

This attachment lists the 18 documentation discrepancies and 7 functional discrepancies found during this Verity Voting 2.7 EAC test campaign.

PCA Documentation Discrepancies

HV27-1 Duplicate Instruction Steps - Transmission

EAC Priority: 5-Informational Status: **Discrepancy Addressed Description:**

The "Verity Remote Transmission Administrator's Guide" contains duplicate steps during the modem activation setup instructions. On page 159 of the document steps 3 and 5 both read "Connect the modem to be activated to the computer."

Resolution:

The Verity Remote Transmission Administrator's Guide updated the modem activation instructions removing the duplicate step and updating the remaining steps numerical values as a result.

HV27-2 Display layout - Central

EAC Priority: 5-Informational Status: **Discrepancy Addressed**

Expected behavior:

Documentation that includes instructions to users, including administrators and poll workers, matches what is shown on devices and workstations.

Witnessed behavior:

The Verity Central Election Preferences menu wording and layout varies slightly between what is displayed on the workstation to the user and the images in the "Verity Administrator's Guide: Central," pages 26-27. Specifically, in the "Default ballot scanning options:" sections the third line is written differently and swapped with the four lines.

On the device it reads:

- Allow duplicate unique IDs on ballots
- Allow incomplete multi-sheet ballots
- Accept issues in batch automatically during scan
- Treat unmarked write-ins as marked (grid-based ballots only)

On the documentation it reads:

- Allow duplicate unique IDs on ballots
- Allow incomplete multi-sheet ballots
- (grid based ballots only) Tread unmarked write-ins as marked
- Accept issues in batch automatically during scan

Resolution:

The image for the Election Preferences has been updated to match what is seen on the workstation. This issue is resolved.



HV27-3 Modification: Reporting Run cannot apply Aliases

EAC Priority:

5-Informational Status:

Discrepancy Addressed

Expected behavior:

Following the "Verity Administrator's Guide: Count" document on page 84, instructions show that when creating a custom report to select the "Reporting Run" option, followed by a series of selections including applying aliases, naming the report, and creating a title for the report header. **Witnessed behavior:**

When "Reporting Run" is selected, the "Apply Aliases" option is removed from the screen unable to be selected.

Resolution:

Documentation has been updated with a new image that appropriately no longer includes "Apply Aliases" when the "Reporting Run" option is selected. The letter indicators have also been updated removing references to aliases and is accurate with the Reporting Run setting.

HV27-4 Obtaining Device Files and Hashes

EAC Priority:

5-Informational

Status:

Discrepancy Addressed

Expected behavior:

Following the "Administrator Field Guide" on steps for validating device and obtaining files and hashes, instructions state to create an empty folder labelled "HartValidation" on a non-vDrive thumb drive. This along with gaining access to the "Additional Functions" menu by pressing the blue button during boot up, will generate a list of all files and hashes onto the thumb drive. Witnessed behavior:

Witnessed behavior:

Three tests were performed in which the Hart Hash files were obtained.

- The instructions were followed, and the device successfully generated all files and hashes into a new folder with the same label as the device serial number. However, no content was stored in the "HartValidation" folder.
- A blank USB was used to obtain all files and hashes. Even though the "HartValidation" folder was missing all files and hashes were successfully generated and stored into a new folder labelled as the device serial number.
- A blank vDrive with only a "root" folder was used, and the device successfully generated all files and hashes into a new folder labelled as the device serial number.

Resolution:

System Administrator Guide update reviewed and the instruction for creating a "HartValidation" folder has been removed.

HV27-5 Obtaining Workstation Files and Hashes

EAC Priority: 5-Informational Status: Discrepancy Addressed Expected behavior:



Following the "Administrator Field Guide" on steps for validating workstations and obtaining files and hashes, instructions state to insert a removable USB drive into the workstation, export system files and hashes by clicking Export, and selecting the location on the USB drive where to save the files. A validation message appears stating all the exported files are saved to a folder named with the workstation serial number, date, and time of export.

Witnessed behavior:

Following these instruction, step 3 "Browse to the location where you would like to save the files, and then click OK" is not available at the workstation. It is observed that upon clicking Export the folder containing the files and hashes is saved directly to the root of the removable USB drive.

