



INDICIUM Voter Signature Verification Scan System – 6/17/2024

Installation and Product Manual – 6/17/2024

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Vote-by-Mail Scan

A system to process incoming vote-by-mail ballots and perform automatic signature verification.

Installation

Install the scanner software and Twain drivers software.

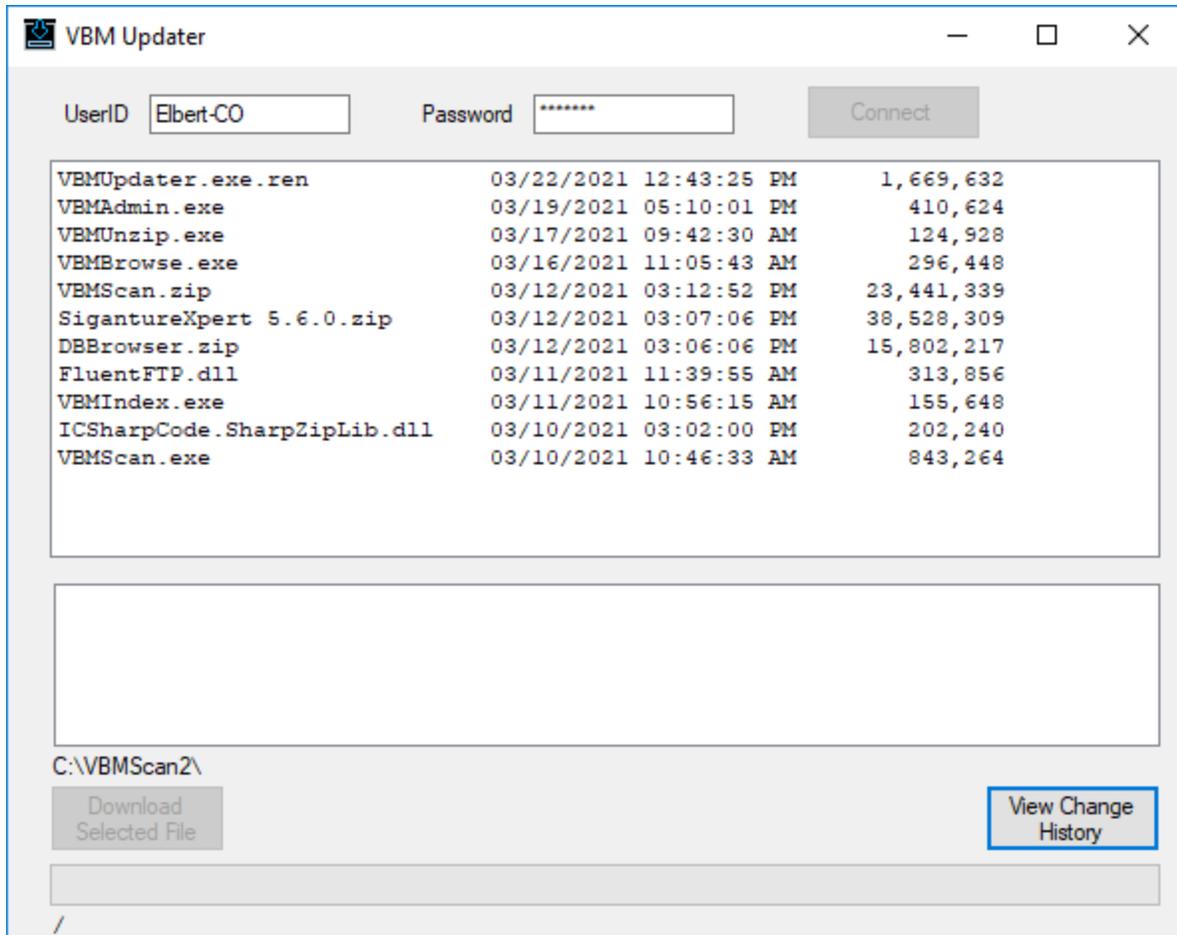
Download Programs

VBUpdater

Download the VBUpdater and FluentFTP.dll from the following link. The password is 2020.

Download both files into the VBMScan folder where the VBMScan programs will be held. Rename VBUpdater.exe.ren to VBUpdater.exe and double click it to run the program.

Enter the username and password provided to you and click 'Connect'.



This VBMScan.zip file has all the files required by the system. Unzip the VBMScan.zip files into the same folder, the VBMScan folder.

For first time installation, rename the VBMScan.ini.hld to VBMScan.ini.

After unzipping the VBMScan.zip file, download the latest version of the VBMScan.exe file as it will be newer than the one in the zip file.

This application is also used to download newer versions of any of the programs. The button on bottom right, 'View Change History' opens the change history document in a web browser.

Testing and Dependencies

Double click the VBMScan.exe application to run the program and verify that it works. If it runs and comes to the main scan screen, then all is good. Move on to the installation of SigXpert.

Problems

If it fails to run, it may be missing the Visual Studio runtime file. Download and run VC_redist.x86.exe using the VBUpdater and try again to run VBMScan.

The Visual C++ runtime may also need to be installed. Download the vcredist_x86.exe to the download folder and run it.

The way to tell which dependency files are missing is to first open the Windows Settings and go to Apps. Look for Microsoft Visual C++ 2015-2019 Redistributable. If this is missing then vcredist_x86.exe is needed.

There is no way to check for the Visual C Runtime, so check the Event Viewer (search for event viewer in the Windows search bar) and click on the Windows Logs and Application. Look for a red error entry. If it indicates a FileNotFoundException for SQLite, then the vcredist_x86.exe is missing. Download and install it. If FileNotFoundException for Atalasoft then VC_redist.x86.exe. Download and install.

Another possibility is that the forms folder path in the ini file points to a non-existent folder. This can also cause the program to abend without message.

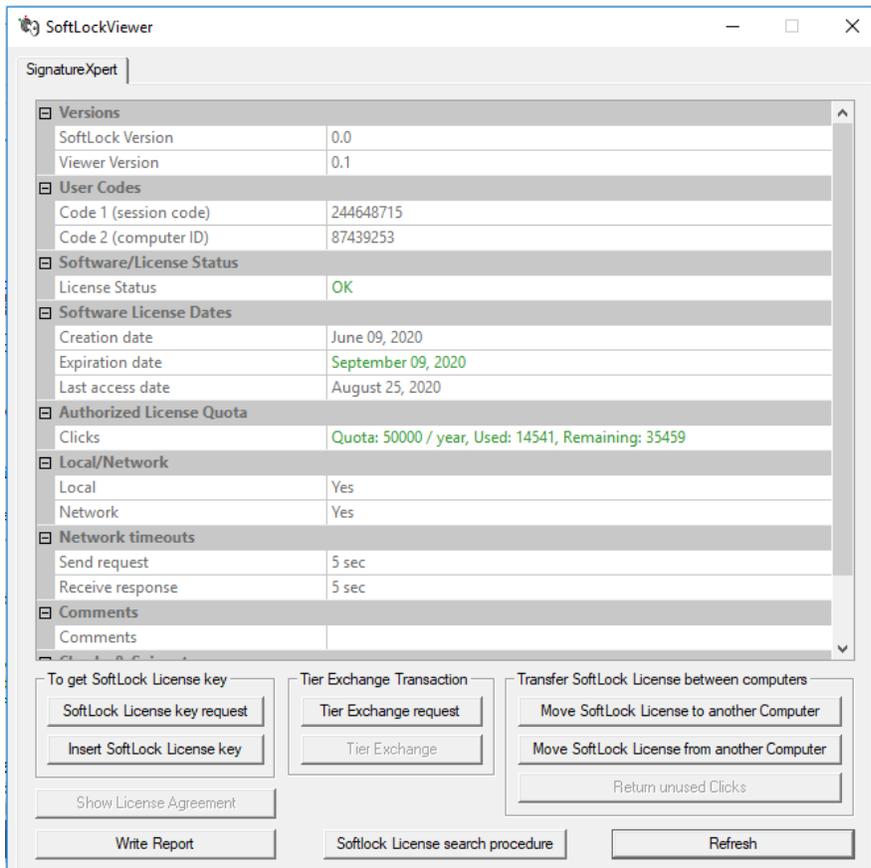
Install SignatureXpert and Softlock Viewer

Next, download the SignatureXpert zip file and unzip its contents into a temp folder.

Run the installation program for the latest version of SignatureXpert.

Select the option to install SignatureXpert.

Note: When upgrading to SigX.AI, be sure to download the SignatureXpert.AI.dll and place it into the exe folder. (Where VBMScan.exe is located)



Under Parascript in the Windows Start Menu, Click SoftLockView and Click the button to 'Make Request for Softkey'. Click 'Save Codes To File'.

If you get an error running SoftLock Viewer, run it as Administrator. To do this, right click the SoftLock Viewer in the Start menu and select 'Run as Administrator'. You will need administrator rights to do this.

Save the file with a .slc extension and send it to your Partner. They will obtain a license file and send it back to you. When you get the license file, use Softlock Viewer to load it. Click 'Insert SoftLock License Key' and follow the prompts.

Double click VBMScan.exe to start. When VBMScan starts, select the Admin tab and the 1st item in the list box should indicate the status and number of clicks remaining.

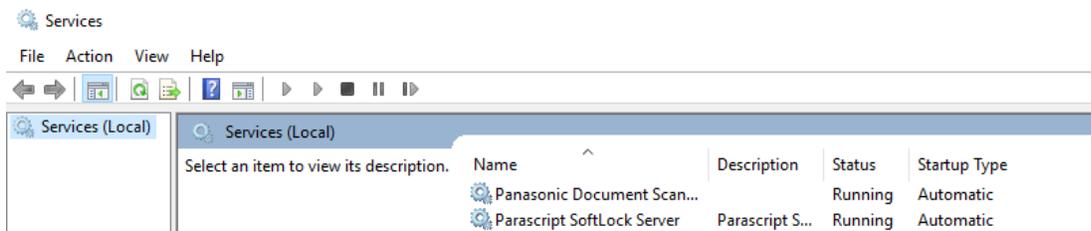
Multiple Scan Stations - Sharing the Softlock License

The system can use a shared Parascript SigExpert license so that multiple scanning stations can share the total licensed verifications. The license is installed on the first station along with SoftLockServer which allows the second station to share the license.

We will assume you have two stations, which we will call Scan1 and Scan2, and Scan1 has the license installed.

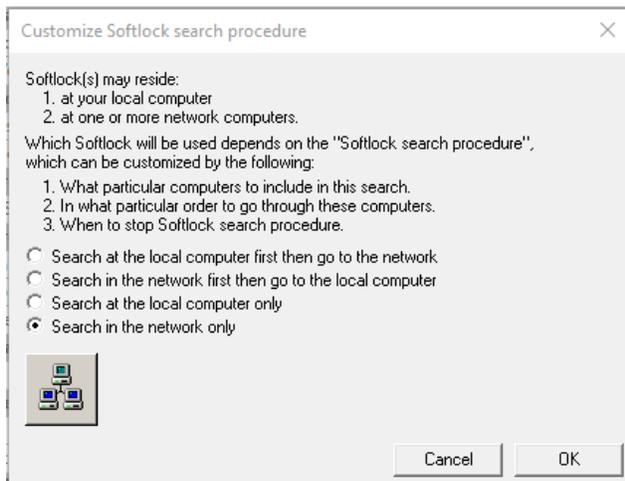
On Scan1, run the Parascript installation program and select **SignatureXpert, Softlock Viewer and Softlock Server** to install or update. This will install the Softlock Server, which you should be able to see in the services list.

To check, type 'Services' into the search bar and run the Services App. Parascript Softlock Server should show as running. If not then, run the SigXpert installation again and install just the Softlock Server.

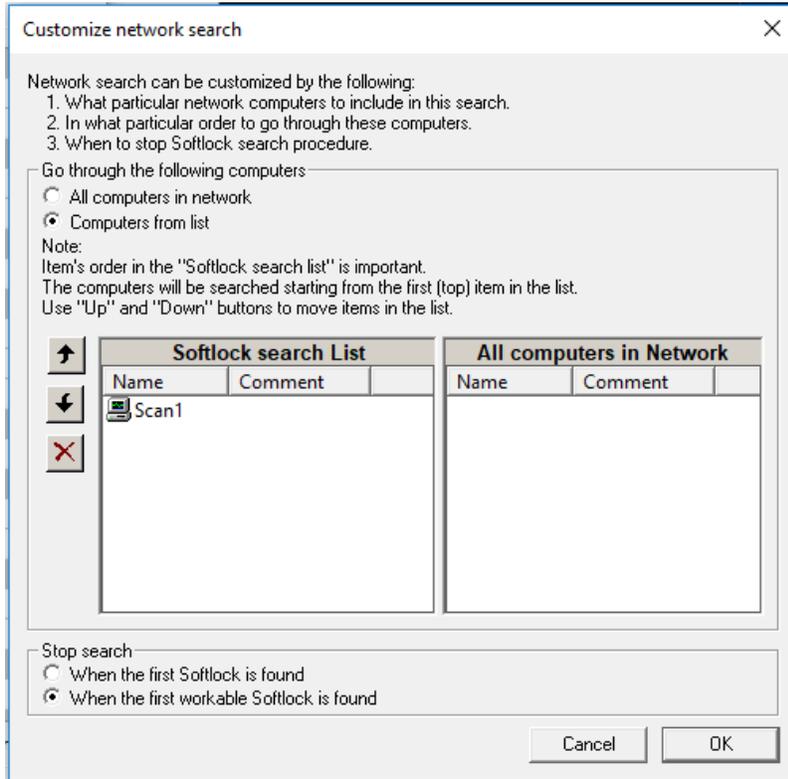


Verify in SoftLockViewer4 that Local and Network both have 'Yes' next to them.

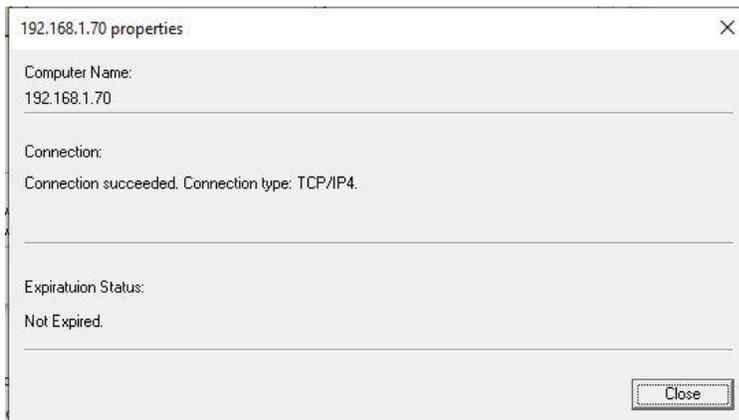
On Scan2, run (as Administrator) Softlock Viewer. Click the 'Softlock License Search Procedure' button on the bottom of the form.



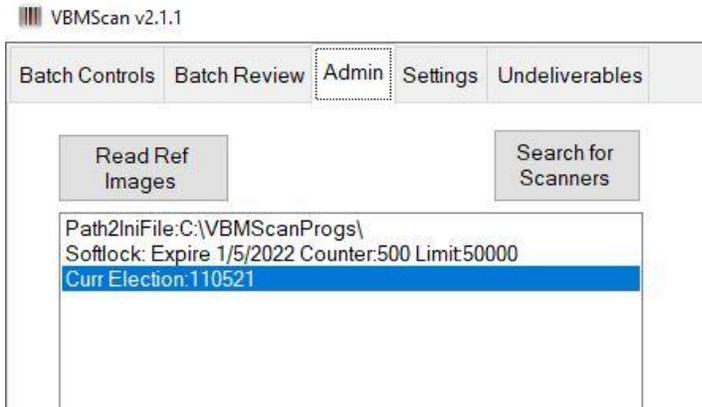
Then, select 'Search in the network only', and click the Icon with 3 computers. This will open the Customize network search window.



Select the option for 'Computers from List' and right-click in the Softlock search List list box and select 'Add New'. Type in the name or the IP address of the station with the Softlock license, 'Scan1' and press enter. Right click the computer name just added and select Properties to test.



Click OK. To test, run VBMScan as with the first station and check to see if it found a valid Softlock license under the Admin tab.



Note that on the second computer, SoftLockViewer4 will not show the status or counts of the license. The screens above are the only indication that it is working.

If not connecting, try turning off the window firewall. The ports used are port 135 for DCOM protocol and port 5420 for TCP/IP protocol.

How to check if a port is available: <https://phoenixnap.com/kb/ping-specific-port>

On the client machine, in the search bar, type in Powershell and press Enter. Paste in the following (change the 127.0.0.1 to the IP address of the host machine).

```
Test-NetConnection 127.0.0.1 -p 5420
```

It should indicate TcpTextSucceeded : True

Scanners

The scanners currently working with this application are the Kodak i4650 or i4250 with imprinter. The system connects via Twain drivers.

The interface is via Twain driver.

A configuration file, VBMScan.ini, is created in the same folder as the VBMScan.exe.

When using the Kodak scanner, an option in the ini file, the scanner type option must be set. This is in the config section.

```
[Config]
```

```
ScannerType=KODAK
```

To start the system, double click the VBMScan.exe file.

Kodak Scanner (i4x50)

The Kodak scanner pauses at the end of the batch to allow more documents to be added to the current batch. Press the Stop button to finish the batch.

The system defaults to disabling the Double Feed Detect (also called INTELLIGENT DOCUMENT PROTECTION) for the Kodak scanner. If, for some reason, it is desired to allow this feature to be enabled, then the following must be added to the config section of the ini file:

```
DOUBLEFEEDALLOW=Y
```

Because of the thickness of the ballot envelopes, it is useful to open the back of the scanner to utilize the straight through paper path. This is done by pressing the button on the back next to the paper exit path to enable this feature.

Feeding the envelopes short edge first may help to reduce jamming.

Sometimes jams are seen where the document is rejected even before it goes very far into the scanner. Removing the pre-separation pad can help with this. In the manual find the selection in Maintenance for 'Replacing the pre-separation pad' and remove it.

Opening the Gap Release can also help. This is the button on the lower left front corner of the scanner. Push in to set the Gap Release. On the 3000 series, the gap release is a rotating dial on the lower left side near the front. Turn it vertically to open the gap more.

The speed of the scanner can be slowed down on the scanner panel by selecting Applications Overrides from the Settings screen. Select Speed then Feed Adjustment and select -4.

For the 4000 series:

Kodak Manual : [A61995 i4x50 User Guide_en_Edit 3.pdf \(alarisworld.com\)](#)

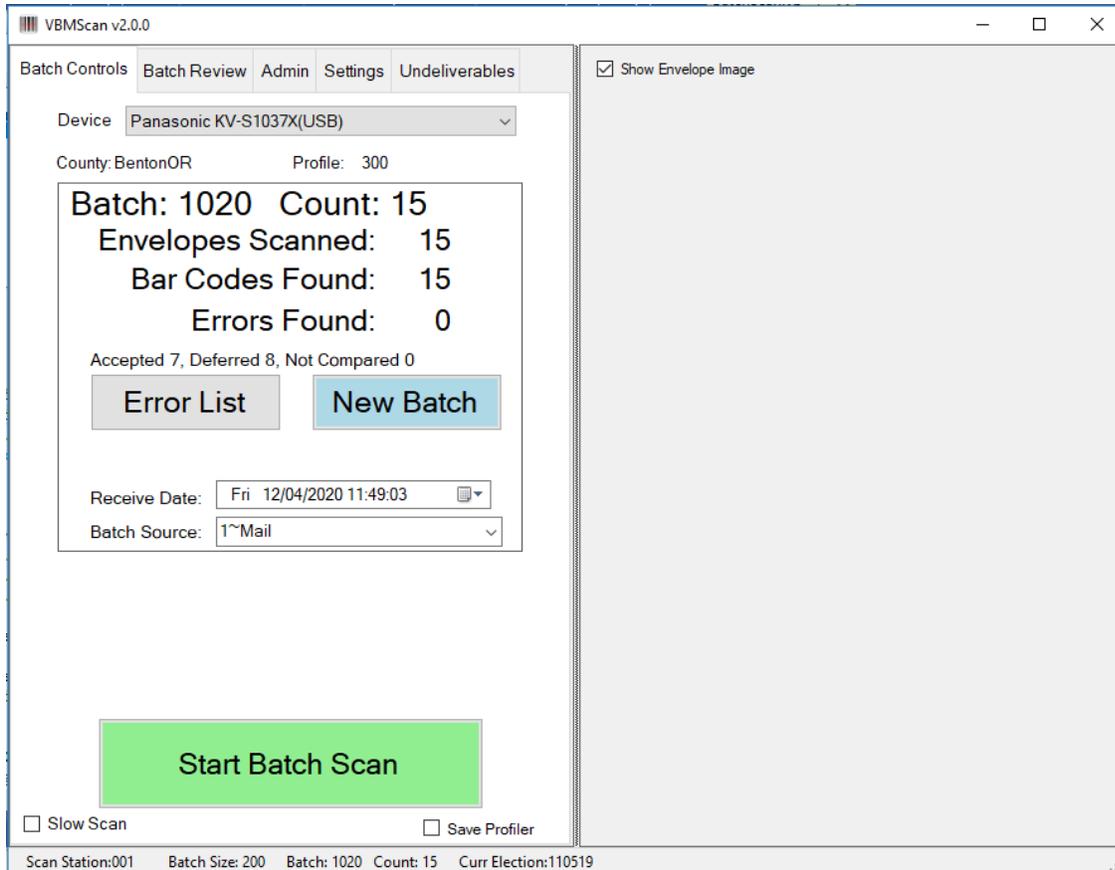
Kodak Software/Drivers : [i4650 Scanner support, drivers and manuals | Kodak Alaris \(alarisworld.com\)](#)

For the 3000 series,

Manual: support.alarisworld.com/-/media/static-picturepark-assets/impblicwebsite/manuals/s2085f-s3000-series/users-guides/145459kodak-s2000fs3000-series-scanners-users-guide.pdf

Kodak Software/Drivers : <https://support.alarisworld.com/en-us/s3140-max-scanner#Software>

The ink cartridge is the same for the Panasonic and the Kodak, HP-C6602A.



