



# Verity Management & Best Practices



## Module 1

# Getting Started

## **In this course, election officials and staff will:**

- Obtain an overall grasp of Verity Office and the Verity Voting System
- Gather tools for managing the change from a legacy system to Verity
- Acquire the information necessary to manage elections using Verity
- Receive an introduction to Verity Layout, Build, Central, Relay, and Count administrative functions and options
- Apply the information available to plan training functions
- Manage staff user permissions information
- Access software and firmware audit log information and reports.

**Usability** – Verity makes election administration and voting easier, by providing user-friendly tools that reduce complexity and streamline productivity.

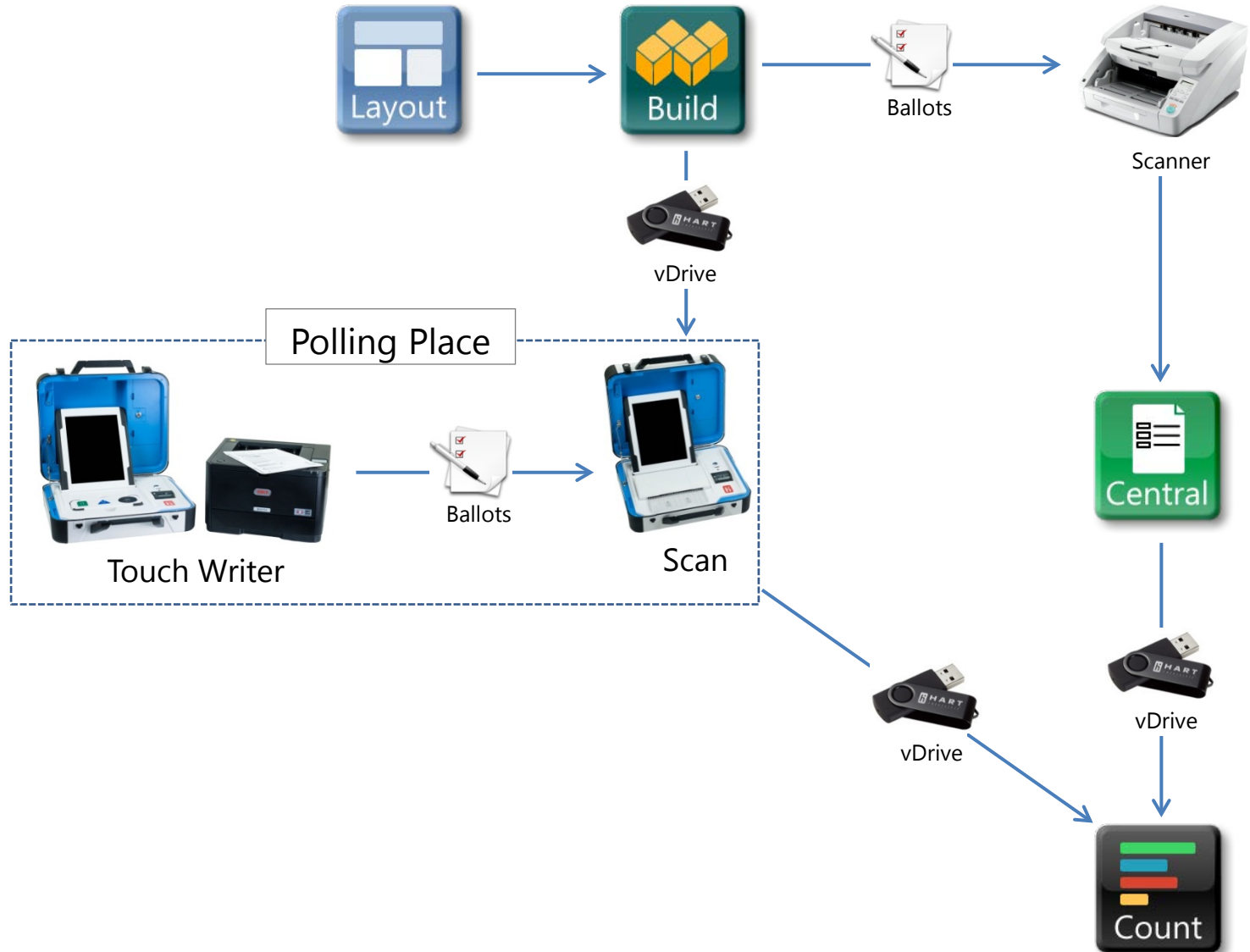
- Modern, intuitive, friendly software design, across the entire suite
- Innovative hardware that is easy to store, transport, set up and operate.
- Usable, plain language ballot design and reporting.

**Adaptability** – Verity is designed to support any kind of election (in-person voting, by-mail voting, convenience voting etc.), and to be flexible enough to change as your needs change.

- Election management (Verity Election Office) + voting system (Verity Voting) is a unique “ecosystem” approach that can respond to legislative changes and support new apps over the long term.
- Modular parts allow Hart to convert Verity devices from electronic to paper and back, as your jurisdiction’s needs evolve.

**Transparency** – Verity provides for open, secure and easily auditable elections.

- Store images from Verity Scan scanning devices.
- Robust filters to print and export ballot images from Verity Central, with adjudication notes, if desired.
- Built-in Auditing Dashboard in Verity Count, to export Cast Vote Record data according to your specific, customized desires.
- Usable, easy-to-read plain language audit reports from every software application.
- Easy, efficient methods to validate software on voting devices and desktop workstations.



Using Verity Touch Writer, voters mark digital ballots via a touch screen. After the voter has confirmed their selections, the marked ballot prints. The voter then retrieves and casts their ballot.





Verity Touch Writer is compatible with **Verity Access**, which provides the following voter input options (in addition to the touch screen): buttons with scrolling wheel, headphones, and tactile button or sip-and-puff devices. The Verity Access can be docked within the Verity Touch Writer or held in hand.



**Verity Scan** is a polling-place-based digital scanner for voted ballots. It can be used with manually marked ballots or those printed via the Verity Touch Writer. If a voter marks contests incorrectly on their ballot, Verity Scan gives the voter the opportunity to check and/or correct their ballot before casting. Verity Scan deposits scanned paper ballots into its secure ballot box for locked storage.



In the Verity system, **vDrives** are used to transfer ballots from software to device for voting, and to transfer voted ballots to software for tabulation.

vDrives also carry the audit log for their associated device to ensure voting remains fair.

