

**North Carolina Board of Elections  
INDICIUM Vote-by Mail Scan System  
FAQ**

### What it is?

Physical processing of the incoming ballot envelope which can scan both sides of the ballot envelope, imprint a date and time stamp with batch number and sequence information\*, then automatically verify the voter signature by comparing it to a reference signature in the Voter Registration system.

*\*The imprinter is disabled during the pilot project*

### What it is not?

It is not a solution for tabulating votes; this requires other software for voting record scanning.

### Why is it needed?

Before a ballot can be opened and processed, the ballot envelope signature needs to be verified against a reference signature in the voter registration database with an audit trail.

### Who do I contact if there are issues with the system?

Please contact your State IT Service Help Desk. The State IT Service desk will determine if it is a workstation issue, an INDICIUM VBScan software, or scanner hardware issue. If it is a VBScan or Hardware issue. The State IT Service Help Desk will initiate a service ticket through BizTech for resolution.

### What resources are available for training?

- The INDICIUM VBM Scan user Video
- Kodak Alaris User Manual
- INDICIUM VBM Scan Manual
- INDICIUM VBM Scan Standard Operating Procedures and Best Practices document
- INDICIUM VBM Scan FAQ document
- To get more help contact your IT Service Help Desk
  - These items are also available on your desktop and the BizTech website
  - [Indicium Election Ballot Resources - Biztech \(forbiztech.com\)](#)

### What do I need to do to maintain the scanner's performance?

You should be cleaning your scanner frequently. Refer to the Kodak user manual for recommended cleaning sequence includes vacuuming the scanner transport, cleaning the residue from the feed module tires, separation roller tires and drive rollers and cleaning the imaging guides.

From time to time you may be required to change the consumables for your document scanner. You have been provided with an initial supply of consumables with the purchase of your new scanner. If you need more consumables for the scanner contact:

#### BizTech Solutions

- Phone:732-761-2880
- Email: info@forbiztech.com
- Typical items you may need include:
  - Roller Kits
  - Imprinter Ink
  - Imaging Guides

As part of your service contract a Kodak Technician will come on-site once per to provide a Preventative Maintenance service. Please reach out to Kodak to schedule your on-site maintenance (800) 356-3253.

### Who do I contact if I need Additional Signature Verification Packs?

BizTech Solutions

Phone:732-761-2880

Email: info@forbiztech.com

### How many envelopes can I scan in a batch?

For best results, scan in batches of 15 to 20 ballot envelopes at a time. This makes the physical stack of paper easier to manage. It also makes retrieving ballot envelopes for Tier Two Review faster and easier.

### What do I do if an envelope keeps jamming?

Step 1.) Did you remove the pre-separation pad from the feed rollers inside the scanner? If not, refer to your SOP guidelines for instructions on how to remove it.

Step 2.) Check the plastic pouch to see if the photocopy of the voter's ID has been folded too many times. This will stop the scanner because it has detected a multi-feed (meaning too many pages). If the photocopy has been folded multiple times, remove it from the pouch, scan the envelope on its own, then replace it in the plastic pouch.

Step 3.) Toggle the switch on the front left of the scanner to open the mouth of the feeder tray wider. You will not see it move, but the hardware will accept a thicker envelope without triggering a multi-feed error.

Step 4.) Toggle the switch on the back right of the scanner, "behind" it. This will open the rear exit tray and allow the ballot envelope to pass straight-through the scanner from front to back (rather than in a u-shaped path from bottom to top). NOTE: be sure there is room behind the scanner and a bin to catch the envelope once it passes through the exit tray.