Multiple Scanning Stations

Overview

VBMScan can run on multiple scanners. Each scanner will run on a separate workstation, but will need to be configured so that they do not interfere with each other.

To work with multiple scanners, you will need to create folders to hold a copy of VBMScan.exe for each scanner and make some minor changes to the VBMScan.ini file in each.

So that the two or more stations do not interfere with each other, they each will need their own 'test' folder but will share all other folders. The current batch number and sequence is stored in the local VBMScan.ini file for each station.

Setting up the second station

The main copy of VBMScan.ini must be in a location that all stations can access, normally a network folder. The other shared folders, Output, Logs, Forms, Processed and ReflImages must also be in a location that can be accessed by all.

Create a folder on the machine that is attached to the second scanner (or on a network folder) and copy in everything from the first scan station folder. Then open the VBMScan.ini file for the second station and delete everything in it and add the following lines. The Path2IniFile parameter should be a pointer to the location of the first scan station VBMScan.ini. In this case I have used M:\VBMScan\.

[Config]

Path2IniFile=M:\VBMScan\

Next, run VBMScan on the second scanning station, select Election Setup from the Admin tab and change the Test Files folder to a new folder for the second scanning station. Click Save Settings. This folder can be located on the workstation attached to the scanner or a network folder. It does not need to be accessible to any other station.

Finally, click the 'New Batch' button on the Batch Controls tab. The system will look at the log files in the shared Logs folder to determine the next batch number.

Election Setup

Under the Admin tab, click the 'Election Setup' button. The Elections Settings form will open.

Setting Data Folders

The system allows for setting the data folders individually or setting them all from a base path. When this option is selected, all the folders will be created as subfolders under the base folder\election_id. This makes it easy to switch to a new election. Note that after the base folder is selected and the election entered, you can switch to 'Define Individual Paths' and change one or more of the paths.

This is useful for interfaces like VR where the election ids are not specific to an election, but rotate through a series. In this case, enter the election date like '20201103' or 'G20' for the election id and select the 'Use Base Path + Election' option. Click the Base Path Change Dir button and browse to the base path and select it. This will set all of the other paths. Then

select the 'Define Individual Paths' option and when you Save Settings, the folders will be created,

For each of the system folders, click the 'Change Dir' button and create or locate the folder to be used for each.

The SigXpert Data Folder is a special case. For SignatureXpert to work properly, it must have the location of its data folder. This is usually C:\Program Files (x86)\Parascript\SignatureXpert5.6.0\Data for SigXpert and C:\Program Files (x86)\Parascript\SignatureXpert.AI\data for SigXpert.AI.

Other Settings

If using the Signature comparison, the Threshold Minimum confidence level is set here for accepting signatures. A minimum threshold can be defined as well as a combination of Threshold and Partial. It is useful to update these settings after getting a feel for the scores that are produced by the system. The scores generated can vary widely depending upon the quality of the reference images and the ballot signatures. For both, the ideal would be a signature with no text or underline.

Note that Partial only applies to SigXpert and not to SigXpert.AI. The valid ranges are 0 to 100, and with SigXpert.AI, the 375-426 range may, optionally, be used. This is useful as people sometimes compare the 0 to 100 range to percentages and the setting required to accept a useful number of signatures as valid may seem very low. Getting away from the 0 to 100 range helps with this perception.

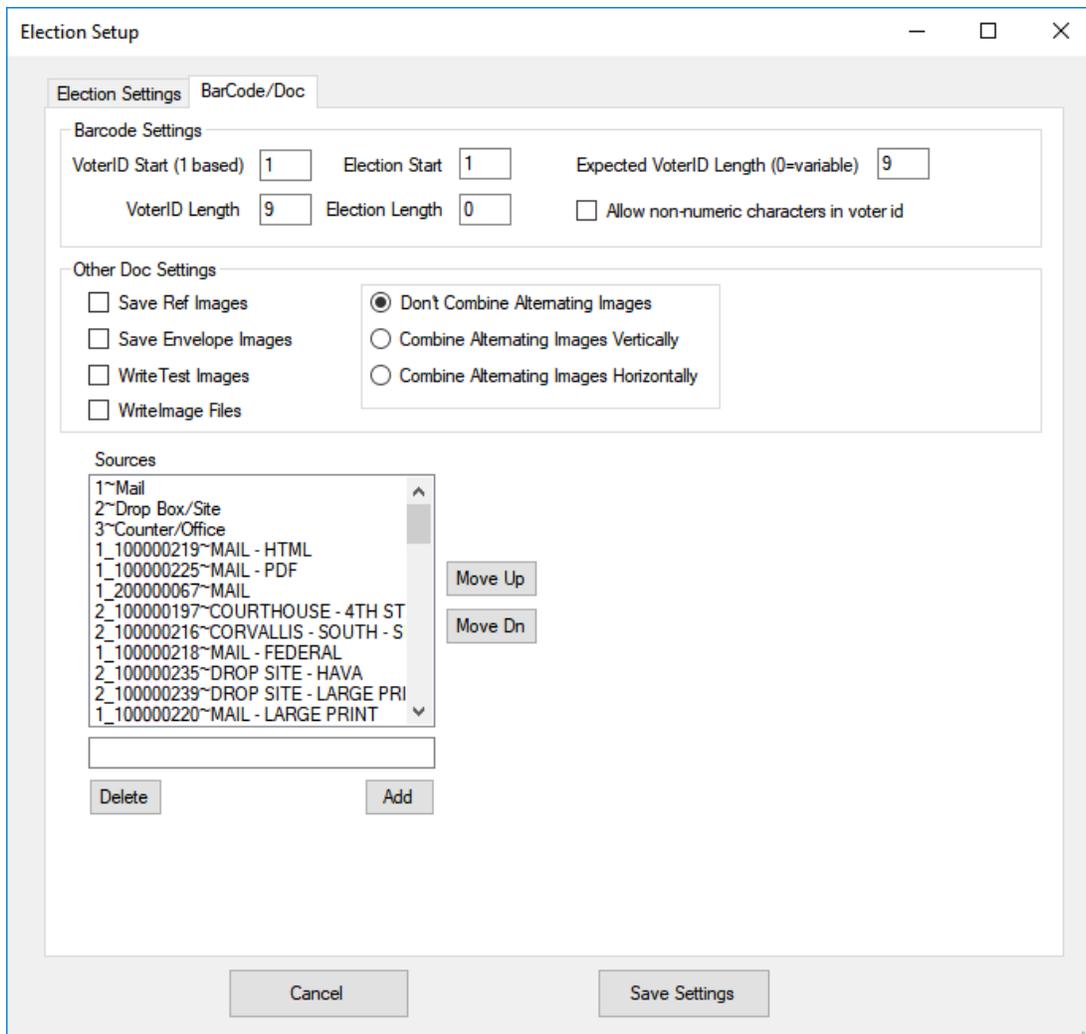
The **batch size** sets the number of ballot envelopes for the scanner to process before stopping. A value of -1 allows unlimited batch size.

The checkbox '**Set Status on SigX Pass**' causes the ballot image files that pass Sigx verification to be bypassed in VBMBrowse in the verification process so your users do not have to look at signatures that are verified by the system.

This form also provides for resetting the **Batch Number**. Check the 'Reset Batches' box and enter the new Batch number and click 'Save Settings'.

Barcode, Image and Source Settings

Click the Barcode/Doc tab.



This tab has additional settings to allow you to define the barcode on the ballot envelopes. In some counties, the barcode contains voter id or ballot id and election information. Enter the starting position in the barcode for the Id and for the Election code and the length of each. If you do not have election information in the barcode, enter zero for Election Length.

If the barcode will contain alpha characters in addition to numeric, check the box to 'Allow non-numeric'.

Enter the length of the barcode in the Expected VoterID Length. If the length varies, enter zero.

Save Ref Images is used in some interfaces so that when a ref image is acquired by the interface during scanning, that it will remain available for the VBMBrowse process. This will be noted, if needed, in the interface doc at the end of the manual.

If the WriteTestImages is checked, then images of the full page, reference sig and scanned sig will be written to the TestFilesDir.

The 'Write Image Files' checkbox enables the saving of individual image files for interfaces (such as VR) which do not already save them.

The combine alternating imaging settings is used when the barcode and signature are on separate documents that will be interleaved for scanning. These settings allow combing the two images into a single image either horizontally or vertically.

The 'Sources' listbox allows editing the list of sources that show in the dropdown box in VBMScan for source of ballots. Note: for Colorado, enter the source and location separated by '~'.

Scanner Manual : [A61995 i4x50 User Guide_en_Edit 3.pdf \(alarisworld.com\)](#)

Capture Areas and Image Settings

Click the settings tab at the top.

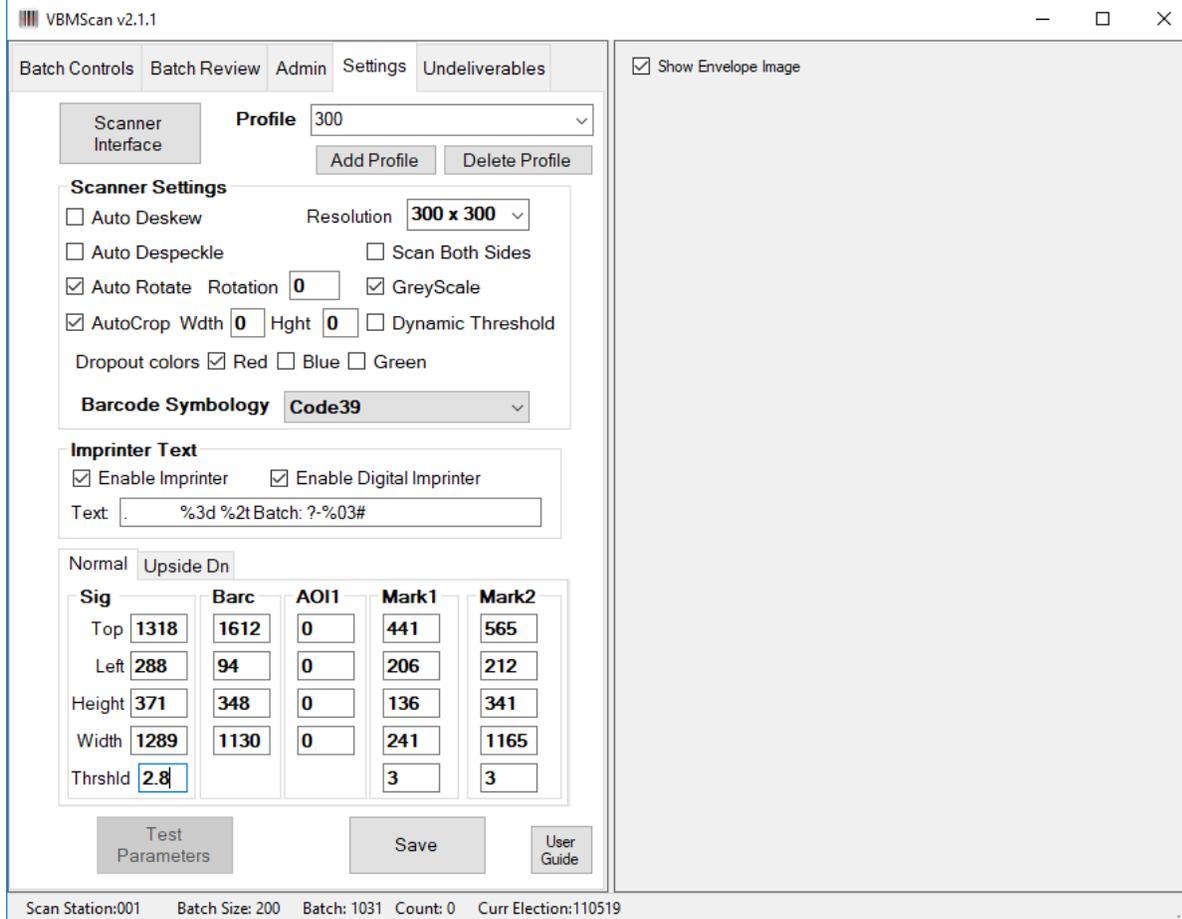


Image Settings

Auto Deskew attempts straighten the image (works with B&W images)

Auto Despeckle removes extra dots, etc from the image (B&W) images

Auto Rotate - the scanner attempts to automatically orient the image correctly by reading some of the text

Dropout colors sets the colors to drop out from the scan

Scan Both Sides enables duplex scanning

Greyscale sets the scanner to scan greyscale if checked and B&W if unchecked. B&W images tend to be smaller and sometimes produce better barcode reading.

Dynamic Threshold is useful for cleanup of images with color backgrounds. The 'Dynamic Threshold' setting affects how the conversion to greyscale is done. Sometimes disabling this enhances the ability to read barcodes.

Imprinter Settings

For the Panasonic scanners, we normally use the string :

```
%3d %2t Batch: ?-%03#
```

This prints the date, time the word 'Batch'. followed by the batch number and the sequence.

The question mark is replaced by the batch number at runtime.

The batch source from the first tab can be included in the imprint by putting SRC in the imprinter string.

If you want to modify the imprinter string, this is the info from Panasonic help system:

Upper- and lower-case letters, numbers and symbols can be printed.

Information such as the date, time, and sheet counter can also be printed.

Example:

Counter printing (#)

```
%0# 0000001
```

```
# SSSSSS1 (S = space)
```

```
%3# SS1
```

```
%05# 00001
```

Date printing (%Xd / %XD)

```
%1d YY/MM/DD
```

```
%2d YYYY/MM/DD
```

```
%3d MM/DD/YY
```

```
%4d DD month abbreviation, YYYY
```

Example: %4d -> 21 Dec., 1997

```
%1D YYMMDD
```

```
%2D YYYYMMDD
```

%3D MMDDYY

Time printing (%Xt)

%1t HH:MM

%2t HH:MM:SS

For the Kodak scanner, we normally use the string :

Y T 1S 2

The template is created from these parameters:

N adds a newline

T is the <stamptime> based on <stampexttimeformat>

Y is the <stampdate> based on <stampextdatedelimiter> and <stampextdateformat>

Z indicates the end of write sequence. This should fill out the string.

1 is <stampextmessage1> which is set to 'B' + batchnum + '-'

S is the sequence number

2 is <stampextmessage2> which is set to the source selected above the BatchScan button

3 is <stampextmessage3>

4 is <stampextmessage4>

5 is <stampextmessage5>

6 is <stampextmessage6>

a 'blank space' adds a blank space

We set, in the program code, the stampextmessage1 'B: xxx-' where xxx is replaced by the batch number and stampextmessage2 is the batch source.

Capture Areas

This is where the areas on the form for capturing the bar code and signature are defined. To set these up and test, click on the 'Batch Controls' tab at the top. Click the checkbox near the top of the right panel 'Show Envelope Image'. Put a ballot in the scanner and click the 'Start Batch Scan' button. The ballot will be scanned and the image will appear on the form.

VBMScan v1.0.3

Batch Controls | Batch Review | Admin | Settings | Undeliverables

Scanner Interface Resolution: 300 x 300
Config Name: -Not named-

Scanner Settings

Auto Deskew Scan Both Sides
 Auto Despeckle
 Auto Rotate Rotation: 0
 Double Feed Detection (Must be unchecked)
Dropout colors Red Blue Green

Barcode Symbology: Code39

Imprinter Text

Enable Imprinter Enable Digital Imprinter
Text: %3d %2t Batch: 7-%03#

Normal	Upside Dn			
Sig	Barc	A011	Mark1	Mark2
Top: 2095	1876	0	0	0
Left: 279	163	0	0	0
Height: 140	146	0	0	0
Width: 582	928	0	0	0
Threshold:		0	0	0

Test Parameters | Save

Scan Station:001 | Batch Size: Unlimited | Batch: 1013 | Count: 3 | 110519R07000050 | Valid Barcode 0 SigVerifyCode:2 | Oracle Connected

Adjust the Top, Left, Height and Width values for Sig Capture Area and Barcode Scan Area until the boxes surround the area to be captured. You can either enter the number directly or draw the capture box on the screen with the mouse.

Note: If working with live ballot envelopes, you may want to disable imprinting during the testing. Uncheck the Enable Imprinter check box on the Settings tab

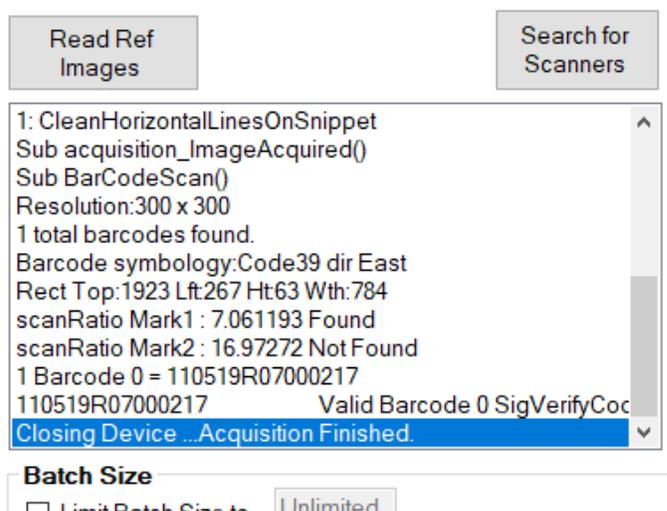
To draw the capture box with the mouse,

- click in the Top box for any of the areas. To draw the sig capture box, for example, click in the Top box for Sig.
- click and hold the left mouse button at the position of the top left area to be captured
- hold the mouse button down and drag to the bottom right

- release the mouse button and the coordinates in the boxes will be updated. (The new box will not be drawn on the screen)
- click the Test Parameters button and the new capture box will be drawn

Be sure to leave a margin to allow for scanning variation. After making a change, click 'Test Parameters' to make the application re-draw the boxes. When the boxes look correct, click 'Save' to update the INI file.

After clicking the 'Text Parameters' button, click the Admin tab and in the list box in them middle will be the status of the scan. This shows the information gathered during processing.



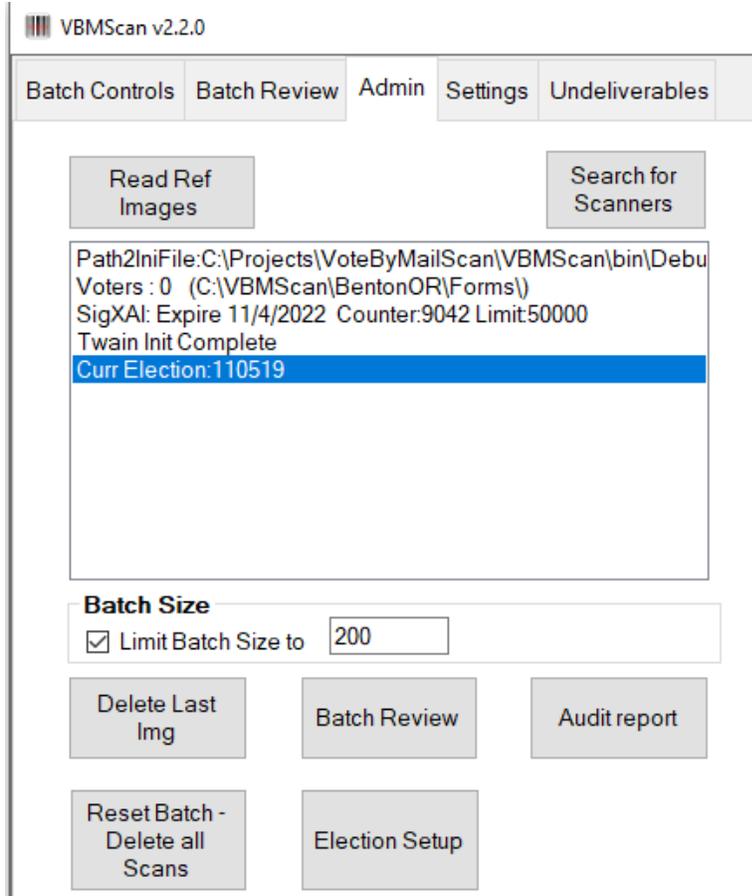
In this case, a barcode was found and the symbology was Code39. If you are unsure of the type of barcode, select All for type and click the test button. It will show the type here if one is found. The direction is shown as East which means it runs left to right. This also shows a precise bounding rectangle for the barcode.