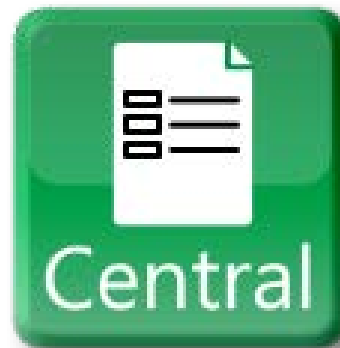
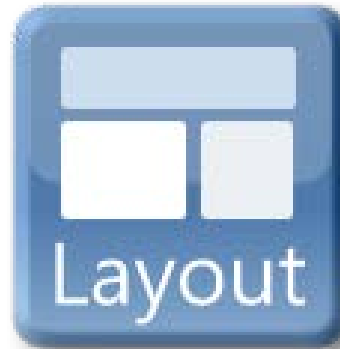




## Verity Key

**Verity Key**, is a small security device that is programmed for each election. Verity Key is inserted into a USB port.

Verity Key is part of Verity's two-factor authentication process. Two-factor authentication requires each user to have something (a programmed Verity Key) and to know something (the passcode associated with the Verity Key). Both the user passcode and the Verity Key must be authenticated together. Certain operations within the Verity Voting system require the Verity Key to be inserted and the passcode to be entered. Only when the Verity system authenticates the Verity key and password will it allow the operation to continue. If Verity fails to authenticate a Verity Key or password, the Verity Key may not have been programmed properly for the current election.





**Election Data**



**Jurisdiction Data**

- Design ballots
- Import data
- Proof ballot layout
- Export ballot to Verity Build



**Ballot Translations**



**Ballot Audio**





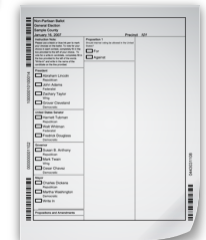
- Proof ballots
- Accept ballots
- Print ballots
- Create vDrives and Verity Keys



**Keys**



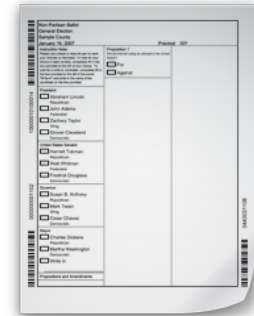
**vDrives**



**Print Ballots**



**By-Mail Ballots  
Received**



**Ballots Sorted**



**Ballots Scanned**



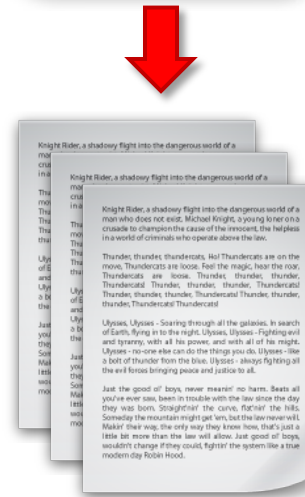
**Ballots Resolved**

- Scan ballots
- Resolve ballots
- Write scanned ballots to vDrives for tabulation in Verity Count





- Read vDrives
- Tabulate
- Create reports and export results



**Count Reports**

## Verity Security Features

- Verity Voting utilizes the AAA (authentication, authorization, and audit) security framework
- All Verity software has been tested by an independent voting system test lab and the Election Assistance Commission to ensure proper security.
- Verity uses a multi-layered authentication process
- Verity software is tamper evident
- Comprehensive audit logs are generated for all login attempts, data transfers, configuration changes, and errors. Logs are stored redundantly and securely.
- Vote records are stored redundantly for security and auditability.
- The integrity of the data is protected from power outage, power surge, magnets, and rough handling.

- What's with all these new terms?
- Change management is the process of managing a change to bring order to a situation.
- Change affects organization's structure, status quo, and staff.
- Change is often met with resistance.

## Exercise 1.1

(On notebook paper in small groups or on chart paper in small groups)  
Answer the following questions, then share.

1. Given what you now know of Verity, how will your job change?
2. How will others' jobs that most affect you change?
3. How can your team best adapt to these changes?

# Strategies for Change Management

## **20/20**

- ☐ Be brutally honest about where you are.
- ☐ Identify your organization's goal with concise 20-20 foresight.
- ☐ Focus on the goal, communicate, provide feedback.
- ☐ Never lose sight of the "big picture", but keep track of the pieces.

## **ADKAR**

- ☐ Establish the AWARENESS that there is a need to change.
- ☐ Encourage the DESIRE to support change.
- ☐ Identify KNOWLEDGE gaps, provide training.
- ☐ Give people the ABILITY to implement change – empower leaders.
- ☐ Provide REINFORCEMENT and incentives.

## **Best Practices to Help Managers Successfully Implement Change**

- ☐ Begin change management activities early.
- ☐ Follow strategic plans (for example: Variance Analysis and the Project Plan)
- ☐ Make certain every team member knows his/her role and responsibilities
- ☐ Delegate
- ☐ Empower
- ☐ Encourage
- ☐ Identify risks
- ☐ Ask for help when you need it
- ☐ Communicate
- ☐ Take advantage of training opportunities

## Exercise 1.2

Identify a strategy to follow during implementation. Examples of some strategies are the 20/20 Change Agent strategy or the ADKAR strategy. Teams list favored strategy(ies) and favored best practices on notebook paper. Share.

