDM package.
2. Once finished, the EED will inform the user that the EDM package was exported successfully, see Figure 6-21.

Packaging and sending the data

Put all the ballot style masters in a folder, and zip it in the usual ZIP format. We recommend the free tool from 7-zip.org. Please use the .zip format, not the .7z format.

AuditEngine has an uploading utility that lets you "set up and forget" the upload of any number of files, of any size. It is the least expensive and fastest way to get the data to us, and the least trouble for you.

We can send you an upload link, so the data goes into the right folder. If the link is not in your cover letter, just ask our support staff for it.

For detailed instructions, see Sending Election Data to AuditEngine.

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1. Dominion EMS RTR User Guide, page 131 of the PDF file, page 119 of the document. This is an older manual, but the newer software interface should be similar. ↩