If either of Mark1 or Mark2 areas were defined, it will show the black to white ratio for these areas. This is useful for setting the threshold for determining if a mark exists in these areas.

Finally, the value of the barcode is shown and whether it was found to be valid based on the setup length of the voterid and if the election code is valid if required.

Note that coordinates may be entered for 'Upside Dn' which is when a form goes through the scanner inverted.

Note that a scan will be entered in the batch each time the Test Parameters is clicked, so you will probably want to clear out these test scans from the batch. Click the Admin tab at the top and then click the Reset Batch - Delete all Scans button.



Thresholds

The threshold values are used to set minimum bit ratios for each of the capture areas. For the signature, if a non-zero value is set for Threshold and the bitdensity of the signature area is below the value, then the ballot will be marked as missing signature.

Operation

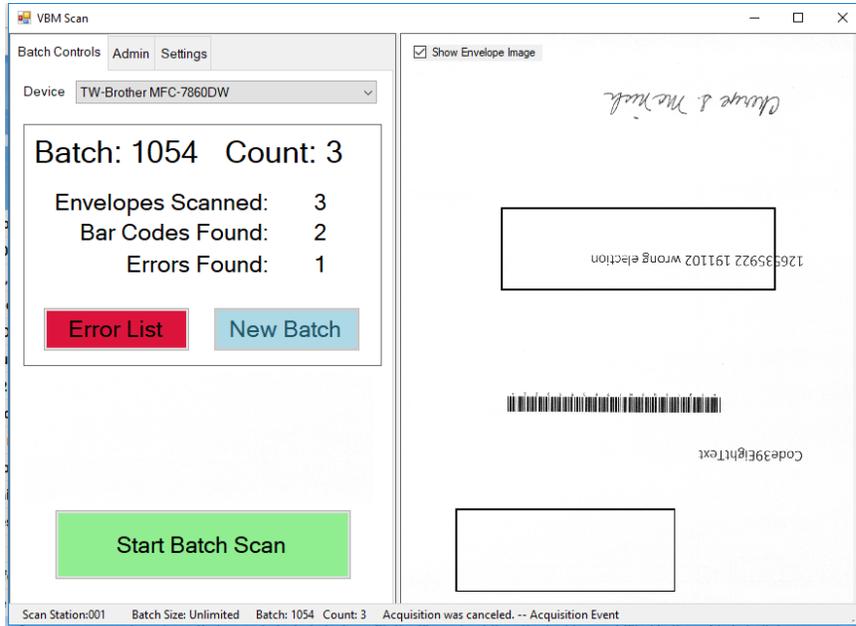
Scanning

Be sure the correct scanner is selected from the drop-down list.

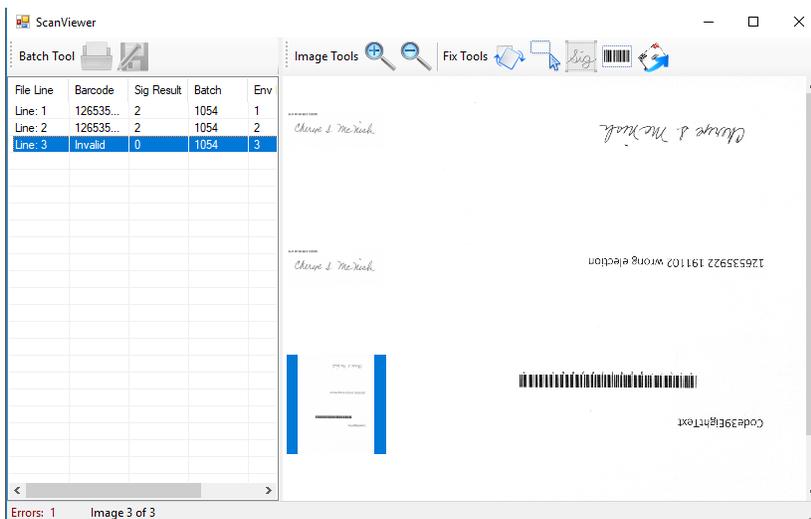
Load the ballots in the scanner and click the 'Start Batch Scan' button. When all the ballots have been scanned, it will show a count of the envelopes scanned and the barcodes scanned. If any of the barcodes were not able to be read, the 'Error List' button will be enabled and lit in red.

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For testing the configuration, a log file is created in the TestFilesDir, called Log_001.txt. If the WriteTestImages=Y is set, then images of the full page, reference sig and scanned sig will be written to the TestFilesDir.



In this case a ballot was scanned upside down. Click the 'Error List' button to open the scan viewer.

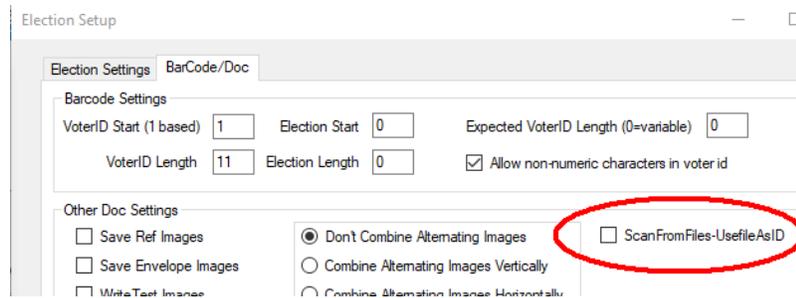


The problem ballot shows as Invalid in the list. Click on it to view the ballot. You can at this point click the 'Pull Icon' which is the envelope with an arrow at the top right. This will indicate that the ballot should be pulled on the pull report. By pulling the ballot you can manually process it.

Scanning From Image Files

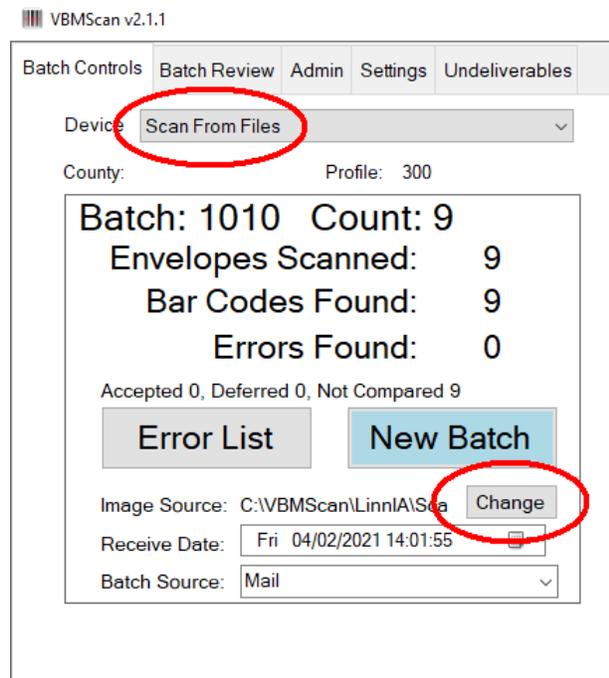
Sometimes it is desirable to scan the images separately. This can be due to some special need such as removing colors, etc.

The system can use the image files in the same manner as the envelopes or it can be set to use the image file name as the ballot/voter id. The option to use the file name as the ballot/voter id is on the second page of the Election Setup form.



Put all of the images to scan into a folder, select 'Scan from Files' from the dropdown list of scanners.

Click the 'Change' button to the right of the 'Image Source' label and browse to the folder holding the image files.



Click the 'Start Batch Scan' button to begin scanning. The images in the source folder are not altered.

Scanning Reference Signatures

In some counties, reference signatures are scanned from Vote by Mail applications and then the VBM ballot envelope signatures are compared to these reference signatures.

The system provides for scanning the applications to collect signatures by setting the interface to 'CaptureRefSigs'. When in this mode, the signatures scanned are added to new folders (named by finding the highest number subfolder under RefSigs folder and then adding 1 to it).

In this mode, the output and log and process files and folders are not updated.

Also, a feature has been added to make switching back and forth between interfaces by showing only the interfaces that are being used. This is done by adding the following line to the VBMScan.ini file in the [Config] section:

```
InterfaceTypeList=NJ,CaptureRefSigs
```

Correction Tools

The Barcode Tool attempts to find a barcode on the page. Clicking this tool attempts to find a barcode anywhere on the page. If there is more than one barcode on the page, you can first use the selection tool to draw a box around the barcode and click the barcode tool again. When there has been a selection, the tool first tries to find a code within the selection and then, if a barcode was not found, looks at the entire page.

If the barcode cannot be read, the system will prompt you to enter the barcode. If you choose to enter the barcode, you should then crop and select the signature.

The selection tool, which is just to the left of the 'Sig' icon, can also be used to select the signature. After drawing a box around the signature, click the sig tool to capture it. You can then rotate the signature clip if necessary.

You would do both if the ballot was upside down when it went through the scanner.

When all the problems are fixed or pulled click the Save icon at the top and close the viewer. A Pull report will be generated and presented to the user. This is a list of ballots that should be pulled either for manually processing or because they are for the wrong election.

Once all the errors are corrected, you can click the New Batch button. This will increment the batch number, set the count to zero and generate the report of the ballots in the batch like this:

Batch: 1054

BallotPosition | FVRS ID

- 1 | 126535737
- 2 | 126535737
- 3 | Invalid-Pulled

Record Count: 3

Batch Review

VBMScan v2.1.1

Batch Controls Batch Review Admin Settings Undeliverables

Batch	Batch Status	Audit File	Audit Status	B
Batch_1005	Open			C:
Batch_1006	Closed			C:
Batch_1007	Closed			C:
Batch_1008	Closed			C:
Batch_1009	Open			C:
Batch_1010	Closed			C:
Batch_1011	Closed			C:
Batch_1012	Closed			C:
Batch_1013	Closed	C:\VBMScan\...	PDF Created	C:
Batch_1014	Open			C:

Signature Review Mark as Processed Print Batch Report Print Batch List Score Stats Rpt

The Batch Review tab lists all of the batches and their status. It also includes several useful functions.

Signature Review

The screenshot shows the ScanViewer application interface. On the left, there is a table listing 18 lines of data. The main area displays a detailed view of the signature verification process, showing the ID, status, signature image, and reference signature for each line.

File Line	Barcode	Sig Result	Batch	Env Po...
Line: 1	00300002	1	1013	1
Line: 2	00300002	1	1013	2
Line: 3	00300003	1	1013	3
Line: 4	00300004	1	1013	4
Line: 5	00300004	1	1013	5
Line: 6	00300006	2	1013	6
Line: 7	00300006	2	1013	7
Line: 8	00300006	2	1013	8
Line: 9	00300006	2	1013	9
Line: 10	00300006	2	1013	10
Line: 11	00300006	2	1013	11
Line: 12	00300006	2	1013	12
Line: 13	00300006	2	1013	13
Line: 14	00310003	0	1013	14
Line: 15	00320003	0	1013	15
Line: 16	00330003	0	1013	16
Line: 17	500063...	2	1013	17
Line: 18	500063...	2	1013	18

ID	Status	Signature Image	Reference Signature
00300002	Verified	Sc:48 Pnt:0 <i>Gau Jaecher</i>	<i>Gau Jaecher</i>
00300002	Verified	Sc:51 Pnt:0 <i>Gau Jaecher</i>	<i>Gau Jaecher</i>
00300003	Verified	Sc:19 Pnt:100 <i>Val ST</i>	<i>Val ST</i>
00300004	Verified	Sc:23 Pnt:68 <i>Rebecca Stonawski</i>	<i>R Stonawski</i>
00300004	Verified	Sc:77 Pnt:0 <i>R Stonawski</i>	<i>R Stonawski</i>

Errors: 0 Image 1 of 18 Sig Verified

The Signature Review function displays the envelope signatures in the batch next to the reference signature for each. The score assigned by Signature Expert is shown printed on each signature image.

When the Signature Review opens, it only shows the signatures that were accepted by getting a score above the threshold set in Election Setup. To see all signatures, click the 'Show All' option at the top center.

This function can be used to review the signature images to get an idea of where to set the threshold.

Mark as Processed

Print Batch Report

Print Batch List

Score Stats Report

The Score Stats Report looks at all of the signatures validated for an election and organizes them by the score that was assigned to them. It then reports the number and percentage that would have been accepted at each threshold level. In the report below there were only

5 signatures with scores of 4, 5, 31, 39 and 51. If the threshold had been set at 30, as an example, then 3 signatures would have been accepted, the scores of 31, 39 and 51 which each exceeded the threshold.

ScoreReport.txt - Notepad

File Edit Format View Help

Signature Scores Statistics Report
09/23/2022 01:44:02
Current Election 123

```
=====
Threshold # Sigs Accepted % Accepted
=====
51          1      20.00%
39          2      40.00%
31          3      60.00%
 5          4      80.00%
 4          5     100.00%
=====
```

This report shows the number of signatures that would have been accepted for various threshold settings based on the signatures in your system. The most restrictive settings are at the top with the smallest percentage accepted as valid.

Undeliverables

The Undeliverables tab in VBMScan allows scanning envelopes that were returned undeliverable by the post office. This can be used to scan any documents with a barcode to generate a list of the barcodes.

The output is available in two forms, a simple list of the barcodes and a report with a barcode for each code scanned to allow for them to be scanned into your VR system.

Switching to New Election

To switch to a new election, goto the Admin tab in VBScan and click the Election Setup button.

Election Setup

Election Settings BarCode/Doc

Election Settings

Interface Type: COLScore Show Batch Review Tab U

Election ID: G24 Automatically Create Audit PDF Thresh 5

Election Date : 11/03/2020 Show Undeliverables Tab

Station Num: Batch Size -1 S

File Directories

Use Base Path + Election Define Individual Paths

Base Path C:\VBMScan\ElbertCO\

Reference Signature C:\VBMScan\ElbertCO\G24\RefSigs\
Batch Output C:\VBMScan\ElbertCO\G24\Output\
Batch Logs C:\VBMScan\ElbertCO\G24\Logs\
Processed Batches C:\VBMScan\ElbertCO\G24\Processed\
Bad Barcodes C:\VBMScan\ElbertCO\G24\BadBarcodes\
Test Files C:\VBMScan\ElbertCO\G24\Test\
AutoIt Exe
AutoIt Script Folder
Form Files C:\VBMScan\ElbertCO\G24\Forms\
SigXpert.AI Data Folder C:\Program Files (x86)\Parascript\SignatureXpert.AI\data\

Batch Settings

Reset Batches Starting Batch #: 1

Cancel Save Settings

Be sure the option to Use Base Path + Election is set and then type into the Election ID field the new election code. This will change all of the paths below to include that election code.

You can change the location of the base path by clicking the Change Dir button to the right of the Base Path.

Click the checkbox at the bottom to Reset Batches and enter the new starting batch number.

Click Save Settings to finalize.

Exit VBMScan and return to check the settings.

VBMAAdmin - System Configuration

THE VBMAAdmin application has a variety of tools for the system.

VBMAAdmin v1.9.0

Scanner1	DBFunctions	Col SCORE	VBMBrowse	VBMBrowse Buttons	Ballot Image	Challenge Reasons					
Batch	Batch Status	Source	Verified	Uploaded	Envelope Count	Accepted Sig	Deffered Sig	Not Compared	Missing Sig	Batch Location	Log Location
Batch_1002	Closed	Mail	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	5	0	0	5	0	C:\VBMSan\ElbertCO\Output\Batch...	C:\VBMSan\
Batch_1003	Closed	Mail	<input type="checkbox"/>	<input type="checkbox"/>	4	0	0	4	0	C:\VBMSan\ElbertCO\Output\Batch...	C:\VBMSan\
Batch_1004	Closed	Mail	<input type="checkbox"/>	<input type="checkbox"/>	4	0	0	4	0	C:\VBMSan\ElbertCO\Output\Batch...	C:\VBMSan\
Batch_1005	Closed	Mail	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4	0	0	4	0	C:\VBMSan\ElbertCO\Output\Batch...	C:\VBMSan\
Batch_1006	Closed	Mail	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4	0	0	4	0	C:\VBMSan\ElbertCO\Output\Batch...	C:\VBMSan\
Batch_1007	Closed	Mail	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8	0	0	8	0	C:\VBMSan\ElbertCO\Output\Batch...	C:\VBMSan\
Batch_1008	Closed	Mail	<input type="checkbox"/>	<input type="checkbox"/>	12	0	0	12	0	C:\VBMSan\ElbertCO\Output\Batch...	C:\VBMSan\
Batch_1009	Closed	Mail	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8	0	0	8	0	C:\VBMSan\ElbertCO\Output\Batch...	C:\VBMSan\
Batch_1010	Closed	Mail	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2	0	0	2	0	C:\VBMSan\ElbertCO\Output\Batch...	C:\VBMSan\
Batch_1011	Closed	Mail	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2	0	0	2	0	C:\VBMSan\ElbertCO\Output\Batch...	C:\VBMSan\
Batch_1012	Closed	Mail	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2	0	0	2	0	C:\VBMSan\ElbertCO\Output\Batch...	C:\VBMSan\
Batch_1013	Closed	Mail	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2	0	0	2	0	C:\VBMSan\ElbertCO\Output\Batch...	C:\VBMSan\

Stati	Selected Batch(es)	All Closed Batches	
Envel	5	72	
Sign	0 0.0%	0	0.0%
Sign	0 0.0%	0	0.0%
Sig	5 100.0	68	94.4%

Refresh List
Print List

Update Batch List
 Copy Img Files
Report Envelopes with Mark
 Mark 1 Mark 2
 Either Mark

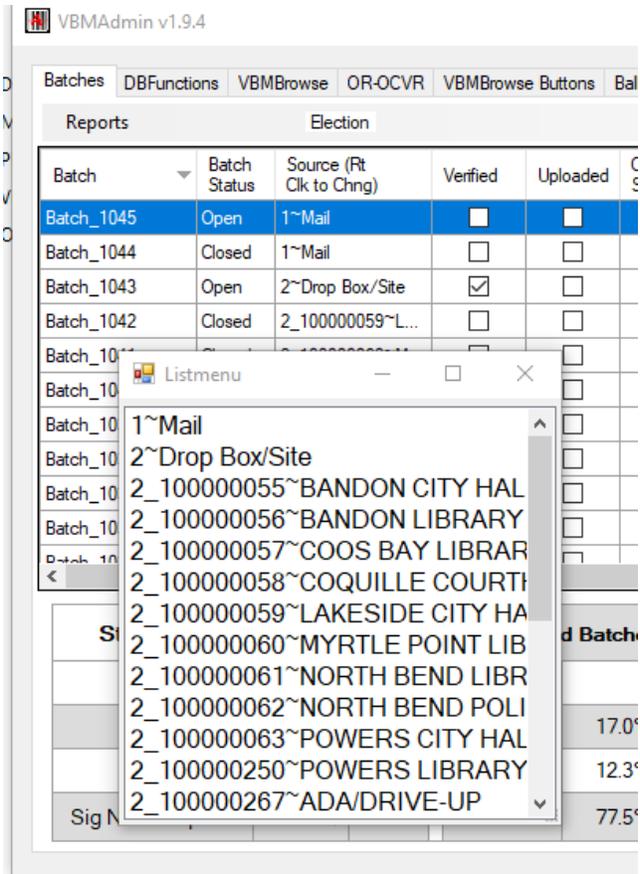
RTF Mailmerge
 Print Images
 Word Mailmerge

Missing Sig Letters

Label20

Change Source for Batch

If a batch was scanned with the wrong source, you can change it here. Right Click on the source in the row you wish to change and a popup list of sources will be displayed. Select the correct source and click it or press Esc to cancel.



Missing Signature Letters

The first tab is used to create missing sig notification letters. A batch is selected and the letters are generated.

These can be Word mailmerge, ballot images or rtf mailmerge. The Edit Letter button allows editing the Word Mailmerge letter.

These letters can be generated for either Missing Sigs or Bad Sigs or both.

Mark Area Reports / Images

The button at the bottom center of the first tab, 'Update Batch List' has two functions. It reads through all of the images looking for images that are flagged as meeting the Mark 1 or 2 threshold. When found, the image link is added to the database so a report can be run. If the Copy Img Files checkbox is checked, then each of the matching images will be copied to a new folder. This is for use by the VBMindeX function which will let you step through each of the images (multi user mode).

When copying the images you will be prompted to select one of the radio buttons, Mark 1, 2 or either.

The 'Report Envelopes with Mark' generates a spreadsheet report of the matching images from the database created in the step above. These can be printed out in spreadsheet and if you have a barcode font installed, can show a barcode in the id column to make entering into voter registration system easier.

DB Functions

This tab has functions for working with the databases.