## Exercise 1.3

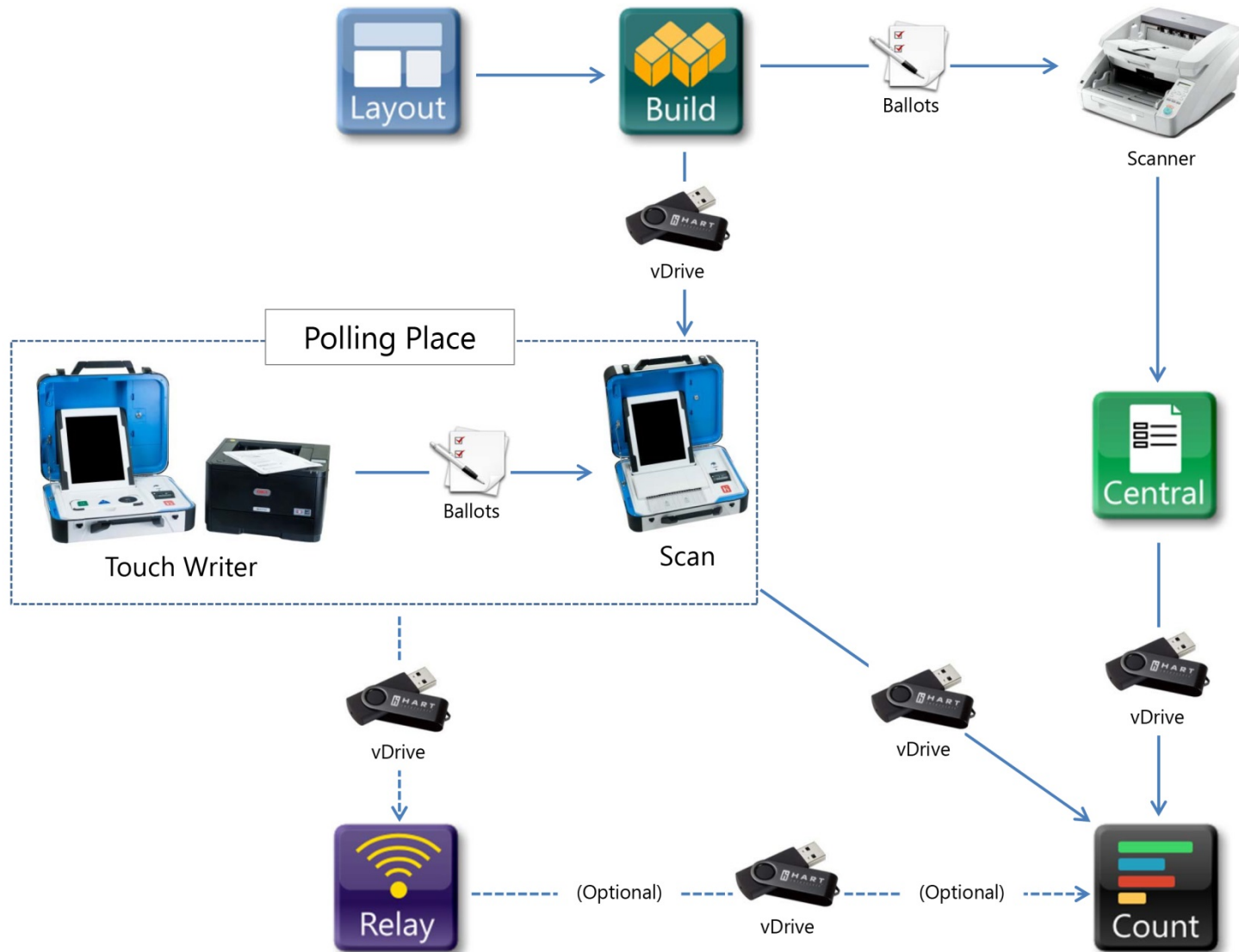
Discuss labor intensive tasks that can now be eliminated with Verity. Share. (*example: no more SERVO*)