### How are the signatures compared?

INDICIUM's software can identify when a signature is authentic, even if there is significant variation between signatures on a ballot and those in a signature reference database. INDICIUM's verification elements include:

- Slant – signatures from the same voter should be slanted in the same way.
- Size and proportion of letters – letters should share the same proportions.
- Ending strokes – if a signature has a long ending stroke and the reference signature does not, it may not have come from the same hand.
- Speed of writing – the system can detect signatures lacking fluidity or appear to be halting to identify potential fraud
- Pen lifts – marks that indicate when and where the pen was lifted from the paper during signing
- Machine Learning – verify a signature as authentic even if it has changed gradually over time

### How is the signature verification score calculated?

Signature comparison is performed by INDICIUM VBM software using the same technology as banks and financial institutions for signature comparison. The software reads the unique bar code on the outside of the ballot envelope to identify the voter and matches it with a reference signature from the Voter Registration system. The two signatures are compared using analytical and geometrical analysis to verify the authenticity of the signature on the mail-in ballot envelope.

### What is an acceptable signature verification score?

The acceptable score level – or “threshold” – for a signature to be automatically verified is set by the State Board of Elections based upon analysis for optimal throughput and accuracy during the pilot project. Please contact your IT representative for questions about “thresholds” for acceptance.

### What if a voter’s signature has changed over time?

INDICIUM VBM Scan software can adapt through machine learning to look at proven key characteristics that are hard to detect with the naked eye. It can identify when a signature is authentic even if there is significant variation between a signature on a ballot and a signature in the reference database.

### What happens to rejected ballot envelopes?

Ballots with signature scores below the pre-set threshold or score are to be removed from the batch for Tier Two Review performed by the County Board of Elections.

### Can this solution create a report of ballot envelopes not verified in each batch?

Yes, reports can be accessed in the INDICIUM Admin panel on the “Reports” tab.

### Can unused signature verifications be carried over from year to year?

No, a new signature verification pack must be purchased each year. Signature verifications not used in a year cannot be used the following year. (i.e.: use it or lose it)

### Can this solution identify when a voter is not registered?

If a voter reference signature is not present in the voter registration database INDICIUM will generate a score of -1, indicating that the signature could not be matched and validated. Additional signatures may be required to determine if the voter is registered.

### Does this solution tabulate the actual vote?

No, the solution is designed for signature verification of the mail in ballot only.

### Is the envelope scanned before or after the ballot is removed from it?

During the pilot the envelope is scanned after it has been opened. During a regular election, the envelope will be scanned unopened.

### Does it matter which way I scan the ballot envelope?

Yes, refer to your SOP and best practices for loading ballot envelopes and other documents into the scanner feeder.

### What is the purpose of the batch number printed on the scanned ballot envelope?

The batch number allows for easy retrieval of the ballot envelope if it needs to be removed for Tier Two Review.

### How long does the signature verification process take?

Signature verification takes less than one second per ballot. Scanning each ballot envelope can take up to 2 seconds depending on the settings of the scanner.

### Can the software be configured to check for other types of data on the ballot envelope?

Yes, the software can be configured to identify other types of data such as check boxes and witness signatures.

### What do I do if the system is having trouble matching barcodes?

Start by cleaning the scanner glass with a microfiber cloth. Smudges on the glass can lead to poor image quality that interferes with barcode reading.

### Why is the scanner jamming more than it used to?

Start by cleaning or replacing the rollers. Paper residue can build up over time causing the roller to slip. The rubber tires on the rollers will wear overtime, which can also lead to misfeeds.

### The scanner jammed in the middle of a batch. How do I know if a ballot envelope has been scanned or not?

Open the scanner by pulling the lever on the right side of the case to “open the hood”. If the ballot envelope is stopped *before* the glass it has NOT been scanned and should be replaced in the feeder tray. If the ballot envelope is stopped *after* the glass, this means it has been scanned and should be placed in the exit tray. If the ballot envelope is stopped on the glass, it should be removed and placed in the feeder tray to be rescanned.

### When can I connect the laptop to the network?

The INDICIUM Signature Verification system is protected from malicious threats and potential bad actors by means of an “Air Gap”. Therefore, the Internet ports and Bluetooth connectivity on the workstations have been turned off.