The SQL textbox allows executing a sql statement. The system maintains two SQLite databases in the forms folder, ReflImages and Voters. The ReflImages database holds a cross reference list of the reference signatures to be used for lookup during signature verification. The Voters database holds a voter table which is used in some interfaces for looking up voters to find the ref signature. It also holds a parms table which has various parameters such as Challenge Reasons and a batches table which tracks the batches.

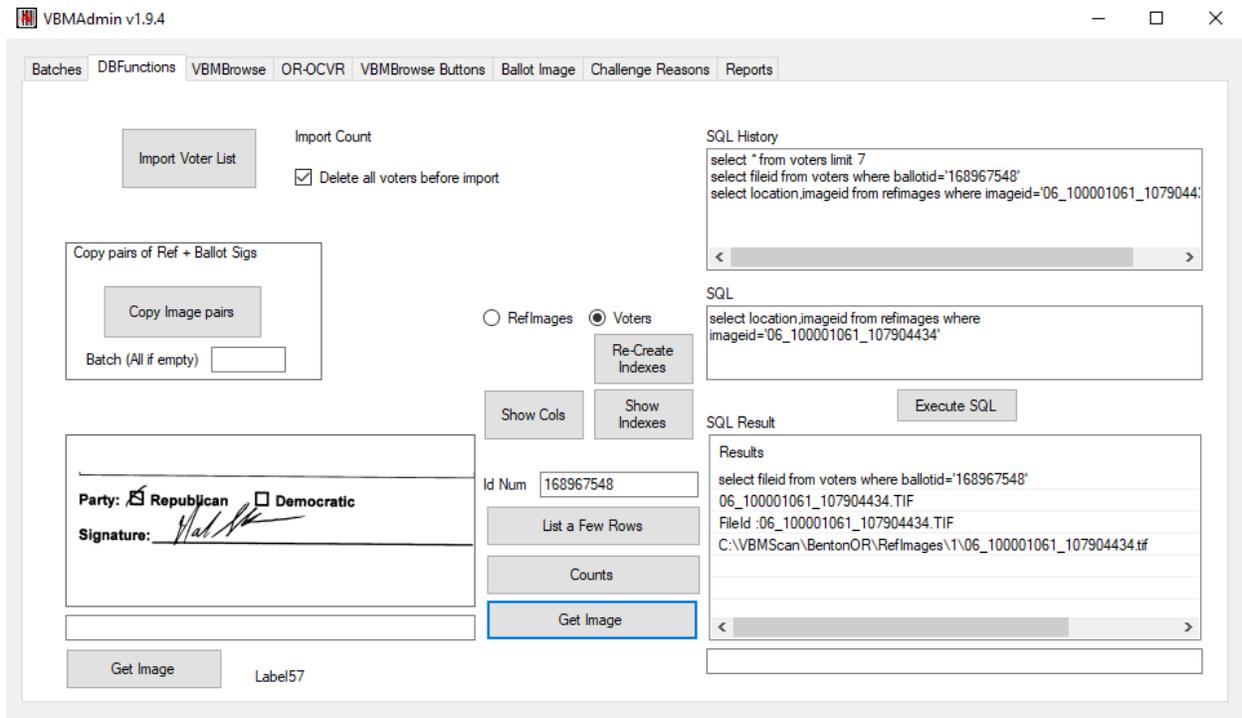
This query will give a list of tables in a database:

```
SELECT name FROM sqlite_master WHERE type='table' AND name NOT LIKE 'sqlite_%'
```

This sql statement will show the columns in a table, voters in this case:

```
pragma table_info('voters')
```

And a typical select would be : select * from voters where vname like 'willa%' as shown in the screenshot.



VBMBrowse Tab

This tab has two functions used for configuring the Verification tool, VBMBrowse. VBMBrowse lets your users step through each of the images to accept or reject each.

The left side of the screen is used to enter the logins for each of the judges. The right determines if certain buttons are displayed and selects between the Canvassing Board (team judging) mode and the single judge mode.

INDICIUM Voter Signature Verification Scan System – 6/17/2024

VBMAAdmin v1.9.0

Scanner1 DBFunctions Col SCORE VBMBrowse VBMBrowse Buttons Ballot Image Challenge Reasons

Judges Admin Judges

Group	User1
GRP_1	BILL
GRP_2	JONW
GRP_3	
GRP_4	
GRP_5	
GRP_6	
GRP_7	
GRP_8	
GRP_9	
GRP_10	
GRP_11	
GRP_12	
GRP_13	

Save

ShowUploadBallots Button
 ShowPullReport Button
 CanvBoardMode

CheckMissingSig from Mark1
 Show Defer to Admin Button

Mark2 Msg: nothing [Color: RED]

Mark2 Missing Msg: nothing [Color: BLACK]

Save

Canvassing Board Mode

VBMAAdmin v1.9.0

Scanner1 DBFunctions VBMBrowse VBMBrowse Buttons Ballot Image Challenge Reasons

Judges Admin Judges

Group	User1	User2	User3
GRP_1	BILLX	RICK-K	JENN
GRP_2	JEFFZ	NANCYK	MELISSA
GRP_3			
GRP_4			
GRP_5			
GRP_6			
GRP_7			
GRP_8			
GRP_9			
GRP_10			
GRP_11			
GRP_12			
GRP_13			

Save

ShowUploadBallots Button
 ShowPullReport Button
 CanvBoardMode

Number of Judges per Grp: 3

Requ Num Votes to Accept: 1

Requ Num Votes to Deny: 3

Requ Num Votes to Confirm Missing Sig: 2

Requ Num Votes to Confirm Sig Not Missing: 2

CheckMissingSig from Mark1
 Show Defer to Admin Button

Mark2 Msg: 1 [Color:]

Mark2 Missing Msg: 1 [Color:]

Save

In the Canvassing Board mode, the number of judges required to see each ballot can be varied as well as the voting scheme to approve or reject ballots. To enable Canvassing Board Mode, check the 'CanvBoardMode' checkbox on the right side.

This opens the number of columns for entering judge names as set by the 'Number of Judges per Grp' dropdown on the right side.

The above settings allow three judges per team and require that all three agree to reject and that only one approving will accept the ballot. It also sets the number required to confirm missing signature is two out of the three.

This also sets the automatic missing sig status to be set by Mark 1 (set the area to scan in VBMScan) and that the 'Defer to Admin Button' will be used.

Note that in the CanvBoardMode, there is a separate list of the admin judges who make decisions on voter status, unsealed envelopes, etc and other things except signature status.

VBMBrowse Buttons

This tab is used to configure which buttons are displayed and their functions.

VBMAAdmin v1.9.0

	Function	Button Text	Challenge Code
Button 1	Mark Sig As Matching	Mark Sig As Matching	
Button 2	Mark Sig As NOT Matcl	Mark Sig As NOT Matc	SD
Button 3	Invalid - Select Code	Invalid - Select Code	
Button 4	Signature Missing	Signature Missing	NSIG

Admin Mode Buttons

	Function	Button Text	Challenge Code
Button 1	--Not Used--		
Button 2	--Not Used--		
Button 3	--Not Used--		
Button 4	--Not Used--		

Missing Sig Mode Buttons

Button 1		Signature Not Missing	
Button 2		Signature Missing	

Save

The Admin Mode Buttons section is only displayed in the Canvassing Board Mode.

Each button is assigned a function and text for the button and a challenge code that is used to report to the voter registration system.

The button functions are:

Mark Sig as Matching - indicates that the ballot is valid and signature matches

Mark Sig as NOT Matching - indicate the ballot is to be rejected

Invalid - Select Code - ballot is rejected and user is prompted from the challenge reason list for the code

Signature Missing - ballot is rejected and Missing Sig code is used

Mark Ballot as Valid (Canvassing Mode only) - indicates the ballot is valid and signature should be checked (some reason other than non-matching sig)

INDICIUM Voter Signature Verification Scan System – 6/17/2024

Mark Ballot as NOT Valid - (Canvassing Mode only) - indicates the ballot is not valid, sig verification not unnecessary

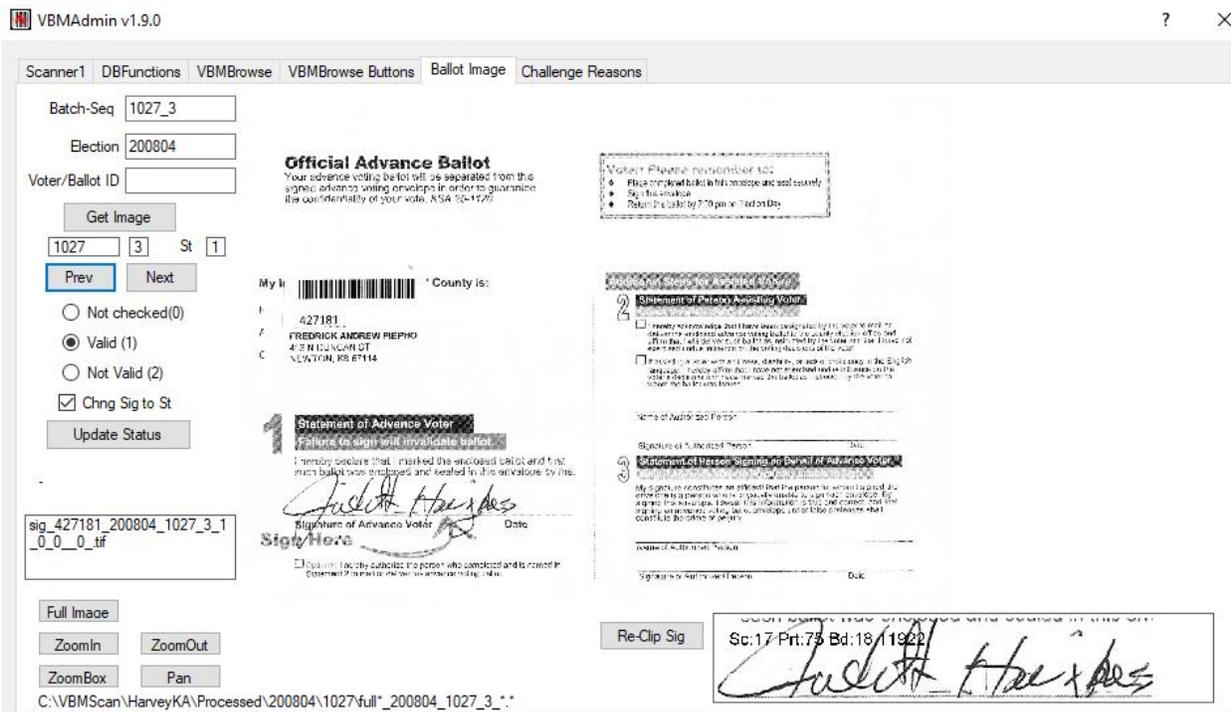
Defer to Admin - (Canvassing Mode only) - indicates the ballot may have an issue other than signature and admin needs to review

Ballot Image Tab

Any of the scanned ballot images may be viewed by entering the election code and the batch and sequence or the voter id, the ballotid or the voter name. The batch and sequence are entered as batch_seq, like 1008_2 or 1008-2.

If searching by name, enter all or part of the last name, a comma and all or part of the first name. A comma must be entered for the system to detect that a name search is desired. If more than one matching voter is found, a list of the matches will be displayed to select from. In the example below, 'ma, ju' was entered to search for May, Julia.

You can also enter the voter id or the ballot id.



When the image is found and displayed, it will also show the current status of the ballot envelope. To change the status, click the appropriate radio button and then click the 'Update Status' button. If the image is a 'sig_' file (not reviewed with VBMBrowse, and the 'Chng Sig

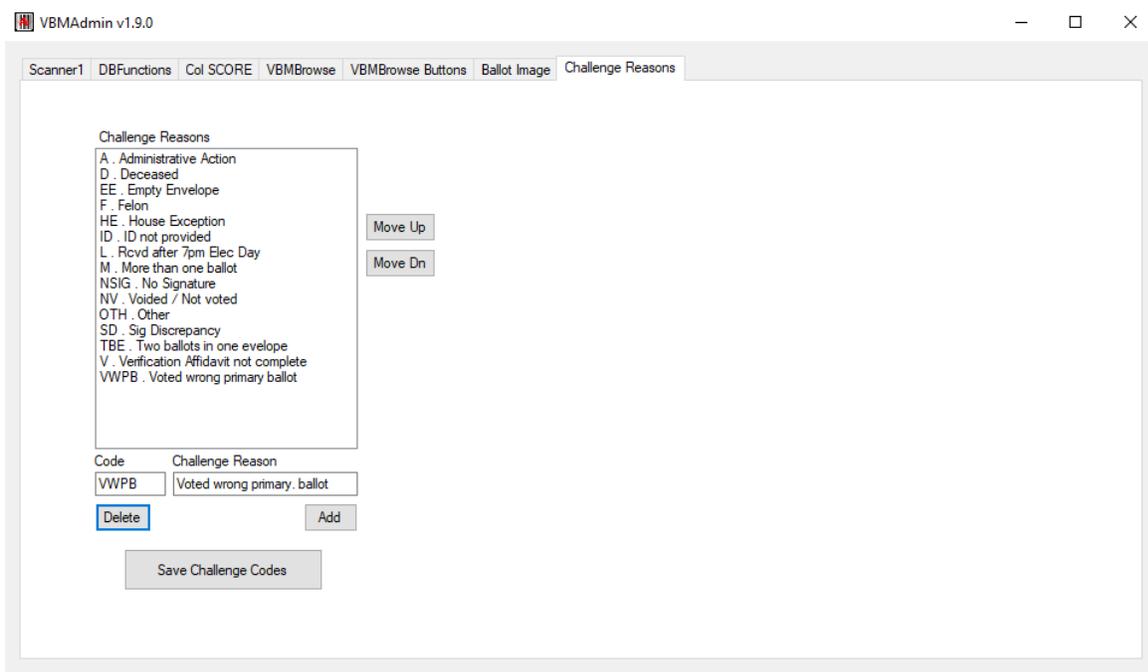
to St' checkbox is checked, it will be saved as a 'st_' file. Some of the upload routines require the files to be 'st_' files before uploading.

The 'Prev' and 'Next' buttons display the next or previous image in the batch.

Challenge Reasons

The table of challenge reasons is the list of reasons you can select from to mark a ballot as invalid. This is done in VBMBrowse.

In VBMAAdmin, select the Challenge Reasons tab.



Add the Challenge Reason that you use to this list.

VBMBrowse - Reviewing Scanned Ballots

The VBMBrowse module is used to view and accept / reject the scanned ballots.

Configuration

The buttons that show in VBMBrowse are configured in the [VBMAAdmin / VBMBrowseButtons tab](#) and the users and other parameters are configured in the [VBMAAdmin / VBMBrowse tab](#).

When VBMBrowse starts, it presents the user login form. The user (added in [VBMAAdmin / VBMBrowse tab](#)) enters the user id and is presented with the main screen.

JONW Grp:2 Pos:1 Ver:2.0.0

VoterID: VoterID

Judges

SigXStatus

Next VBM Ballot

Batch# 1018 0

Show Ref Sig Show Ballot Image

Batch Report Upload Ballots

All Batches Print 'Pull' Rpt

Copy VoterID to Clipboard

C:\VBMScan\ElbertCO\Processed\G20\1018

The user then enters the Batch number in the lower right corner of the form. Note the two checkboxes, 'Show Ref Sig' and 'Show Ballot Image'. If these are checked then those images will be displayed for each ballot as well as the ballot signature.

Click the 'Next VBM Ballot' to view the first available ballot image.

This displays the image and locks it by renaming the file (in the election/batch folder under the 'Processed' folder). Before locking the files will begin with 'sig_' for the signatures, 'full_' for the full images and 'aoi_' for the area of interest images. After renaming the sig_* image file will be renamed to 'wk_JONW_sig*' where JONW is the user id.

FormsLocal - Use local DB copies

In the [config] section of the vbmscan.ini there is a parameter, 'FormsLocal', that if set to 'Y' will copy the SQLite DB files to a local folder, 'C:\VBMForms'. This can reduce the competition between workspaces for access to these files and speed up operations.

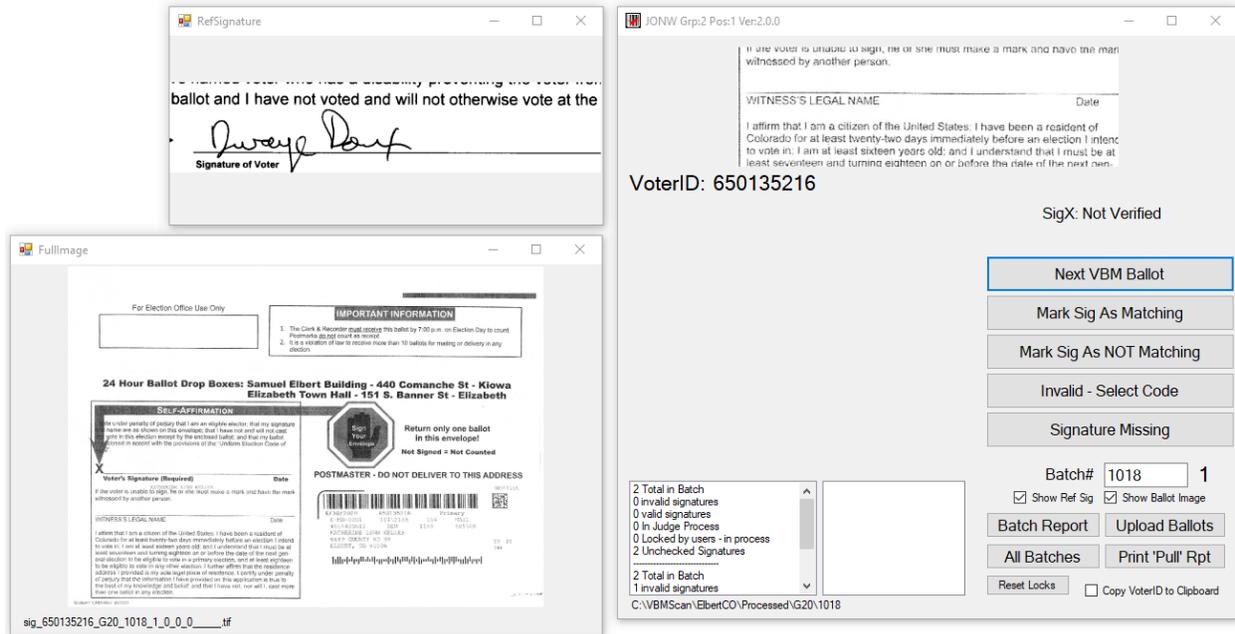
This value can be set by checking the checkbox 'Copy DB to local' on the BarCode/Doc tab in Election Setup (Admin tab in VBMScan).

Image File Naming

The file name breaks out like this:

sig_voterid_election_batch_sequence_status_mark1_mark2_judgestat_flags_personassisting_challengecode.tif

1. sig - either sig_, aoi_, or full_, changes to wk_ when locked and st_ when finished
2. voterid - the voterid (or ballot id) from the barcode scan
3. election - the election code for the current election
4. batch - the batch number
5. sequence - sequence in the batch beginning with 1
6. status - verified status, 0=not verified, 1=valid, 2=not valid, 3=missing sig, 99=wrong election
7. mark1 and 2 - 1 if mark found, 0 if not
8. judgestat - for canvassing board configurations, the status for each judge
9. flags - also for canvassing board, indicates VO=voted, NA=not active, NM=don't show missing sig
10. person assisting - if configured to look for person assisting box, then check if exists
11. challenge code - the challenge code if not valid and reason specified



Button Functions

Next VBM Ballot - normally not used after the first press. This brings up the next ballot without setting status on the last one and leaves the last one locked. To unlock any ballots, you can either leave the app and re-enter, and all locks for the same user will be reset, or click the 'Reset Locks' button at bottom right.

Mark sig as Matching - changes the status of the ballot to valid and advances to the next image

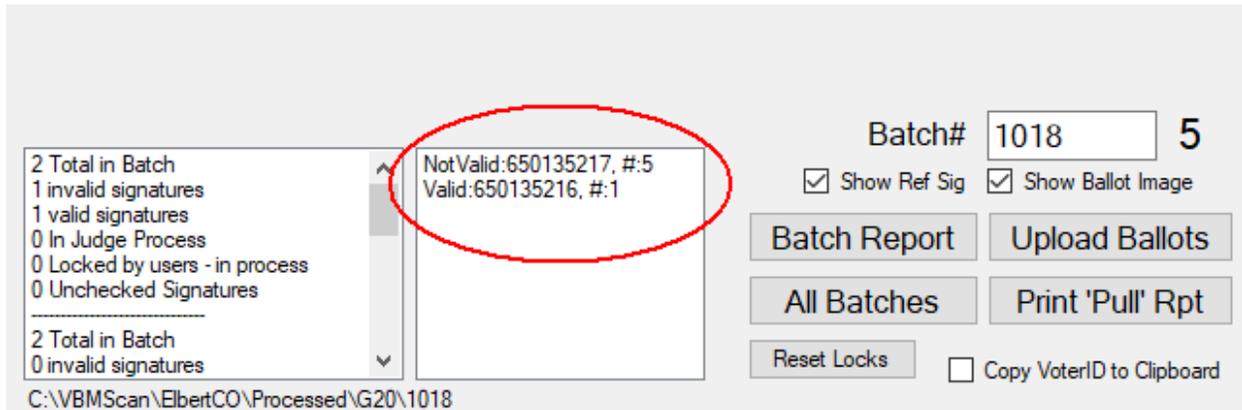
Mark sig as NOT Matching - changes the status of the ballot to not valid and advances to the next image

Invalid - Select Code - prompts the user for one of the challenge codes (defined in [VBMAdmin / Challenge reasons](#)) and if one is selected, changes the status of the ballot to not valid and advances to the next image.