## Module 2

# Election-Related Management



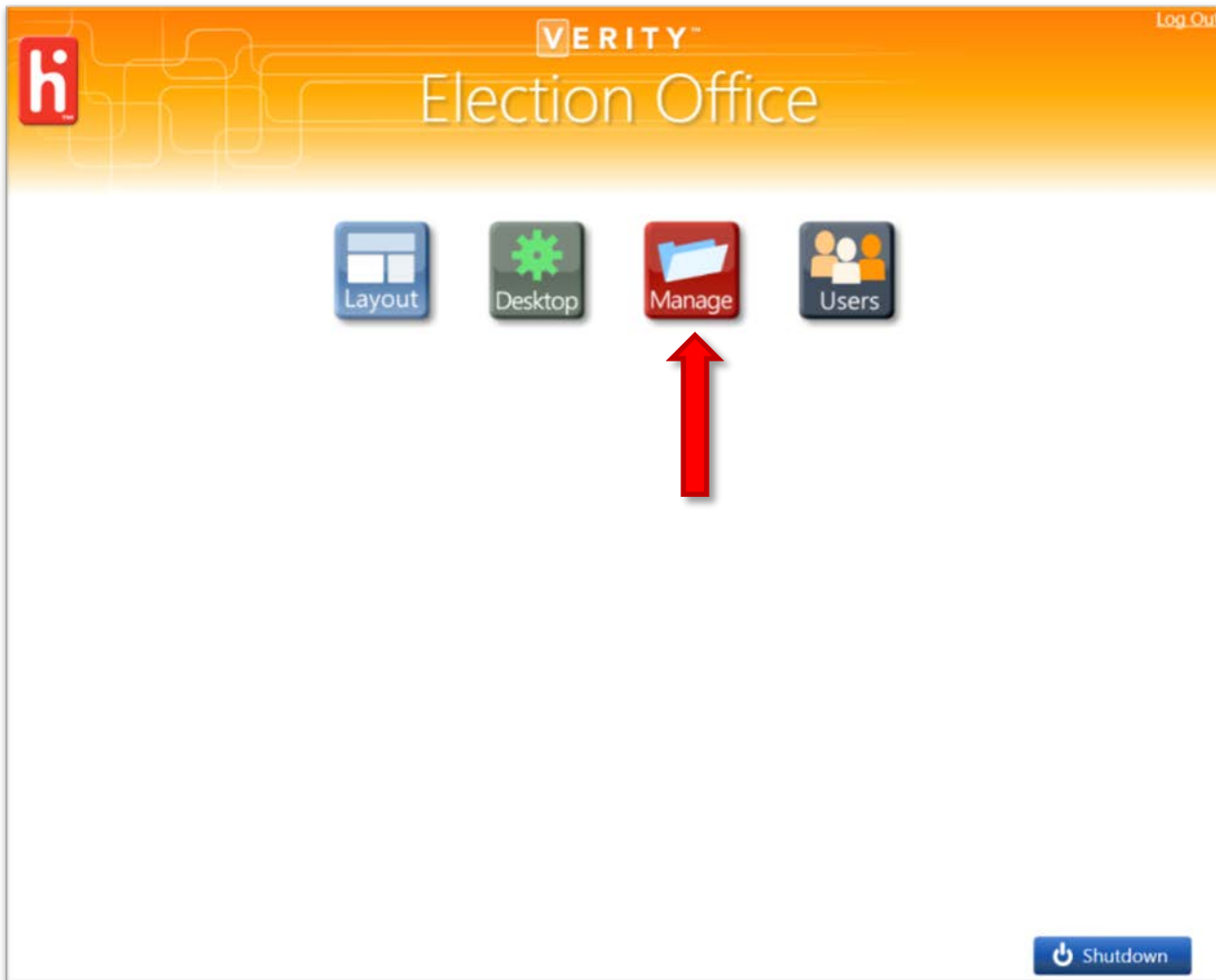
## Verity Election Workflow Topics

- Election security procedures
- Training
- Public relations/voter education and outreach
- Election Creation
  - Ballot design and layout in Verity Layout
  - Ballot and media creation in Verity Build
- Hardware maintenance, testing and preparation
- Live voting events - absentee, early voting in-person, and election day
  - Scanning ballots in Verity Central
  - Tabulation in Verity Count
  - Reporting
  - Recount and audit procedures
- Post-election data archival and management





## Verity Election-Related Tasks Checklist

### Managing Elections in Verity Election Office



Choose  
**Manage**  
button from  
Verity Election  
Office  
Dashboard


## Managing Elections in Verity Election Office

Home   03:51 PM 05/29/2014 [Log Out](#)

**VERITY™ Election Management** Workstation: W1494024503

Select an election from the list below Actions

| Name                               | Election Type  | ID    | Election Date | Status           |
|------------------------------------|----------------|-------|---------------|------------------|
| Clearwater County General Election | General        | 77296 | 5/29/2014     | Open for Editing |
| City of Tres Rios Primary Election | Closed Primary | 91161 | 5/29/2014     | Open for Editing |



An election is highlighted when selected

### Actions Button

[Home](#) 02:37 PM 05/30/2014 [Log Out](#)

**VERITY™ Election Management** Workstation: W1494024503

Select an election from the list below

| Name                               | Election Type  | ID    | Election Date |
|------------------------------------|----------------|-------|---------------|
| Clearwater County General Election | General        | 77296 | 5/29/2014     |
| City of Tres Rios Primary Election | Closed Primary | 91161 | 5/29/2014     |

**Actions**

- Add
- Copy
- Rename
- Delete
- Import
- Import Signed
- Export Signed
- Archive
- Restore

Add, Copy, Rename, Delete, Import, Archive or Restore an Election

- You will meet with your Project Manager to submit jurisdiction and election information to Hart InterCivic.
- Hart sends you vDrives with your election programmed on them.
- You place vDrives into Verity polling place equipment.
- You perform a Logic and Accuracy Test from a Test Deck.
- You conduct election and tabulate.



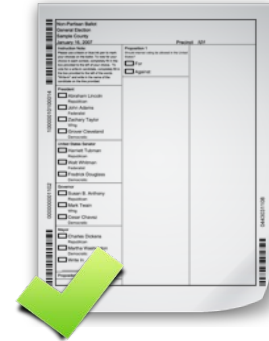
**Customer submits  
ballot information and  
vDrives to Hart**



**Hart creates election  
database**



**Hart sends proofs of  
ballot styles to  
customer for approval**



**Hart sends all  
materials for customer  
to run a live election**



**Hart sends Test vDrive  
to customer for  
approval**



**Hart adds audio to  
election database**



# Polling Place Security Recommendations

- **Restrict access to voting equipment** behind locked doors when not in use
- **Ensure chain of custody** when delivering or transferring any voting equipment or ballots.
- **Maintain documentation** for authentication purposes containing serial numbers, seal numbers and identification to anyone tasked with delivery or transport.
- **Do not leave voting equipment unattended** when polling place is open.
- **Put in place and follow local guidelines relating to device seals and chain of custody procedures**, including what to do if a seal is broken.
- **Put in place and follow Access Code procedures.** Do not issue Access Codes or ballots until voter has been qualified and there is an available voting booth.
- **Report any suspicious activity** to the local election officer.



## Security Recommendations for Device Storage

- **Use security cameras** in the voting system storage facility.
- **Use a secure access system** and limit the number of keys to the voting system storage facility.
- **Use a burglar and fire alarm system** in the storage facility.
- **Verify that all voting devices are returned** to storage after each election.
- **Maintain an inventory of all election materials**, including any serial numbers and location information
  - Voting devices
  - vDrives
  - Security seals and keys
  - Voter registration lists/poll books
  - Election results tapes, printouts, logs and reports

## Security Recommendations for Device Transport

- **Use chain-of-custody forms and seals** when transporting equipment for any reason. Create and follow local procedures, such as sealing the inner box with serialized tamper-evident tape, logging the seal number on the chain-of-custody form, and using an outer shipping box.
- **Always check device seals** and confirm that they have not been tampered with during transport; sign the chain-of-custody document(s) upon receipt of the voting devices.
- **When accepting equipment being returned from Hart:** perform acceptance testing within 10 business days to confirm functionality and firmware version. Perform hash code testing to confirm that the certified firmware has not been compromised.



## Module 3

# Planning Verity Training and Voter Education

- Management & Best Practices
- Administrator Training *(software)*
  - Layout
  - Build
  - Central
  - Count
- Train the Trainer
  - Polling Place Operations
  - Assisting Persons with Disabilities
- Support Procedures *(including Troubleshooting)*

## Who needs what training?

Poll workers *(training given by election officials and staff)*

- Polling Place Operations
- Assisting Persons with Disabilities

Lead pollworkers, election officials & staff *(given by Hart)*

- Train the Trainer

Election officials and staff *(given by Hart)*

- Management & Best Practices
- Support Procedures *(including Troubleshooting)*
- Administrator Training *(software)*
  - Layout
  - Build
  - Central
  - Count

In the **Train the Trainer course**, lead poll workers, election officials and staff will learn how to successfully conduct the appropriate polling place operations course(s) in order to teach poll workers how to:

- Operate the voting equipment
- Instruct voters
- Set up the polling place components
- Assist voters
- Suspend (and reopen) or close the polls, and
- Pack up the equipment



The **Polling Place Operations course**, taught by election officials and staff, provides poll workers with an overview of the Verity system, the benefits of using Verity, and Polling Place Operations.