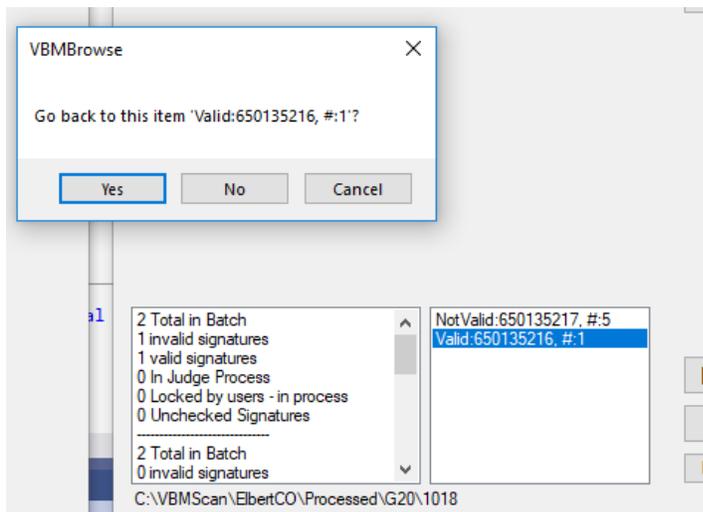
Batch Report

The 'Batch Report' and 'All Batches' show the status of the images in the batch with a summary. The 'Batch Report' shows a summary in the list box at bottom left and the 'All Batches' opens a notepad with a report of all of the batches.

Going back to a processed Image - Getting a Redo



As the images are processed, they are loaded into the list box in the bottom center, with the last processed at the top of the list. If you want to go back to an image previously verified, click on the line in the listbox and it will ask if you want to go back to the item.



Click Yes to undo the status change and bring it back onto the screen.

Print Pull Report

Print Pull Report opens a notepad with a report of the ballots that should be pulled do to being marked as not valid.

Upload Ballots

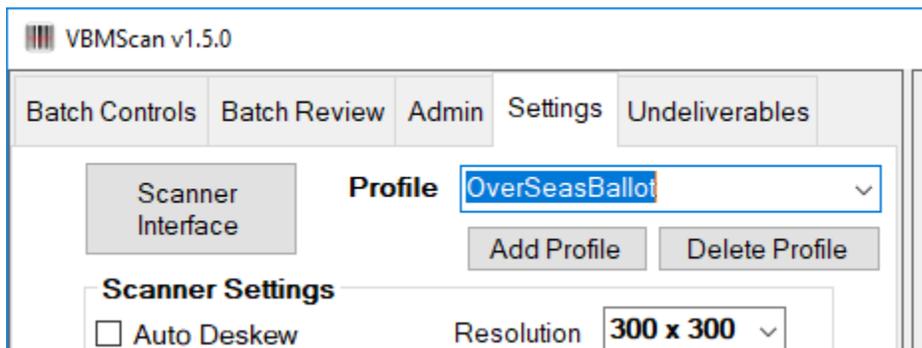
Upload Ballots, for some interfaces either directly uploads the batch to the state system or generates files for upload to the state system.

Both Print Pull Report and Upload Ballots cannot be run until all ballots in the batch have been processed.

Scanning Profiles

A Scan Profile has the parameters for a particular document, such as the location of the barcode and capture areas. Creating multiple profiles allows you to switch between scanning of multiple form types, which might be laid out slightly differently, such as regular and overseas ballots.

To add a profile, type the name into the Profile dropdown box, and click the 'AddProfile' button. Note that profile names cannot have spaces or commas in them.

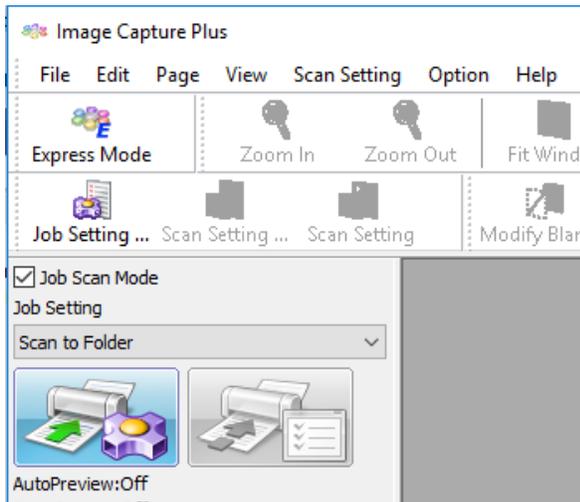


To delete a profile, select the profile in the dropdown and click the 'Delete Profile' button. Note that the profile will be deleted from the dropdown list, but the settings are still in the ini file in the [Config-OverSeasBallot] (if this was the profile deleted) section. To restore then, simply re-add the profile.

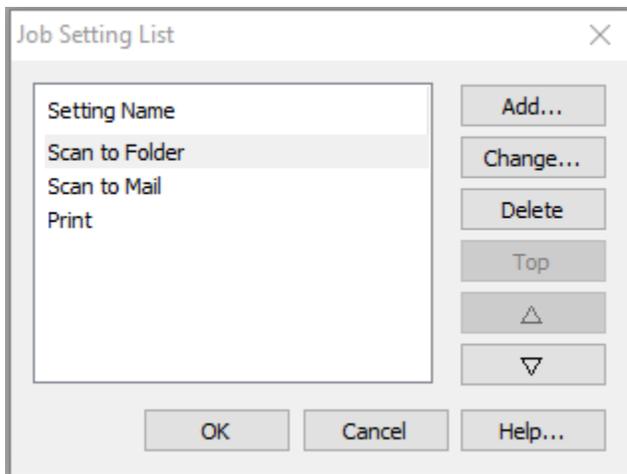
Scan From Multi-Page Tiff Files

The system can input directly from multi-page tiff files so that the VBMScan function can be run on different machines than the one attached to the scanner.

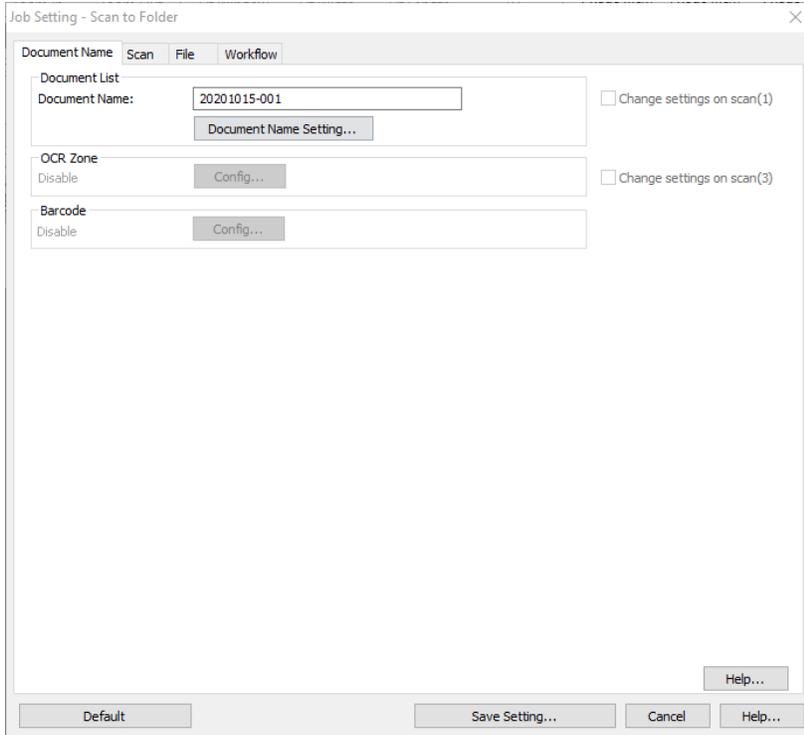
The ballot envelopes should first be scanned with Image Capture Plus into a multi-page tiff file. In Image Capture Plus, check the 'Job Scan Mode' checkbox and click 'Job Settings'.



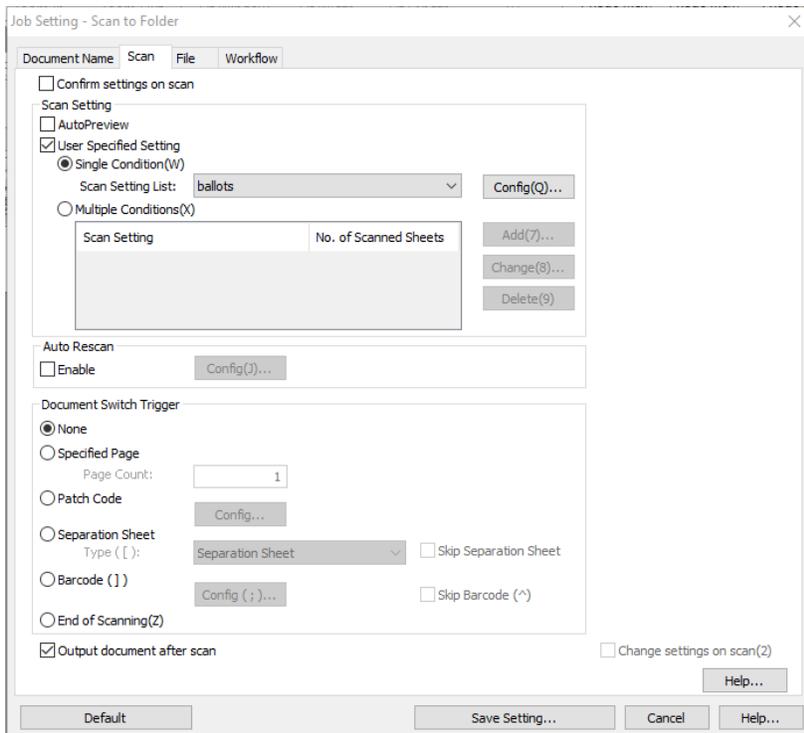
The Job Setting List will open. Click Add to create a new Job.



The first tab allows you to specify how the output documents will be named.

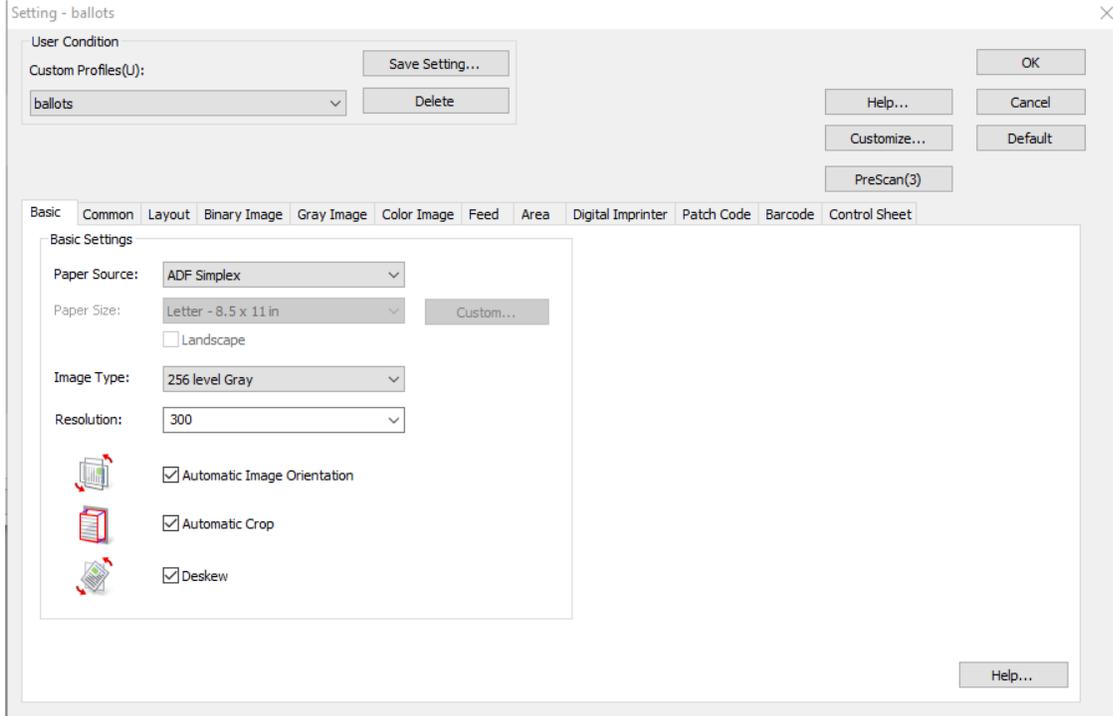


The Scan tab controls the scan settings.

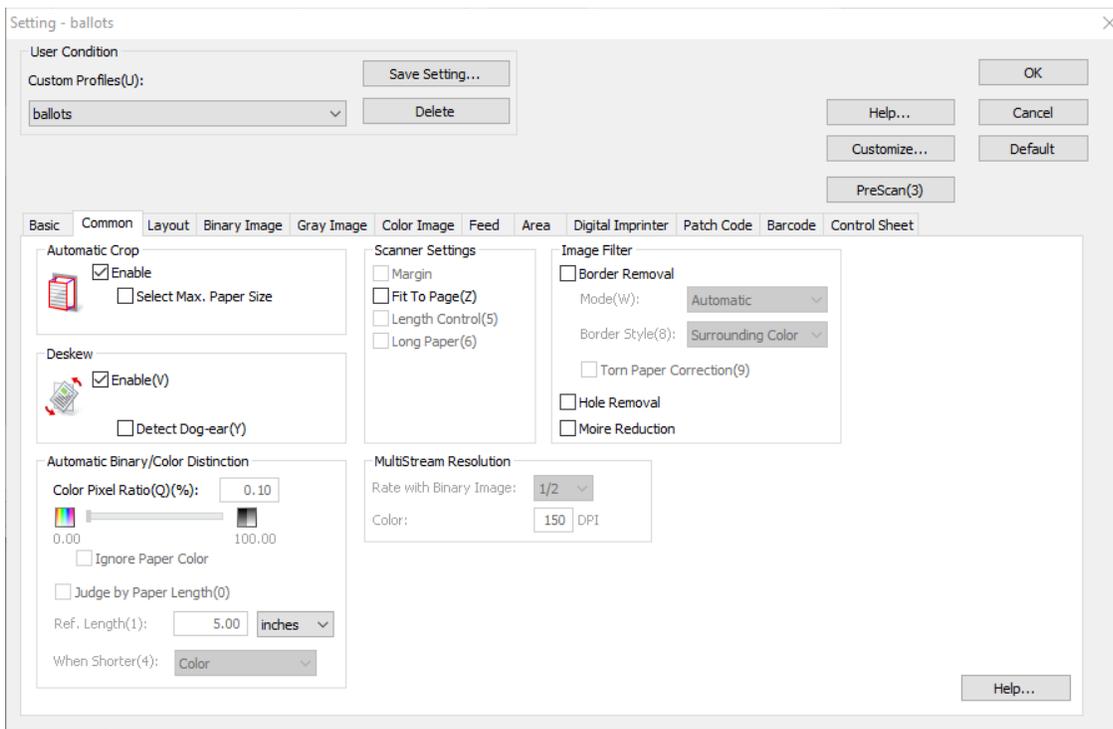


INDICIUM Voter Signature Verification Scan System – 6/17/2024

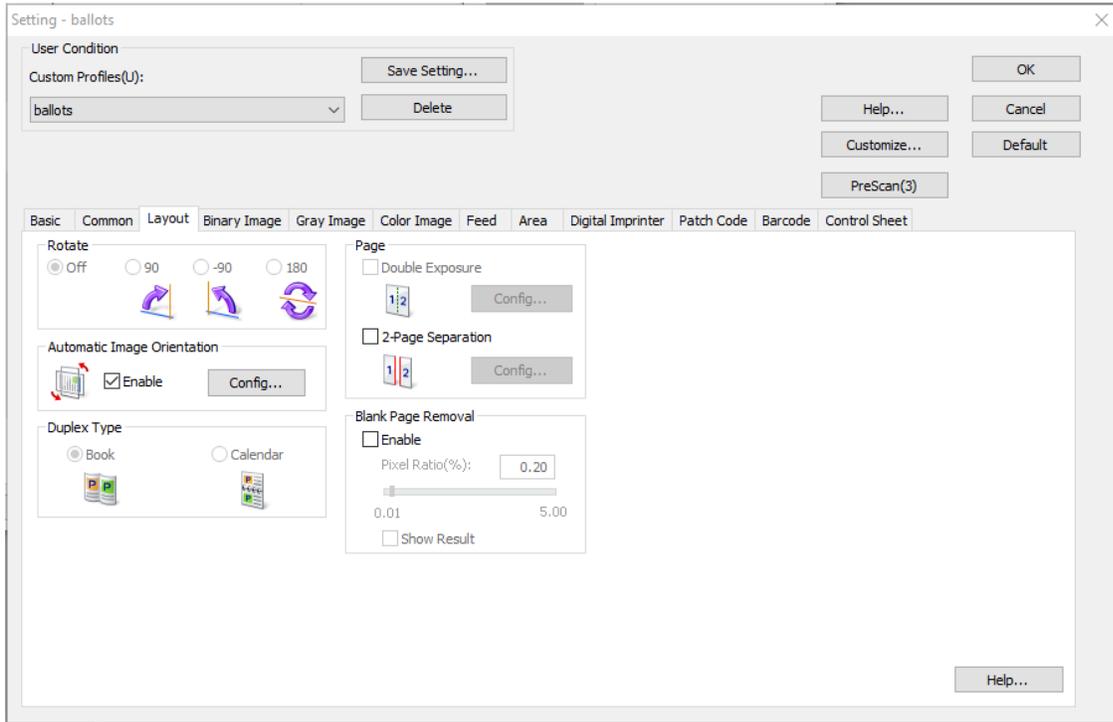
Click the Config(Q) button to set the scan settings. The first tab is Basic settings. Select Simplex or Duplex scanning and Image Type of 256 level Grey and resolution 300.