In this course, Trainees will learn to successfully:

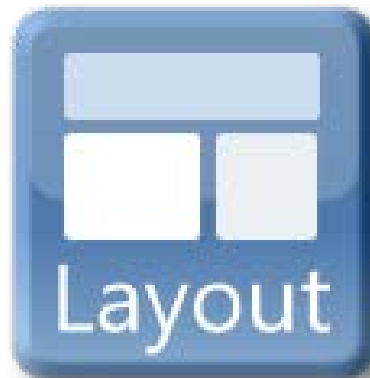
- Set up the voting equipment
- Open polls
- Instruct and assist voters
- Suspend/Close polls

The **Assisting Persons with Disabilities** course, taught by election officials and staff, provides poll workers with the knowledge, awareness and sensitivity needed to instruct and assist persons with disabilities using the Verity Touch and Touch Writer.

After completing this course, trainees will successfully instruct and assist persons with disabilities in the accessibility features of the Verity Touch and Touch Writer systems.

**The Verity Layout administrator's course** introduces the Verity Layout application and takes the trainee through the steps of preparing the ballot for Verity Build.

This course includes instruction on entering election specific data, as well as formatting the ballot before it is imported into Build.



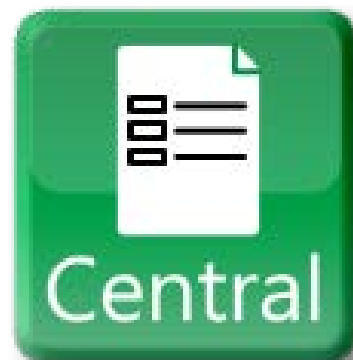
In the **Verity Build administrator's course**, election officials and staff will:

- Obtain an overall grasp of Verity Office
- Have the information and skills necessary to operate Verity Build software for any election
- Learn how to create paper ballots and electronic files for off-site printing
- Learn how to create vDrives



In the **Verity Central administrator's course**, election officials and staff will:

- Run voted paper ballots through the Verity Central scanner
- Resolve unresolved ballots
- Write the scanned cast vote records to the vDrive
- Prepare the cast vote record (CVR) for Verity Count vote-tabulating software.



In the **Verity Count administrator's course**, election officials and staff will:

- Obtain an overall grasp of Verity Office
- Have the information and skills necessary to operate Verity Count software for any election
- Learn how to read and tabulate vDrives
- Learn how to resolve cast vote records
- Print reports



In the **Support Procedures course**, election officials and staff will:

- Practice proper storage, delivery, and maintenance practices for longevity of the hardware components.
- Learn how to perform Functionality and Acceptance Tests with the polling place hardware. Trainees will also learn how to prepare the hardware for an election, prepare for field technician and help desk operator training, and troubleshoot the hardware.
- With knowledge of Verity Service & Maintenance procedures, local personnel can run full election cycles independently. All of the procedures involved are straightforward and they lend themselves to local modifications.

## **Full System Customers**

1. Schedule training and reserve training room.
2. Create a training database that is similar to the upcoming election. We recommend creating a short training ballot with fictional or historical candidate names.
3. Create media and set up equipment for training.
4. Print ballots, if Scan is to be included in training.
5. Conduct training.
6. Reset equipment.
7. Repeat 5 & 6 until all poll workers are trained.



## **Service Bureau Customers**

1. Schedule training and reserve training room.
2. Obtain training vDrives from Hart InterCivic.
3. Obtain ballots from Hart InterCivic, if the Scan is to be included in training. These ballots must be compatible with the vDrives.
4. Conduct training.
5. Reset equipment.
6. Repeat steps 4 and 5 until all poll workers are trained.

## Verity Documentation

- Verity documentation is included with each implementation.
- Documents will vary by implementation, but may include:
  - Polling Place Operations Guide
  - Polling Place Operations Quick Guide(s)
  - Support Procedures Guide
  - Administrators Guide (*software*)
  - Train the Trainer Course Pack
  - Supporting materials and planning tools
    - vDrive Planning Worksheet
    - Logs & Labels
- Documentation is intended to support and follow the training courses as well as provide ongoing reference

## **Voter Education Materials**

- Available materials may include:
  - Voter instruction flyers
  - Voter instruction posters and placards
  - Multimedia
- Materials may be purchased from Hart or obtained from a local vendor using custom templates developed by Hart and the jurisdiction
- Create and follow a plan for distribution of materials at the polling place

## **Verity Training Planner**

- The Verity Training Planner is designed to assist election officials and staff with planning and conducting training events.
- The Training Planner will outline the number of trainees for each course and the training time allotted for each trainee.

## Exercise 3.1

Hand out and review the Verity Training Planner for this implementation. Are all users who will be affected by change included in training? How does the timeline work?

## Exercise 3.2

Discuss available documentation for Verity, including the audience for each document and how they might be used in a training course.

## **Exercise 3.3**

View and discuss materials needed for Voter Education.  
Identify best use of materials within the polling place.



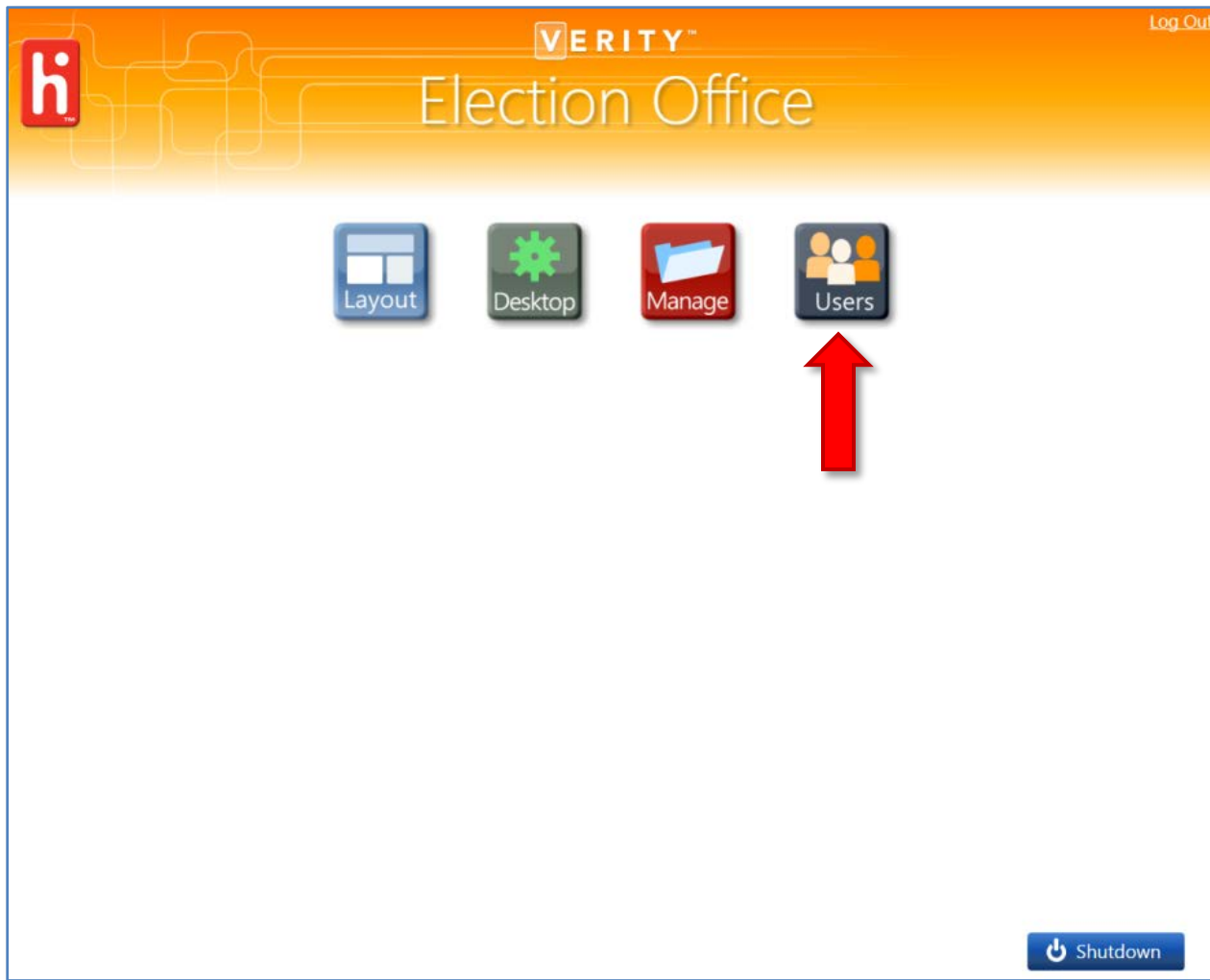
## Module 4

# Verity Software Administration Tasks



- Use two-person control procedures (i.e., the “buddy system”) when accessing computers with Verity Software
- Assign a password Administrator
- Limit number of passwords issued
- Change logins and passwords regularly

### User Management



Choose **Users**  
button from  
Verity Election  
Office  
Dashboard

### Adding Users

- Click **Add** to add a new user
- Set rules for all users on the right

Home Log Out

**VERITY™** User Manager

Manage users with the grid below.  
Expand a user entry to assign roles.

| User Name  | Password | Account Locked           |
|------------|----------|--------------------------|
| bscheibler |          | <input type="checkbox"/> |
| user       |          | <input type="checkbox"/> |
| roman      |          | <input type="checkbox"/> |
| jmillar    |          | <input type="checkbox"/> |
| jvaldez    |          | <input type="checkbox"/> |

Set rules that apply to all users.

☒ Lock accounts after  failed login attempt(s)

☒ Force password change every  month(s)


Enforce password complexity rules


☒ Must contain at least one upper-case character

☒ Must contain at least one numeric digit

☒ Must contain at least one special character

☒ Must be at least 6 characters long





Add
Delete
Save

### Adding Users

- Type the new User Name
- Click the + to view and assign roles



Home Log Out

**VERITY™ User Manager**

Manage users with the grid below.  
Expand a user entry to assign roles.

| User Name ▼  | Password ▼ | Account Locked ▼         |
|--------------|------------|--------------------------|
| + bscheibler |            | <input type="checkbox"/> |
| + user       |            | <input type="checkbox"/> |
| + roman      |            | <input type="checkbox"/> |
| + jmiller    |            | <input type="checkbox"/> |
| + jvaldez    |            | <input type="checkbox"/> |
| + newuser    |            | <input type="checkbox"/> |

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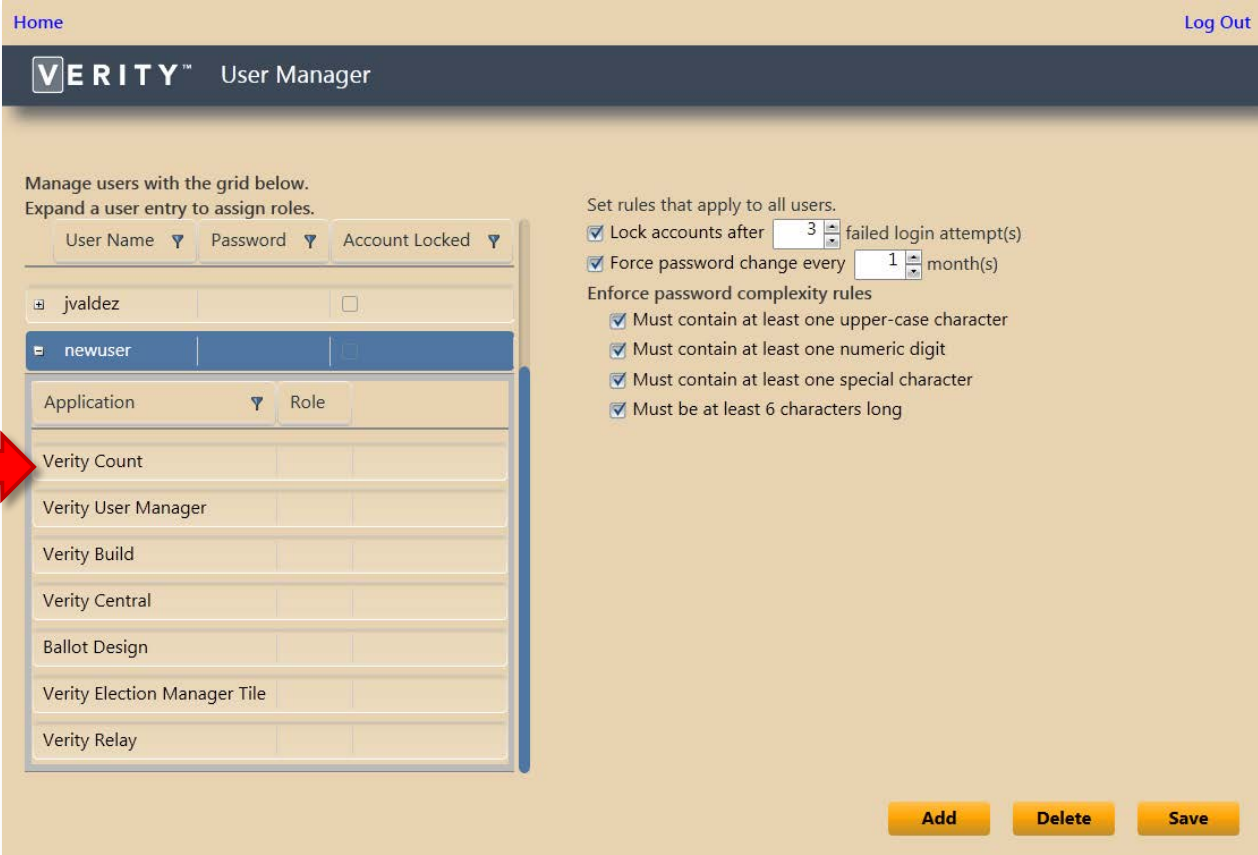
☒ Must contain at least one numeric digit