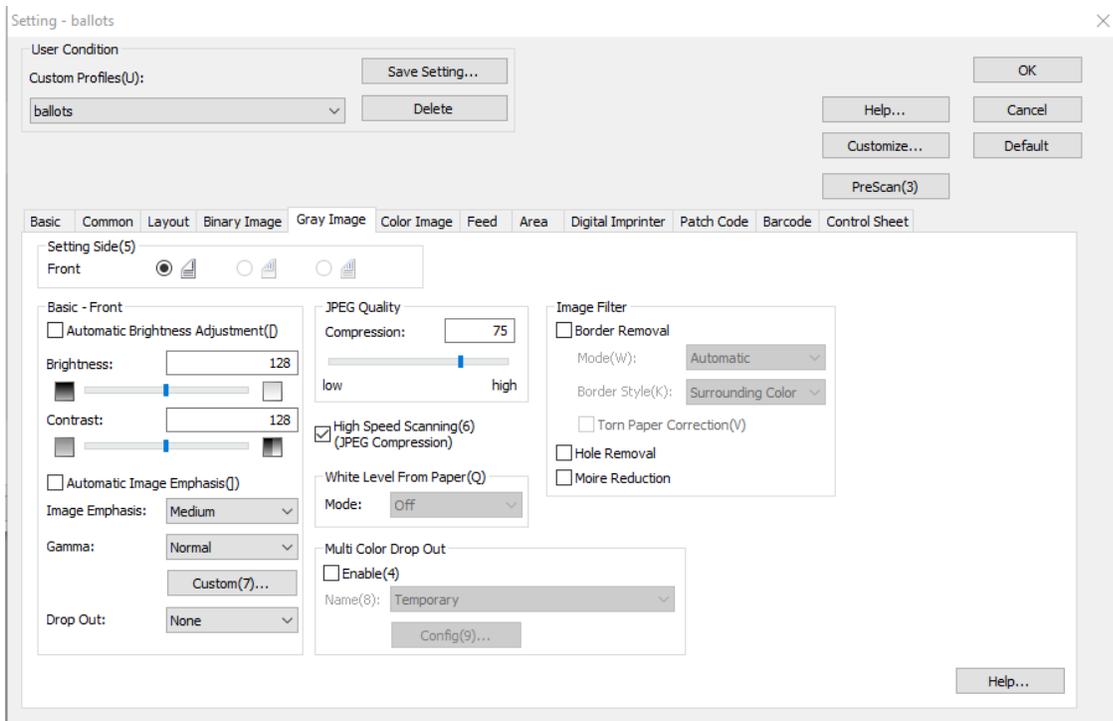
The Common Tab



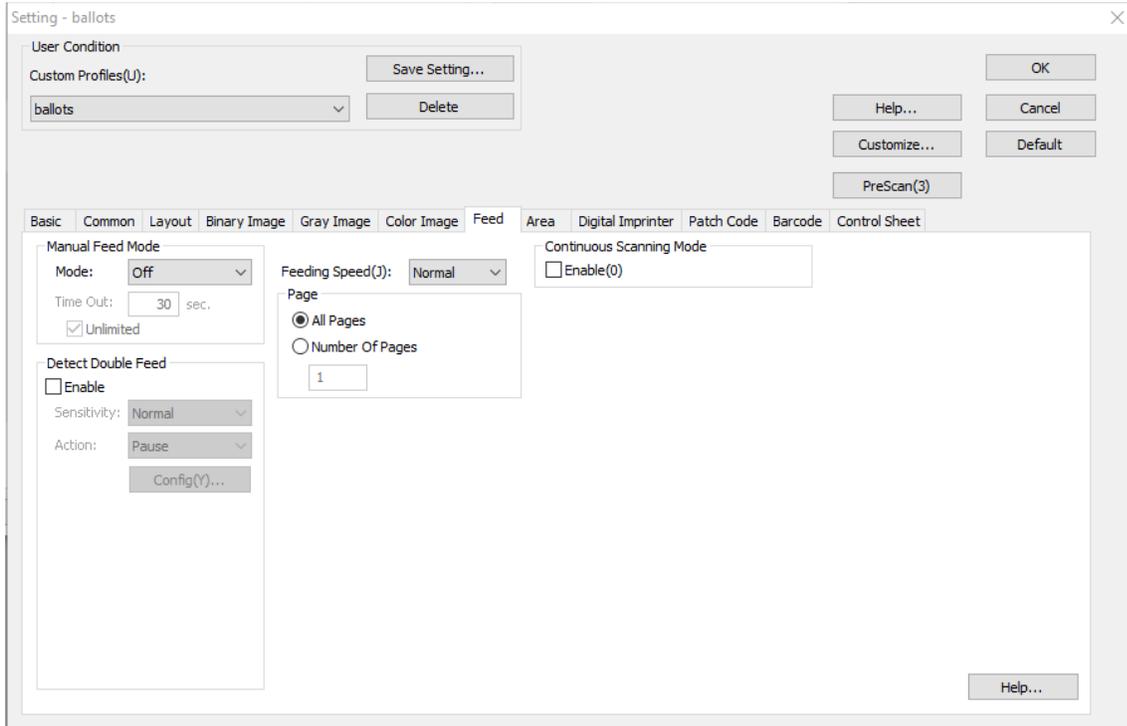
The Layout tab controls how images are stitched together if scanning two sides.



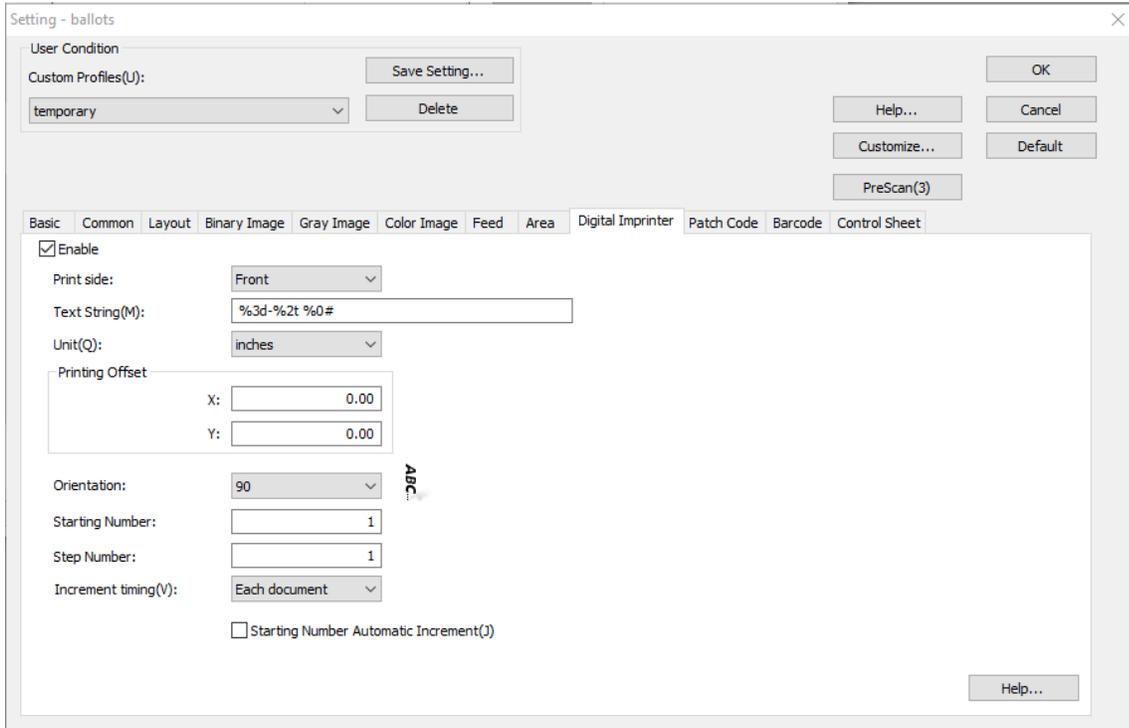
Grey Image tab controls the settings for scanning the greyscale image.



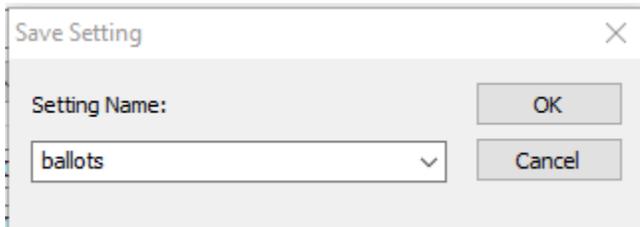
On the Feed tab, be sure to uncheck the 'Detect Double Feed' so that the thick envelopes will not trigger this condition.



Finally, set the Imprinter settings to suit how you want the imprinter to print on the document. Set the text string to %3d-%2t %0# to print the date-time sequence number.



When finished, click Save Setting. Select an existing name from the dropdown or type in a new one.



Click OK, then click the OK button on the Setting form.

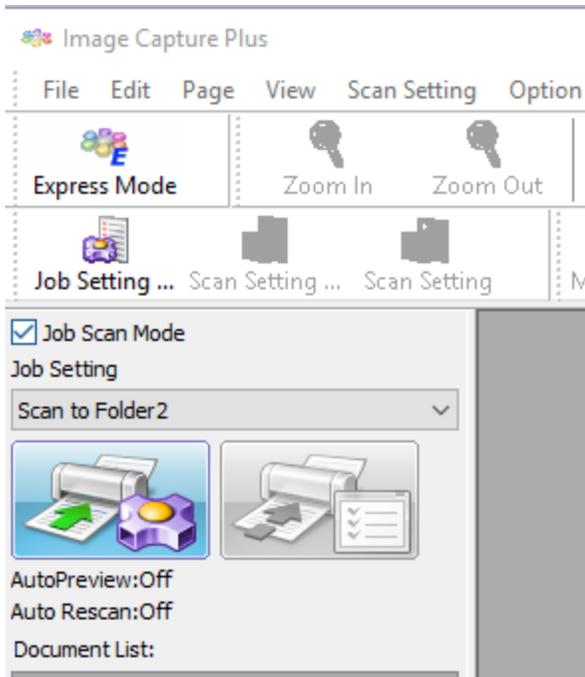
In the Scan tab of the Job Setting form, be sure your Scan Setting List is selected.

The screenshot shows the 'Job Setting - Scan to Folder' window with the 'File' tab selected. The 'Document Name' section has three sub-tabs: 'Document Name', 'Scan', and 'Workflow'. The 'Scan' sub-tab is active. The 'Confirm settings on scan' checkbox is unchecked. The 'Scan Setting' section includes 'AutoPreview' (unchecked), 'User Specified Setting' (checked), and 'Single Condition(W)' (selected). The 'Scan Setting List' dropdown is set to 'ballots', with a 'Config(Q)...' button next to it. Below this, the 'Multiple Conditions(X)' option is unselected, and there is a table with columns 'Scan Setting' and 'No. of Scanned Sheets'. To the right of the table are buttons for 'Add(7)...', 'Change(8)...', and 'Delete(9)'. The 'Auto Rescan' section has 'Enable' unchecked and a 'Config(J)...' button. The 'Document Switch Trigger' section has 'None' selected, 'Specified Page' unselected, and a 'Page Count' input field with the value '1'. The 'Patch Code' option is unselected.

On the File Tab of the Job Setting form, check 'Use a user-defined file name(K)' and then click the Config(O) button to define the base file name. By having the Confirm for Each Document checked, it will ask you to confirm the file name after each batch scan and you can enter the batch number as part of the file name. Uncheck the check 'Use a user-defined file name(K)' after setting the base name.

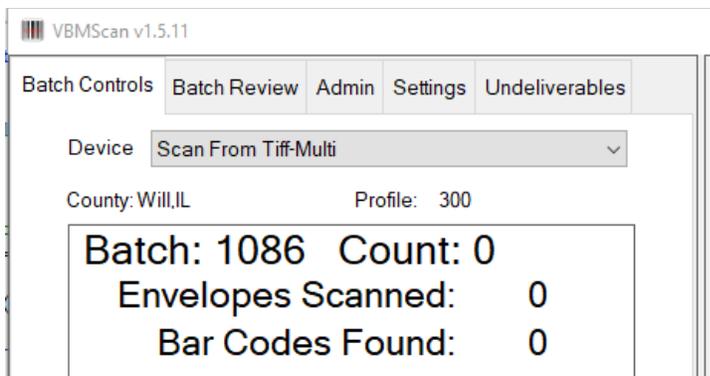
Click 'Save Setting' and select a name or create a new one like 'Scan to Folder'.

To scan ballot envelopes, check the 'Job Scan Mode', select the correct job (Scan to Folder) and click the scan button.



The scanner will scan all of the documents and pause to allow you to confirm the file name at the end of the job.

In VBMScan, select Scan from Tiff-Multi, and click the Start Batch scan button.



Scanning Reference Signatures

The system has the capability to scan documents to acquire reference signatures. This can be used in the case where you want to collect the signatures from ballot applications and then use those signatures as the reference signatures when scanning the ballot envelopes.

To do this, in Election Setup under the Admin tab in VBMScan, select 'CaptureRefSigs' as the interface type. Then scan the applications normally. The signature files will be placed in a folder named as the batch number under the RefSigs folder.

When finished scanning, set the interface type back to the correct type and when the window opens after starting VBMScan for scanning the RefImages folder, click the option to reset and the restart to make sure all of the images are indexed.

VBIndex - Viewing Mark 1 and Mark 2 Images

In some counties, the ballot envelopes have other areas of interest, such as check boxes to indicate a desire to continue receiving vote-by-mail ballots or an address change. Most voter registration systems do not provide for importing this data back in.

This process allows your users to view images that have been detected as having either Mark 1 or Mark 2 as defined in VBMScan. The VBIndex application can be run alongside your voter registration system to view the images and directly enter the data into the voter registration system.

Selecting the Images

The first step is to select the images that were marked. In VBAdmin, the Update Batch List can be used to copy all the matching images to a new location. These are the full_* files from the 'Processed' folder.

Batch	Batch Status	Source	Verified	Uploaded	Envelope Count	Accepted Sig	Deferred Sig	Not Compared	Missing Sig	Batch Location	Log Location
Batch_1065	Closed	Mail	No	No	19	3	9	7	0	C:\VBMScan\Will_IL\Output\Batch_1...	C:\VBMScan\Will...
Batch_1066	Open	Mail	No	No	0	0	0	0	0	C:\VBMScan\Will_IL\Output\Batch_1...	C:\VBMScan\Will...
Batch_1067	Open	Mail	No	No	0	0	0	0	0	C:\VBMScan\Will_IL\Output\Batch_1...	C:\VBMScan\Will...
Batch_1068	Closed	Mail	No	No	2	0	1	1	0	C:\VBMScan\Will_IL\Output\Batch_1...	C:\VBMScan\Will...
Batch_1069	Closed	Mail	No	No	1	0	0	1	0	C:\VBMScan\Will_IL\Output\Batch_1...	C:\VBMScan\Will...
Batch_1080	Closed	Mail	No	No	2	1	1	0	0	C:\VBMScan\Will_IL\Output\Batch_1...	C:\VBMScan\Will...
Batch_1081	Open	Mail	No	No	0	0	0	0	0	C:\VBMScan\Will_IL\Output\Batch_1...	C:\VBMScan\Will...
Batch_1082	Closed	Mail	No	No	4	1	3	0	0	C:\VBMScan\Will_IL\Output\Batch_1...	C:\VBMScan\Will...
Batch_1083	Closed	Mail	No	No	10	2	6	2	0	C:\VBMScan\Will_IL\Output\Batch_1...	C:\VBMScan\Will...
Batch_1084	Closed	Mail	No	No	8	1	5	2	0	C:\VBMScan\Will_IL\Output\Batch_1...	C:\VBMScan\Will...
Batch_1085	Closed	Mail	No	No	8	1	5	2	0	C:\VBMScan\Will_IL\Output\Batch_1...	C:\VBMScan\Will...
Batch_1086	Closed	Mail	Yes	No	2	1	1	0	0	C:\VBMScan\Will_IL\Output\Batch_1...	C:\VBMScan\Will...

Statistics	Selected Batch(es)	All Closed Batches	
Envelopes	19	180	
Signatures	3 15.8%	22	12.2%
Signatures	9 47.4%	150	83.3%
Signatures Not	7 36.8%	26	14.4%

Rows added 197

Click the 'Copy Img Files' checkbox and then select the radio button below for either Mark 1, Mark 2 or either Mark. Click the 'Update Batch List' button and the system will prompt you for the location to copy the image files to. Select an existing folder or create a new one.

VBMScan.ini configuration for VBIndex

The VBMScan.ini file must have this section in it:

[VBMIndex]

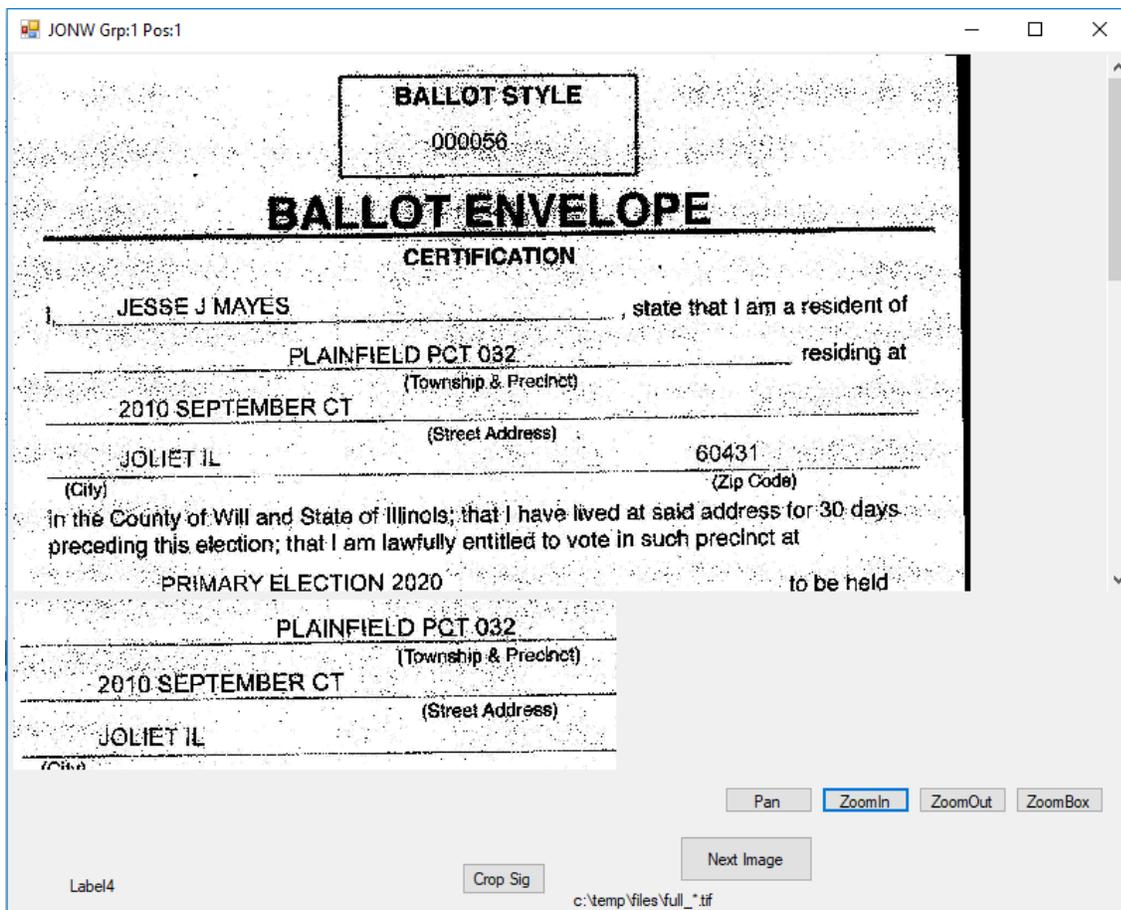
ImagesFolder=c:\temp\files

ImageMask=full_*.tif

DisplayImageOnly=Y

Operation

Set the ImagesFolder and then run VBMIndex. It will prompt for the user name. These are set [VBMAAdmin](#).



The image is displayed. Buttons are provided for zooming and panning the image. The crop sig button allows you to select a portion of the image to display in the smaller image box below the main image.

Clicking the Next Image button will rename the current image so it will not be displayed again (prepends 'x_' to the image name and then displays the next image.

This application may be used by multiple users at the same time without interfering with each other.

Voter Registration System Interfaces

VR Systems VoterFocus

VR Systems offers an optional 'Generic VBM Scanner Interface' to Voterfocus customers. This option is used to interface to the VBMScan system.

Barcode Settings

In Elections Setup on the Barcode/Doc tab, enter the following

VoterID Start 1

VoterID Length 11

Election Start 1

Election Length 1

Expected VoterID Length 11

The screenshot shows the 'Election Setup' window with the following configurations:

- Election Settings:**
 - Interface Type: VR
 - Election ID: 123
 - Election Date: 11/03/2022
 - Station Num: [Dropdown]
 - Batch Size: 250
 - Use Signature Comparison:
 - Show Batch Review Tab:
 - Automatically Create Audit PDF:
 - Show Undeliverables Tab:
 - Set Status on SigX Pass:
 - Threshold: 10 Or 6 + Partial 99
 - Write score on Sig Image: Top Bottom
- File Directories:**
 - Use Base Path + Election: Define Individual Paths:
 - Base Path: C:\VBMSan\Nassau\
 - Reference Signature: C:\VBMSan\Nassau\123\RefSigs\
 - Batch Output: C:\VBMSan\Nassau\123\Output\
 - Batch Logs: C:\VBMSan\Nassau\123\Logs\
 - Processed Batches: C:\VBMSan\Nassau\123\Processed\
 - Bad Barcodes: C:\VBMSan\Nassau\123\BadBarcodes\
 - Test Files: C:\VBMSan\Nassau\123\Test\
 - AutoIt Exe: [Empty]
 - AutoIt Script Folder: [Empty]
 - Form Files: C:\VBMSan\Nassau\123\Forms\
- Batch Settings:**
 - Reset Batches:
 - Starting Batch #: 1037

Buttons at the bottom: Cancel, Save Settings, User Guide.

Setting up New Election

To set up a new election, open the Election Setup form from the Admin tab in VBMSan. Select the radio button for 'Use Base Path + Election' and then make sure that the correct base path is selected. Enter the election (3 digit) code in the Election ID field. This will cause all of the paths below to include the three digit election code as part of the path. Note that when scanning, the system uses the last digit of the election code as the election ID which is also the first digit of the barcode. If a barcode starts with a number other than the election code, it will be rejected as wrong election.

Exporting Signatures

When the ballots are mailed by Voterfocus, a signature file is created for each ballot with the name of the file containing the ballot id number. When VBMSan loads, it scans this folder for any new signature files and adds them into a database it maintains of the signatures available.

When a ballot is scanned, the ballot id number is taken from the barcode and is used to look up the signature for comparison. VBMScan then assigns a status to the ballot depending upon whether the signature comparison showed a valid signature.

In VoterFocus, change the output folder for signature to the RefSigs folder used by VBMScan.

In Voter Focus Admin select System Options, Vote by Mail tab, Generic Envelope Interface button, Change Export Path.

Import Verification Results into VoterFocus

A text file is created in the Output folder with the batch number and a row for each ballot in the batch along with a multi-page tif file which holds each of the images scanned from the ballots.