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☒ Must be at least 6 characters long

### Adding Users

- Assign roles for each Application



Home Log Out

**VERITY™ User Manager**

Manage users with the grid below.  
Expand a user entry to assign roles.

| User Name ▼    | Password ▼ | Account Locked ▼         |
|----------------|------------|--------------------------|
| jvaldez        |            | <input type="checkbox"/> |
| <b>newuser</b> |            | <input type="checkbox"/> |

| Application ▼                | Role |
|------------------------------|------|
| Verity Count                 |      |
| Verity User Manager          |      |
| Verity Build                 |      |
| Verity Central               |      |
| Ballot Design                |      |
| Verity Election Manager Tile |      |
| Verity Relay                 |      |

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Add
Delete
Save

### Adding Users

[Home](#)
[Log Out](#)

**User Manager**

Manage users with the grid below.  
Expand a user entry to assign roles.

User Name ▼ Password ▼ Account Locked ▼

|           |  |                          |
|-----------|--|--------------------------|
| ✚ jvaldez |  | <input type="checkbox"/> |
| ▣ newuser |  | <input type="checkbox"/> |

Application ▼ Role

|                              |                               |  |
|------------------------------|-------------------------------|--|
| Verity Count                 | ▼                             |  |
| Verity User Manager          | Count Operator<br>Count Admin |  |
| Verity Build                 |                               |  |
| Verity Central               |                               |  |
| Ballot Design                |                               |  |
| Verity Election Manager Tile |                               |  |
| Verity Relay                 |                               |  |

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Add

Delete

Save


### Adding Users

[Home](#)
[Log Out](#)


**User Manager**

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Expand a user entry to assign roles.

| User Name | Password | Account Locked           |
|-----------|----------|--------------------------|
| jvaldez   |          | <input type="checkbox"/> |
| newuser   |          | <input type="checkbox"/> |



| Application                  |                       |
|------------------------------|-----------------------|
| Verity Count                 | Count Admin           |
| Verity User Manager          | UserManager Admin     |
| Verity Build                 | Build Operator        |
| Verity Central               | Central Admin         |
| Ballot Design                | Layout Admin          |
| Verity Election Manager Tile | ElectionManager Admin |
| Verity Relay                 | Relay Admin           |

Set rules that apply to all users.

- ☒ Lock accounts after  failed login attempt(s)
- ☒ Force password change every  month(s)

Enforce password complexity rules

- ☒ Must contain at least one upper-case character
- ☒ Must contain at least one numeric digit
- ☒ Must contain at least one special character
- ☒ Must be at least 6 characters long

[Add](#)
[Delete](#)
[Save](#)

### Deleting Users

- Click **Delete** to remove a selected user

Home Log Out

**VERITY™** User Manager

Manage users with the grid below.  
Expand a user entry to assign roles.

| User Name ▼    | Password ▼ | Account Locked ▼         |
|----------------|------------|--------------------------|
| bscheibler     |            | <input type="checkbox"/> |
| user           |            | <input type="checkbox"/> |
| roman          |            | <input type="checkbox"/> |
| jmilller       |            | <input type="checkbox"/> |
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☒ Must contain at least one special character

☒ Must be at least 6 characters long

**Add Delete Save**



## Password Tips

- Passwords must be at least 6 characters
- Passwords should contain a numbers and letters
- Passwords should contain uppercase and lowercase letters

- Keep computer equipment in locked facilities, and use a log to monitor access.
- Maintain an accurate inventory of all voting system computers and peripherals by make, model, location and serial number.
- Maintain an accurate inventory of vDrives and Verity Keys.
- Keep vDrives and Verity Keys secured at all times.

## About Verity vDrives

- Write and Read vDrives in Verity Build
- vDrives contain Cast Vote Records and Election-specific audio data
- Each vDrive holds up to 10,000 Cast Vote Records
- Planning vDrive quantities:
  - Follow the **vDrive Planning Worksheet** to ensure you create enough vDrives for your election
  - Test Mode vDrives for the Logic and Accuracy Test (LAT)
  - Election Mode vDrives
  - At least 10% of totals as spare vDrives



## About Verity Keys

- Write and Read Keys in Verity Build
- Use when prompted to perform certain operations within the Verity system
- Use of Verity Key requires knowledge of the Verity Key passcode (created in Verity Build)
- Verity Keys can be programmed to share the same passcode, or have their own unique passcodes



## Verity Key Security Recommendations

- Label Verity Keys with a recognizable notation (e.g., jurisdiction name), but NOT with the passcode
- Log and limit the number of Verity Keys created, passcodes associated with the Verity Keys, and the individuals they are assigned to, and keep this information in a secure location.
- Change the Verity Key passcodes at regular intervals (i.e. for each election) according to local guidelines.
- Remove Verity Keys from workstations and devices when not in use and keep in a secure location.



## **Verifying software and firmware versions via device printout tapes**



## **Audit Logs and System Logs**

Through the Verity audit and system logs, you can:

- Track every action performed in plain language.
- Easily view which user performed each action.
- View at what time each action was performed.
- Audit and System Log reports are available in the reporting section of each Verity application.
- Audit Logs for devices are recorded on each vDrive.