This information is imported back into Voterfocus and any ballots marked as failing the signature comparison are presented to users for verification. Voterfocus then generates a pull file for the batch which indicates which ballots should be set aside as not to be counted.

Loading and Reviewing Signatures from Scanned Batches into VR is a two step process. Step one is to load the images and step two is to review the batches/signatures.

1. Under Vote By Mail click on the “Retrieve Return Images”; This will open a file selection dialogue box.
2. Find the directory and select the Batch_xxx.Tif file for the batch you wish to import and click Open. This will open a VR Dialogue box prior to importing.
3. There is a check box to retrieve all TIFF file in the selected folder. If this is checked the process will go through every TIFF file in the folder and import the images even if the TIFF file was previously imported. This can make the process take a long time if there are many TIFF files in that directory. If it is unchecked, the process will only import the file that was previously selected in step 2. NOTE: A message box will appear when it is done asking if you want to look at a report. If there were any errors it will show in this report. Also, VR ignores the Batch Limit when importing this way.
4. After the Signature files have been imported. The click the “Return Ballots from Envelope Reader” button to bring up the Batch list.
5. This list will show batches that have been imported into VR. Once all signatures have been processed out of the batch, the batch will disappear from this list. Highlight the batch you want to process and click “Continue”.

6. Step through each of the images accepting or rejecting them.

Importing Voters from VRSystems Voterfocus

Voters can be imported from VRSys so that ballots with Mark Area 1 or 2 filled in can be reported. The report is at the bottom of the first tab. Click the 'UpdateBatch List' first to scan the ballot files. Note that the option in VBMScan on Election SetUp on the 2nd tab to 'Write Image Files' must be enabled in order to create the ballot files.

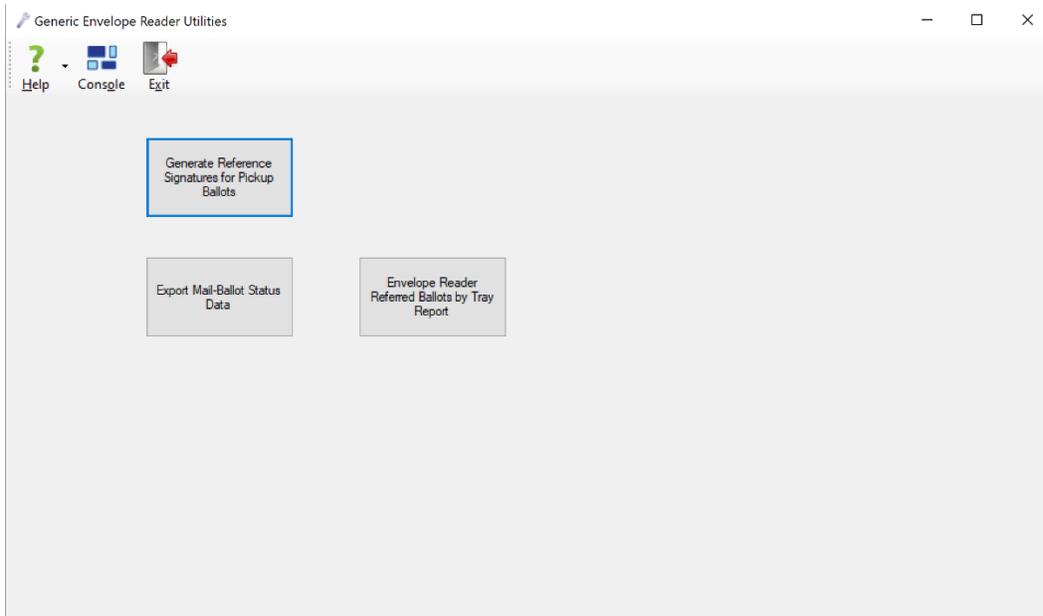
To create the voter list export in VR do the following steps.

In VR Console under Vote By Mail click on “Envelope Reader Utilities”

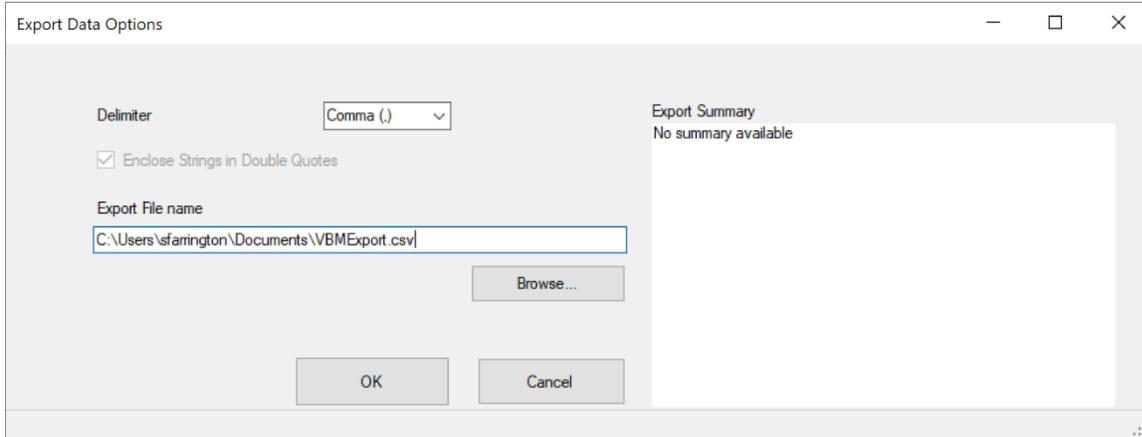
In VR Console under Vote By Mail click on “Envelope Reader Utilities”

Click on “Export Mail-Ballot Status Data”

Click on “Export Mail-Ballot Status Data”



An Interface box will appear. There are 3 options for Delimiter (Comma, Tab, Pipe). Leave it on the default, which is Comma. Select the location and file name to be created and click “Ok”. It took about 30 seconds to run 120,000 records, so it runs quickly. The interface file disappears when complete.



To import the file, click the Import button on the DB Functions tab.

Mega (FL) Voter Registration System

Note that in the INI file, the OutputDir parameter was set to H:\Voternet\reliavote_sigs\. This is the reliavote_sigs folder under the VoterNet folder on your system. The image files will be placed here and have a file name like this:

sig_vvvvvvvv_eeeeee_bbbb_nn_sss.tif

where:

vvvvvvvv is the voter id

eeeeee is the election code

bbbb is the batch number

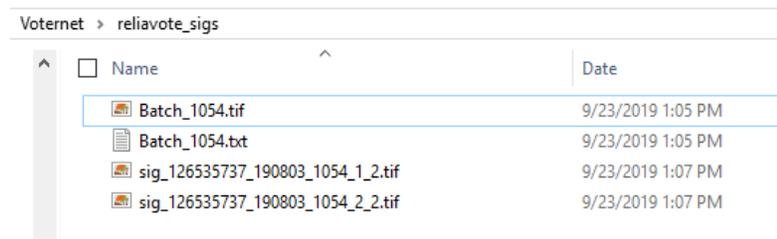
nn is the count in the batch

sss is the status (0=sig not checked, 1=sig valid, 2=sig not valid, did not meet threshold)

The status of 0 usually indicates that a reference signature was not available. The 1 status indicates that the signature comparison yielded a score greater than **MinimumConfidenceLevel** set in the INI file.

In Mega, open the Absentee Ballots/VBMScan In form. You will be required to select an election and the Absentee Returns for along with the ReliaVote Sig Verification form will be opened.

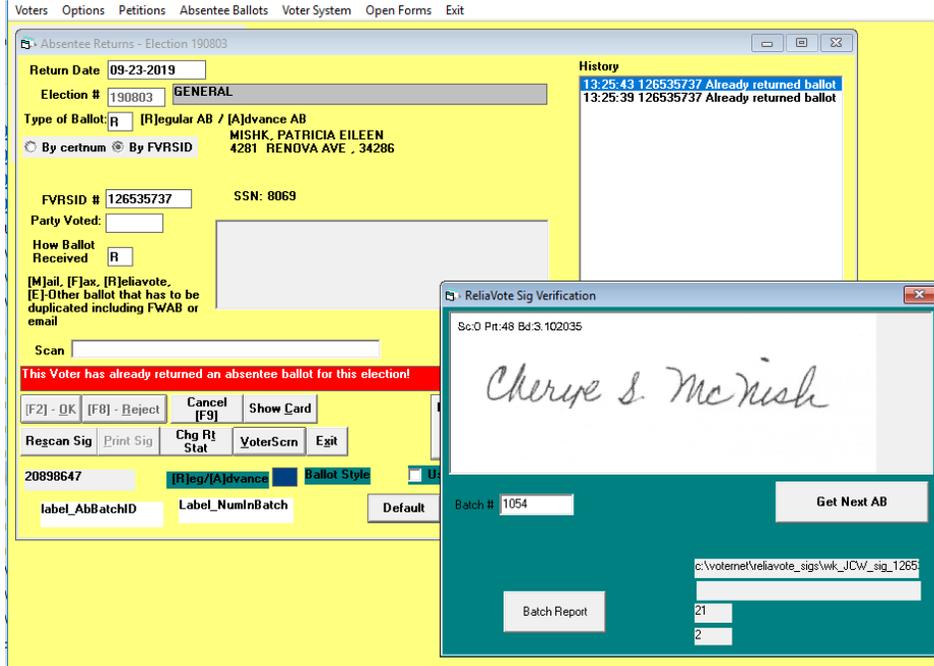
Key in the batch number into the text box and click the Get Next AB button. It will look at the signature files in the voternet\reliavote_sigs folder.



Name	Date
Batch_1054.tif	9/23/2019 1:05 PM
Batch_1054.bt	9/23/2019 1:05 PM
sig_126535737_190803_1054_1_2.tif	9/23/2019 1:07 PM
sig_126535737_190803_1054_2_2.tif	9/23/2019 1:07 PM

If a signature has a status of 1 (valid) it will be automatically processed as a valid AB return. If it does not have valid status, the signature will be presented to the user along with the

reference signature on file and the user will be given the opportunity to accept or reject the ballot.



There is also a Batch Report button with will generate a report like this:

VBM Batch Pull Report

09-23-2019 13:26:40

Batch: 1054

Pull Count : 2

Good Count : 0

Being Worked Count : 0

Not Worked Count : 0

Pull List:

Batch 1054 # 1 ID 126535737

Batch 1054 # 2 ID 126535737

This is the final pull report which includes all ballots which had readable barcodes, but are rejected for any reason.

ESS PowerProfile Voter Registration System

VBMScan interfaces with ESS Powerprofile via the Tritex interface. This must be enabled by ESS before use.

Importing Voter List Into VBMScan

Signatures and voter lists are exported from PowerProfile/ELVIS. This is done under PSR and a template should be created.

Be sure to include Voter Signature as a field. This causes it to also export a zip file with the signatures when the report is created. The report needs the following fields and should be a csv file.

- text_name_first
- text_name_middle
- text_name_last
- text_name_suffix
- text_registrant_id
- text_cascade_line_1
- text_cascade_line_2
- text_cascade_city
- text_cascade_state
- text_cascade_zip

This will create two files. one with the list of voters and the other is a zip file containing the signature images.

The signature images should be unzipped into the refsigs folder under a sub-folder named '1'. Each day as new signatures are exported, create additional sub-folders with incrementing numbers such as c:\vbmscandata\refsigs\2 and so on.

The list of voters is imported in VBMAAdmin under the DBFunctions tab. Click the Import Voter List button to import.

Importing Results into PowerProfile

Import is via Trytek interface. You must contact ESS support to enable this interface. It is done under Advanced, System Parameters, Enable Interface Trytek.

Module/Advance/Create Batch

Because import specification does not support valid / invalid ballot, we create two separate files, one for valid and one for not valid and use the defaults when doing the import.

The sig and full images are created along with the regular image files in the Processed_dir/batch path. When the import is run, the sig image files are deleted by Powerprofile. The full path to each image is specified in the csv file so the image can be imported at the same time as the csv file.

The screenshot shows a Windows-style dialog box titled "Create Batch with Tritex". It contains several input fields and a "Browse" button. The "Election" field is set to "PR2022", the date is "08/02/2022", and "# of Batches" is "1". The "Import From File" checkbox is checked. Below that are fields for "Batch ID", "User ID", "Hand Count", and "Date Returned" (set to "7/21/2022"). There is a checked checkbox for "Automatically Apply Defaults". At the bottom, a "Defaults" section contains four dropdown menus: "Contact Method" (Tritek), "Ballot Status" (Accepted), "Date Returned" (7/21/2022), and "Reason".

The Export file is created when VBMBrowse Upload Ballots is run.

Files created are

- 1) Output_path\VBMExport_" & batchnumber & "_Valid.csv
- 2) Output_path\VBMExport_" & batchnumber & "_NotValid.csv

The files should be imported separately into PowerProfile with the defaults set to 'Valid' for the valid file and 'NotVALid' for the not valid file.

This is done under the Advanced Module, Create Batches, Log Ballot Returns. A separate batch is used for each of the two import files, valid and not valid.

VBMBrowse is used for setting status ballots and should be run in the non Canvassing Board mode.

VBMBrowse Setup

VBMBrowse is used to verify the signatures. In VBMAAdmin, the following settings are used for ColScore.

On the VBMBrowse tab, enter the names of any users who will be verifying signatures. They will use the id you enter here to login. Also, be sure to uncheck the CanvBoardMode checkbox. Click both save buttons.

VBMAAdmin v1.9.0

Scanner1 DBFunctions Col SCORE VBMBrowse VBMBrowse Buttons Ballot Image Challenge Reasons

● Judges

Group	User1
GRP_1	BILL
GRP_2	JONW
GRP_3	
GRP_4	
GRP_5	
GRP_6	
GRP_7	
GRP_8	
GRP_9	
GRP_10	
GRP_11	
GRP_12	
GRP_13	

Save

ShowUploadBallots Button
 ShowPullReport Button
 CanvBoardMode

CheckMissingSig from Mark1
 Show Defer to Admin Button

Mark2 Msg: nothing [Color: RED]

Mark2 Missing Msg: nothing [Color: BLACK]

Save

On the 'VBMBrowse Buttons' tab, select the following from the dropdowns. Note that Challenge Codes are not used.

VBMAAdmin v1.9.0

Scanner1 DBFunctions VBMBrowse VBMBrowse Buttons Ballot Image Challenge Reasons

	Function	Button Text	Challenge Code
Button 1	Mark Sig As Matching ▾	Mark Sig As Matching	▾
Button 2	Mark Sig As NOT Matcl ▾	Mark Sig As NOT Matching	▾
Button 3	Signature Missing ▾	Signature Missing	▾
Button 4	--Not Used-- ▾		▾

Save

DFM Voter Registration System

Setup

In EIMS, navigate to the Resources Menu, System-Wide Options screen, Absent Voter Module, Vendor Settings, and review/select the following settings under Mail Processing Vendor Settings page.

Vendor Name: Select 'Runbeck – Duo/VBMScan'

Signature Extract File Path: Use the "..." button to select the file path on the network where extract images will be stored for use by the MPV.

Records per Return Group: Groups are divided by tray numbers supplied in the incoming MPV data file. One group will be created for each tray. Thus, this field will be ignored. NOTE: EIMS can only support up to 9999 return ballots in a single tray/group.

Operation

Create Export files for VBMScan

Two files are to be provided to VBMScan by EIMS in order to share both the Ballot Issue data and Voter Signature data . These files are automatically generated by EIMS during normal Vote by Mail processing tasks.

The files are generated when the county runs the following processes in EIMS:

- Issue Envelopes Process Used when issuing ballots in large batches/groups to many voters
- Counter Screen Used for issuing ballots to voters In-person

Both functions will create:

- Issue Envelopes text file Is a tab-delimited text file with all Voter Ballot Issue information required to print envelopes
- Signature Files in .tif format Matching Voter Signature files will be create in the Signature Extract File Path (defined in the System Wide Options) with a new sub Folder created for each day. These should be copied to the VBMScan Reference Sigs folder.

When VBMScan runs scanning ballots, two files are created for import into EIMS. These are in the Output folder.

- Batch_1007_DFM.txt - where 1007 is the current batch number. This file has the list of ballot ids.
- Batch_1007.tif - this is a multi-page tiff file which holds each of the images in the batch

Import Files Into EIMS

To import the incoming MPV Scanned Ballot Envelope Files into EIMS for further processing, please do the following:

1. From the VBM Group Control screen, click on the Control Panel tab (4th tab on the screen).
2. Select 'GET Available Scanned Envelopes'
3. Use the Select Files for Import dialog screen to select the files to be imported. Simply browse the network and import files from the appropriate Server.
4. When the process is complete a message will display, click OK.
5. Select the Groups Tab on the VBM Group Control screen.
6. Select the Returns Group Type to see the VO (Verify Only) Return Groups created. One group for each tray will be displayed. Each VO Return Group will be in an 'Open' status.
7. To process a VO Return Group, select any of the just imported groups and click either of the Return Processing Mode buttons:
 - a. Verify Only Single
 - b. Verify Only Multiple

The Import process will create an Import Errors file in the directory where the files were retrieved from. This file will contain the Ballot Issue ID for any ballot that failed to process correctly.

<ImportFileName> & ImportErrors_" & CurrentDateTimeStamp") & ".txt"

Import File Access Issues

Please be sure to check the User Security access permissions to Servers and File Locations that Import Files will be accessed or written to. This is usually the number one issue that causes delays in processing.

MPV Tray Report

When the processing of the Verify Only Return groups is complete, run AVMR033 – List of Returned Absent Voters by Tray. Select the groups that have just been completed. The Report will list the voters by tray and display which records have been challenged so ballots can be pulled from the tray.

Colorado-SCORE Voter Registration System

SCORE Exports

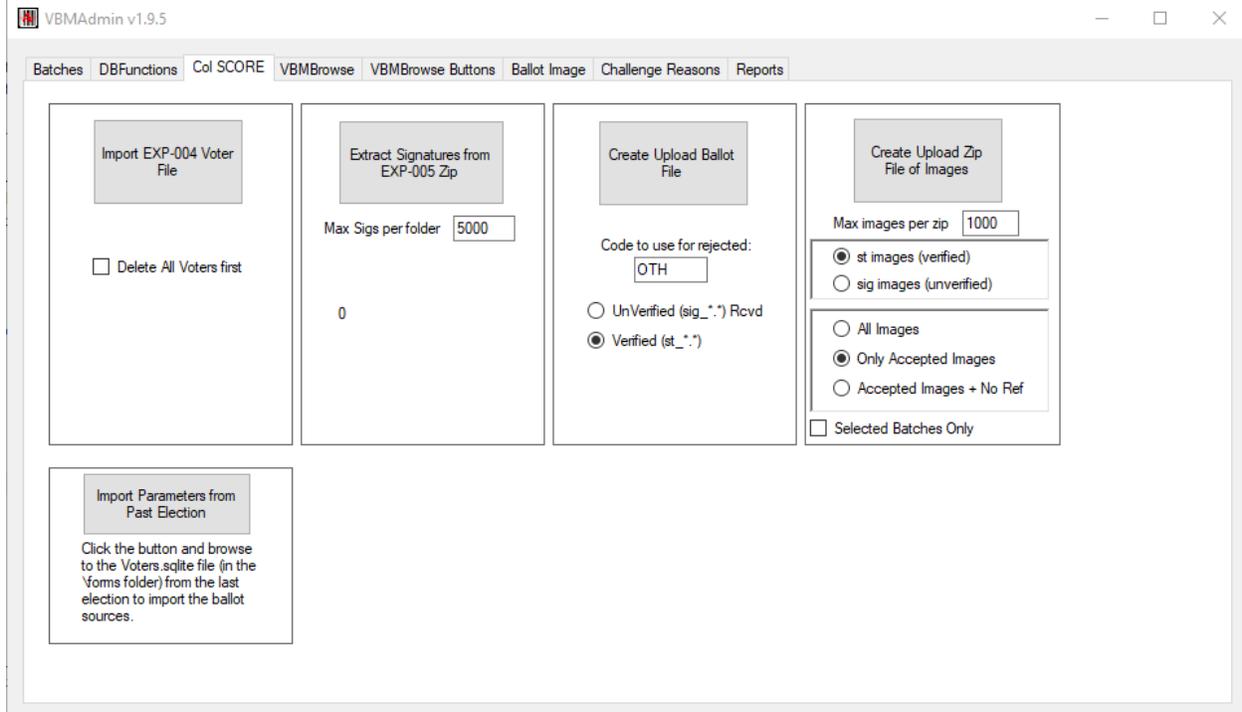
Two files are exported by SCORE.

- EXP-004 Ballot Verification System Export - List of ballots issued for an election. This is used to cross reference for building the return import files by VBMScan
- EXP-005 Voter Signature Export - signature image files for comparison to ballot sigs.

The EXP-004 files are imported into the system using VBMAAdmin. These files will be created regularly during the election cycle as new voters are registered and sent ballots.

Importing the EXP-004

The EXP-004 file is used to cross reference the ballot Tracking Num and the VoterID. The import is done in VBMAAdmin on the 'Col SCORE' tab.