## Exercise 4.1

If desired:

- Set the user names and passwords to each application
- View Audit Log reports

*NOTE: This can also be completed in software-specific training.*



## During the election process:

- **Back up** Verity application data at proper intervals to keep databases—and in turn, the entire election—organized.
- Doing so will enable you to practice proper election data retention and provide quick and easy recovery if needed.
- Backup data to two locations:
  - A separate folder on the workstation hard drive
  - A removable media, such as a USB drive

## After the election:

- **Archive** election data onto recordable CD-Rs or DVD-Rs.
  - Create at least 2 copies of each CD or DVD. Store one copy offsite.
  - Store discs away from direct sunlight in a climate controlled room.
- Clearly label the surface of the disc—not the case—with a permanent marker. Indicate the following data:
  - Application
  - Name and date of the election
  - What mode or state the database is in
  - Time/date-stamped folder name (if applicable)
  - Date and time of the backup
- Do not back up data solely to a hard disk drive.
  - Hard disk drives can be used for short term data storage during the election event, but should not be used as a long-term archive.

## When and What to back up

## Exercise 4.2

On chart or dry-erase board, trainer explains the characteristics of archive process per application.

## Exercise 4.3

Walk through an example of good vs. bad file structures for data organization (not Verity-specific).

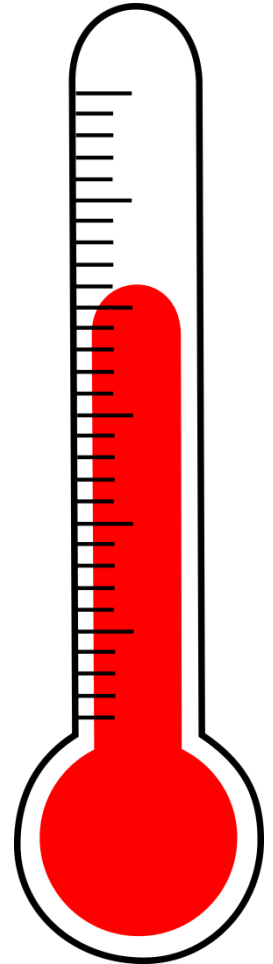


## Module 5

# Support Procedures Overview

## Equipment environmental standards

- Recommended operating temperature range of **41°-104° F**
- Recommended storage temperature of **less than 150° F**
- Recommended humidity of less than **85%** for operation
- Recommended humidity of less than **95%** for storage
- Power requirements: **120 VAC, 60 Hz, 60 W**
- Avoid excessive vibration or shock



## **Best practices for storage**

- Store voting equipment on racks, off the floor.
- Cover racks to protect voting devices from water damage from above (e.g., leaking roofs) and below (e.g., building flooding).



## **Power accessibility in Storage Facility**

- At least one workstation with AC power should be available for functionality testing of devices.
- Voting devices require 0.5 amps AC power to operate, so a standard 15 amp circuit will be adequate.



## **Thermal paper storage**

- Thermal paper that has been printed has a storage life of **7 years**
- Unprinted thermal paper should be used within **3 years**
- **Store paper at temperatures below 77° F. Do not expose to direct light or high humidity.**

## **Maintenance of equipment between elections**

- **Functionality Testing**
- **Preventative Maintenance Cycles**
- **Replacement Cycles**

## Functionality Test

A functionality test may consist of:

- Testing the touchscreen
- Testing Access Controller
- Testing the Verity Scan
- Testing Thermal printer
- Testing Laser printer
- Checking the system battery



## Preventative Maintenance Steps

Preventative maintenance for Verity devices consists of:

- Cleaning tablet touch screen displays (as needed)
- Cleaning Verity Scan scanners (annually, or prior to each election)
- Calibrating touchscreens (annually, or prior to each election)
- Calibrating scanners (annually, or prior to each election)
- Replacing system batteries (every 4 years)
- Replacing internal table CMOS batteries (every three years)\*
- Performing a basic functionality test

*\* Note: this step performed only by Hart*

### System battery maintenance between elections

- Rechargeable battery; Provides power for up to 2 hours on full charge.
- Recommended replacement cycle: every 4 years; can be replaced by the customer following procedures taught by Hart.
- Follow local guidelines when disposing of used battery packs.
- Follow Support Procedures Guide for instructions on reading battery indicators, testing charge and charging batteries



## Preventative Maintenance (PM) cycles

### Verity Scan

| Action                         | Frequency                                    | Performed By |
|--------------------------------|--|--------------|
| Clean Display                  | As needed                                    | User         |
| Clean Scanner                  | Inspect/Clean scanner after every 500 Sheets | User         |
| Calibrate Touch screen         | Annually                                     | User         |
| Calibrate Scan Head            | Annually                                     | User         |
| Replace system battery         | Every four years                             | User         |
| Replace CMOS Battery in tablet | Every three years                            | Hart         |

### Verity Touch Writer with Access

| Action                         | Frequency         | Performed By |
|--------------------------------|-------------------|--------------|
| Clean Display                  | As needed         | User         |
| Calibrate Touch screen         | Annually          | User         |
| Replace system battery         | Every four years  | User         |
| Replace coin Battery in tablet | Every three years | Hart         |

## **Replacement Cycles: Best Practices**

- Keep accurate asset logs of all equipment, including:
  - Computer workstations
  - vDrives and Keys
  - Scanners and Printers
  - UPS devices, power strips and cords
  - Voting equipment batteries
  - Other consumables, such as paper
- Note purchase dates for each
- Keep track of the recommended replacement cycles for budgetary and planning purposes





## Module 6

# Review and Conclusion

## Review

- Verity Workflow (Module 2)
- Verity Voting System Personnel and Training Requirements (Module 3)
- Database Archive: What to archive and when (Module 4)

- Hart Customer Support Center (Help Desk)  
1.866.275.4278  
8 AM-5PM CST, extended hours during election events
- Hart Support Online (HSO)  
<https://hartsupport.hartic.com/>
- Hart File Transfer Site (HTS)

## Exercise 6.1

Log in to Hart Support Online as customer. Visit knowledgebase. Enter issue or enhancement, if applicable.



# Election Logs Processes

## Exercise 6.2

View full set of Verity labels and logs, discuss processes.

**Questions?**