Select the Col Score tab and click the 'Import EXP-004 Voter File' button. Browse to the location of the EXP-004 file and select it to import. If this is the first file for an election, click the 'Delete All Voters first' checkbox.

EXP-005 Extracting the Signatures

The EXP-005 is a zip file with sig images for all of the voters. These will be downloaded from SCORE. The first download will be the largest and supplemental downloads will be done after that.

Click the 'Extract Signatures from EXP-005.zip' button. A dialog will open to allow selection of the zip files. Note that more than one file can be selected and all will be unzipped.

These will be placed in a daily folder under the Reflimages folder. Enter the Max Sigs per folder and click the 'Extract Signatures from EXP-005 Zip' button and browse to the zip file downloaded from SCORE.

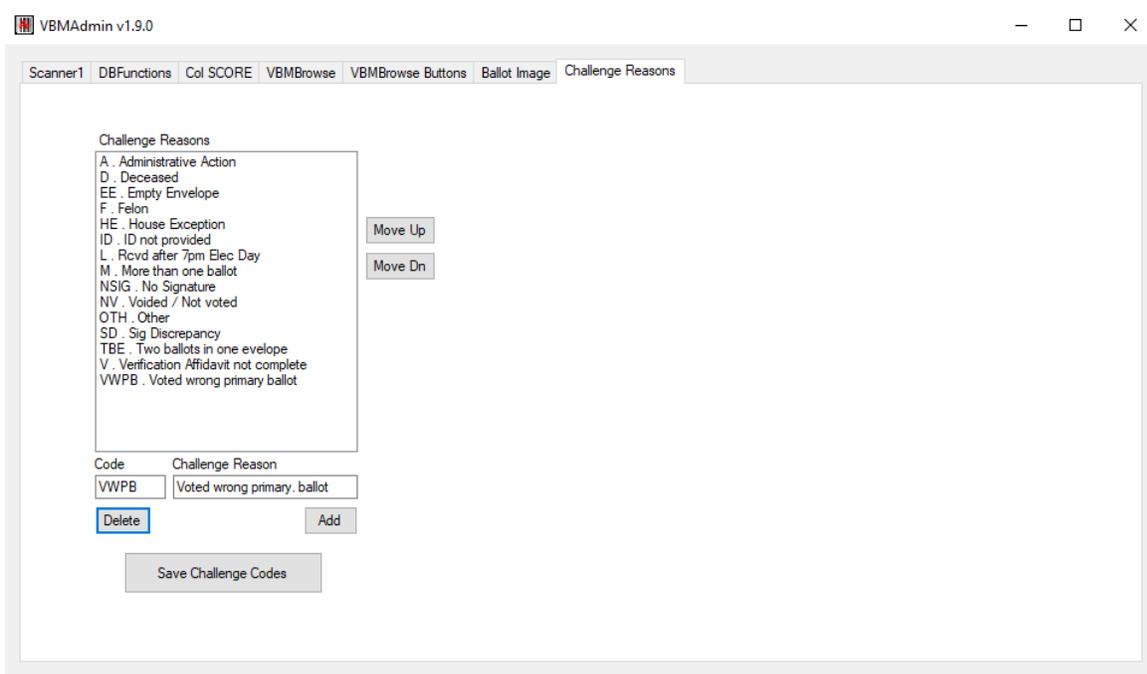
If the download consisted of multiple zip files, you can select more than one to unzip.

Under the refsigs folder, new folders will be created with incrementing numbers for each extraction.

Challenge Reasons

The table of challenge reasons is the list of reasons you can select from to mark a ballot as invalid. This is done in VBMBrowse.

In VBMAAdmin, select the Challenge Reasons tab.



Add the Challenge Reason that you use to this list.

Sources

For import into SCORE, the source codes must match their requirements. The source codes are set up on the un VBMScan on the Election Setup form (Admin Tab/Election Setup).

In Election Setup, click the Barcode/Doc tab.

Election Setup

Election Settings BarCode/Doc

Barcode Settings

VoterID Start (1 based) Election Start Expected VoterID Length (0=variable)

VoterID Length Election Length Allow non-numeric characters in voter id

Other Doc Settings

Save Ref Images Don't Combine Alternating Images ScanFromFiles-UsefileAsID

Save Envelope Images Combine Alternating Images Vertically

Write Test Images Combine Alternating Images Horizontally

WriteImage Files

Sources

- M~Mail
- D~Dropbox 1
- D~Dropbox Outside Office**
- O~Counter / In Office
- A~HCF
- E~Email
- F~Fax

Move Up

Move Dn

D~Dropbox Outside Office

Delete Add

Cancel Save Settings User Guide

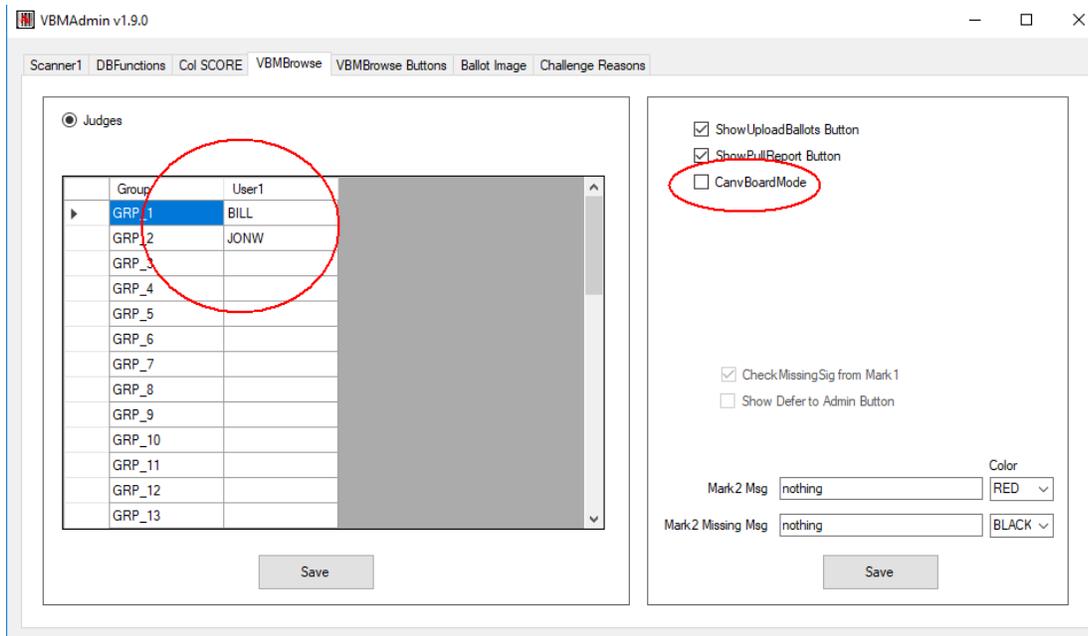
The sources are entered as code and description separated by a tilde (the shifted key to the left of the '1' key on the keyboard). The valid codes are M, D, O, A, E and F. The description

after the tilde can be anything you wish. After entering these, save and exit VBMScan and come back in for them to show in the dropdown on the main tab.

VBMBrowse Setup

VBMBrowse is used to verify the signatures. In VBMAAdmin, the following settings are used for ColScore.

On the VBMBrowse tab, enter the names of any users who will be verifying signatures. They will use the id you enter here to login. Also, be sure to uncheck the CanvBoardMode checkbox. Click both save buttons.



On the VBMBrowse Buttons tab, select the following from the drop downs. The button 3 option selected here will display the list of Challenge Reasons for the user to select.

VBMAAdmin v1.9.0

Scanner1 DBFunctions Col SCORE VBMBrowse VBMBrowse Buttons Ballot Image Challenge Reasons

	Function	Button Text	Challenge Code
Button 1	Mark Sig As Matching	Mark Sig As Matching	
Button 2	Mark Sig As NOT Match	Mark Sig As NOT Matc	SD
Button 3	Invalid - Select Code	Invalid - Select Code	
Button 4	Signature Missing	Signature Missing	NSIG

Save

Importing Verification Results into SCORE

During the scanning process, a file is created for upload into SCORE for each ballot that passed signature verification. This file is in the Output folder and has a name like 'SCOREImport_1018.txt' where 1018 is the batch number.

If you go through the VBMBrowse manual verification process, then there is the option there ('Upload Ballots' function in VBMBrowse) to generate the upload report again, which you would use instead of the one created during scanning.

Another method of creating the upload file is in VBMAAdmin on the Col SCORE tab. Clicking the 'Create Upload File' will create an upload file combining all of the batches from the Batches tab which have 'Verified' checked and 'Uploaded' not checked. The file will be named after the highest number batch selected.

If the 'Unverified' option is checked, it will only upload the status of 'Received'.

Importing Signatures into SCORE

After the election, an upload file of signatures for accepted ballots is created by VBMAAdmin on the 'Col SCORE' tab.

This file is placed in the Output folder. The filename is BALLOT_ENVELOPE_SIGNATURES_MMdyyyhhmsstt.zip where 'MMdyyyhhmsstt' is replaced by the time and date of the run.

If the number of images exceeds the number entered in the 'Max images per zip' textbox, then multiple zip files will be created, each with slightly different timestamps.

If you do not use VBMBrowse to review the images, they will still be stored as 'sig_' images, but are changed to 'st_' images if approval is done in VBMBrowse.

Switching to New Election

After switching to a new election, go into VBMAAdmin and select the Col SCORE tab. Click the Import Parameters from Past Election button at the bottom left and navigate to the /forms folder from the last election and select the Voters.sqlite file. This will import the sources from the last election. You can verify these on the Election Setup form, on the BarCode/Doc tab.

Oregon OCVR system

OCVR uses web services to allow the VBMScan system to communicate directly with the state voter database. In VBAdmin, the OR-OCVR tab has most of these functions.

VBMAAdmin v1.9.2

Batches DBFunctions VBMBrowse **OR-OCVR** VBMBrowse Buttons Ballot Image Challenge Reasons

County ID Election Date (mm/dd/yyyy) Use Test System

Get Sources

Get Challenge Codes

Request FullImageExport

Num days back (0 for all)

GetBallotData Delete Ballots First

UploadBallotResults

Batch

Valid Sig Challenge Code

Valid, Need Sig Update

Invalid Sig Challenge Code

Missing Sig Challenge Code

Cnt

Before scanning, several functions on this form should be run. First enter the county code in the textbox at the top of the form. Before running any of the functions, a valid election date (a date for an election that is in OCVR) must be entered. This can be a past election.

Get Sources

This function executes the following web service to retrieve the ballot source list from OCVR. If your locally maintained list is more current, then you do not need to do this.

Get Challenge Reasons

GetChallengeReasons - retrieves the list of valid challenge reasons. This is used for entering the challenge reason codes to be used for valid ballots, invalid ballots and ballots with missing sigs.

0

```
ElecID : 100001053
ElecDate: 11/03/2020
Descr : General Election
Ballots : 62542
Challenge Reasons)
018. No signature on file
024. Multiple signatures
025. Ballot envelope open
026. Residence address changed
027. Wrong person signed, same household
028. Wrong person signed, different household
029. No signature on ballot
030. Name change, signatures don't match
031. Power of Attorney
032. Signed with stamp, no attestation on file
033. Printed signature, no attestation on file
034. Other county
035. Missing label
036. Duplicate ballot voted
037. Missing ballot
```

RequestFullImageExport

This function sends a request to OCVR to export images for all of the ballots. The resulting file is zipped and placed on the SFTP server. The result shown in the list box shows the number of images and file name.

Enter the number of days since the last image file download, or '0' for the first download in the 'Num Days Back' box. Entering a '1', for example, would only retrieve the images for voters added in the last day.

Num days back ('0' for all)

Delete Ballots First

Click the 'Request FullImage Export' button to request the export.

```
DA1AU2.tar.gz, Num Recs:62489
ElecID : 100001053
ElecDate: 11/03/2020
Descr : General Election
Ballots : 62542
RequestFullImageExport)
IMAGES02.tar.gz, Num Recs:26813
```

After doing this, depending upon the number of voters.ballots in the election, there may be a delay of several hours before the download file is available.

You will download using ftp the image files and copy them into the refsignatures folder in the VBMScan data for the particular election. To download, you will need to contact OCVR to get

a user and password. The ftp site used is different from the one used to upload ballot pdf images.

On the ftp site, when the download is complete, there will be two files (xx is your county number):

IMAGESxx_done.txt

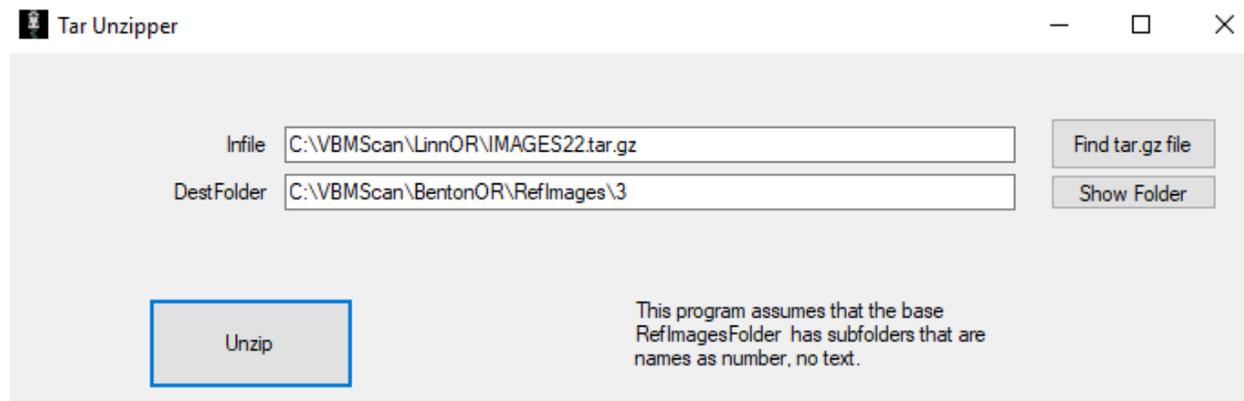
IMAGESxx.tar.gz

The first one indicates that the file is complete. Do not download the tar.gz file until the '_done.txt' is there. After downloading the tar.gz file, delete both from the remote server. This allows the server to create new files the next time you request them. You do not need to download the '_done.txt' file.

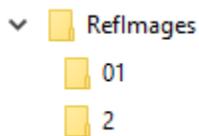
A tar.gz file is a compressed file that can be extracted with a zip tool. Unzip the contents into the refsignatures folder in the VBMSdata.

VBUnZip

The VBUnZip.exe application provides an easy way to unzip the images.



Run the VBUnZip.exe program by double clicking on the program in the VBMScan programs folder. When it starts, it looks for sub-folders in the RefImages folder and gives the Destination folder as a new folder that will be created with a name that is the number one higher than the highest subfolder found. It is assumed that these subfolders will be named as incrementing numbers. In the case above, the highest number folder found was 'C:\VBMScan\Benton\RefImages\2', so it will create the next folder as '3'.



Click the 'Find tar.gz file' button to browse to the IMAGESxx.tar.gz file that was downloaded and then click the Unzip button. This application does not show the progress as the unzipping is done, but you can see it by opening a Windows explorer and watching the number of files increase in the Destination folder.

When it is complete a message box will be displayed. You can then click the 'Show Folder' button to open a Windows explorer for that folder to view the unzipped images.

The manual process for unzipping is to open a command prompt and use the following command:

```
tar -xvzf C:\PATH\TO\FILE\FILE-NAME.tar.gz -C C:\PATH\TO\FOLDER\EXTRACTION
```

GetBallotData

Requests the list of ballots issued within a period. Enter the number of days to look back. If this is the first run, check the checkbox to Delete Ballots First. The results of this call are imported into the local voter database to cross reference the images. On the first run, enter a zero to get all ballots.

For each subsequent run (typically daily), enter the number of days back to run so as to include any ballots mailed since the last retrieval.

This can take a few minutes and the count of ballots being retrieved shows in the lower left corner as they are retrieved.

VBMAAdmin

Scanner1 DBFunctions VBMBrowse **OR-OCVR**

County ID Election Date (mm/dd/yyyy)

Update Ballot Sources

Num days back Delete Ballots First

Valid Sig Challenge Code
InValid Sig Challenge Code
Missing Sig Challenge Code

Batch

19982

ElecID : 100001053
ElecDate: 11/03/2020
Descr : General Election
Ballots : 62542
Ballot Data

UploadBallotResults

Uploads the ballot status for a batch of ballots. Enter the challenge codes for each of the statuses, Valid, Invalid and Missing Signature and the batch code to upload.

Note that this can also be done with the Upload Ballots button in VBMBrowse.

This process uploads directly to OCVR via web services.

VBMBrowse Setup

VBMBrowse is used to verify the signatures. In VBMAAdmin, the following settings are used for Oregon OCVR.

INDICIUM Voter Signature Verification Scan System – 6/17/2024

On the VBMBrowse tab, enter the names of any users who will be verifying signatures. They will use the id you enter here to login. Also, be sure to uncheck the CanvBoardMode checkbox. Click both save buttons.

VBMAAdmin v1.9.0

Scanner1 DBFunctions Col SCORE VBMBrowse VBMBrowse Buttons Ballot Image Challenge Reasons

● Judges

Group	User1
GRP_1	BILL
GRP_2	JONW
GRP_3	
GRP_4	
GRP_5	
GRP_6	
GRP_7	
GRP_8	
GRP_9	
GRP_10	
GRP_11	
GRP_12	
GRP_13	

Save

ShowUploadBallots Button
 ShowPullReport Button
 CanvBoardMode

CheckMissingSig from Mark1
 Show Defer to Admin Button

Mark2 Msg: nothing Color: RED

Mark2 Missing Msg: nothing Color: BLACK

Save

On the VBMBrowse Buttons tab, select the following from the drop downs. The button 3 option selected here will display the list of Challenge Reasons for the user to select. Button 2 accepts the signature as valid, but inserts a challenge reason to request a new registration card from the voter.

VBMAAdmin v1.9.0

Scanner1 DBFunctions VBMBrowse OR-OCVR **VBMBrowse Buttons** Ballot Image Challenge Reasons

	Function	Button Text	Challenge Code
Button 1	Mark Sig As Matching ▾	Mark Sig As Matching	▾
Button 2	Mark Sig As Matching ▾	Mark Sig As Matching/Update	093 ▾
Button 3	Mark Sig As NOT Matcl ▾	Mark Sig As NOT Matching	049 ▾
Button 4	Invalid - Select Code ▾	Invalid - Select Code	▾

Save

Election Setup Screens

INDICIUM Voter Signature Verification Scan System – 6/17/2024

Election Setup

Election Settings BarCode/Doc

Election Settings

Interface Type: OR-OCVR Use Signature Comparison Threshold 5 Or Threshold 0 + Partial 75

Election ID: 110519 Show Batch Review Tab

Election Date: 11/10/2021 Automatically Create Audit PDF Write score on Sig Image: Top Bottom

Station Num: Show Undeliverables Tab Batch Size 200 Set Status on SigX Pass

File Directories

Use Base Path + Election Define Individual Paths

Base Path Change Dir

Reference Signature C:\VBMScan\BentonOR\RefImages\ Change Dir

Batch Output C:\VBMScan\BentonOR\Output\ Change Dir

Batch Logs C:\VBMScan\BentonOR\Logs\ Change Dir

Processed Batches C:\VBMScan\BentonOR\Processed\ Change Dir

Bad Barcodes C:\VBMScan\BentonOR\Output\BADbarcodes\ Change Dir

Test Files C:\VBMScan\BentonOR\Test\ Change Dir

AutoIt Exe C:\Program Files (x86)\AutoIt3\AutoIt3.exe Change Dir

AutoIt Script Folder C:\Projects\AutoIT\StLouisMO\ Change Dir

Form Files C:\VBMScan\BentonOR\Foms\ Change Dir

Batch Settings

Reset Batches Starting Batch #: 1037

Cancel Save Settings User Guide

INDICIUM Voter Signature Verification Scan System – 6/17/2024

Election Setup

Election Settings | BarCode/Doc

Barcode Settings

VoterID Start (1 based) Election Start Expected VoterID Length (0=variable)

VoterID Length Election Length Allow non-numeric characters in voter id

Other Doc Settings

Save Ref Images Don't Combine Alternating Images ScanFromFiles-UsefileAsID

Save Envelope Images Combine Alternating Images Vertically

Write Test Images Combine Alternating Images Horizontally

Write Image Files

Sources

1~Mail
1_100000217~MAIL - FWIB
1_100000218~MAIL - FEDERAL
1_100000219~MAIL - HTML
1_100000220~MAIL - LARGE PRINT
1_100000225~MAIL - PDF
1_100000233~MAIL - HAVA
1_200000067~MAIL
2~Drop Box/Site
2_100000197~COURTHOUSE - 4TH STREET
2_100000216~CORVALLIS - SOUTH - SUNSET BUILDING
2_100000235~DROP SITE - HAVA

Delete Add Move Up Move Dn

Cancel Save Settings User Guide