Resolution:

Document instructions have been updated removing step 3 which ask to browse for a location on inserted drive, which does not match current functionality.

HV27-6 Modifications: Rich-Text Formatting for Additional Text

EAC Priority: 5-Informational

Status: Discrepancy Addressed Description:

Verity_2.7_Administrators Guide_Data, page 72 & 75

Documentation states rich text formatting option to be "bold, italic, etc." Options available to the user include font size, bold, italic, underline, cross-text, highlighting in chosen color, font color, numbering, and table insertion. All characteristics are available for Additional Text; however not all characteristics display on electronic ballots. Electronic ballots are limited to bold, italic, underline, and cross-text.

Resolution:

Pages 72 and 75 were updated to explicitly state what Rich-Text formatting options are available and what will be displayed on the paper vs electronic ballots.

HV27-8 Verity Data – Add images

EAC Priority: 5-Informational Status: Discrepancy Addressed A01_Verity_2.7_Administrators Guide_Data Expected behavior:

Documented instruction steps and relevant images depict how to include images at different points during ballot creation on the Verity Data. This includes images for Parties, Contests, Ballot Instructions, Header Images, and Ballot Images



Witnessed behavior:

Documented instruction shows and refer to a folder icon used to browse for the desired image. The workstation does not contain the folder icon and browsing for images occur after a language and the "Add" button is selected.

The instruction refer to the folder icon at the following locations:

Page 33, Step 7 Page 57, Step 12 Page 73, Step 5 Page 81, Step 5 Page 83, Step 6 "Select the ballot type/language on the left, click the folder icon to browse to the image you wish to upload, then click Add" **Resolution:**

Document has been updated replacing the image on pages 33, 57, 73, and 83 with an updated one matching what is seen on the Verity Data workstation. Page 81, step 5 was also updated to remove the reference to a blue folder which does not exist on the workstation.

HV27-9 Grid-Based Ballot Contest Image

EAC Priority: 5-Informational Status:

Discrepancy Addressed

Verity_2.7_Administrators Guide_Data document, page 57

Expected behavior:

Within the documentation it contains a note that states "Contest images are not supported when using a grid-based ballot."

Witnessed behavior:

On the Verity Data, the Electronic Contest Image is supported for a Grid-Based Ballot. When an image is uploaded, a contest image is displayed within the Preview Ballots screen for an electronic ballot.

Resolution:

Note has been updated on page 57 to clarify that the image is not available on paper contests.

HV27-11 Verity Print – Missing from documentation

EAC Priority: 5-Informational Status: Discrepancy Addressed

Observed behavior:

On the Main Menu screen of the Verity Print a new menu item was added: View installed languages. This menu item is displayed on the device and found in "Verity 2.7 Test Cases" Page 258, Test Case 1.218.1 Design Steps. This menu item is not found in any other documentation.



Resolution:

Reference to the "View installed languages" menu item has been added into the following document locations of the TDP: Verity Support Procedures Guide: Page 139

HV27-13 Remote Transmission – Incorrect page reference

EAC Priority: 5-Informational Status: Discrepancy Addressed Verity 2.7 Remote Transmission Administrators Guide (Page 50)

Expected behavior:

Step 5 states:

"If you received confirmation that the speed test has Passed, continue to step 6. If the device displays Speed test Failed, perform calibration on the scanner (**page 65**), and then repeat the scanner functionality test."

Page 65 will have additional instructions for calibrating the device ballot scanners.

Witnessed behavior:

Page 65 contains instruction for "replacing tablet CMOS batters".

Page 61 is where "calibrating device ballot scanners" instruction begins. **Resolution:**

The reference on page 50 has been updated to accurately reflect that the steps to take after a speed test has failed are on page 61 and not page 65.

HV27-14 Verity Scan – Instruction Image

EAC Priority: 5-Informational Status: Discrepancy Addressed Verity_2.7_Support Procedures Guide (Page 67)

Observed behavior:

The image used in documentation for the "Insert Speed Calibration Sheet" screen contains a Cancel button. When calibrating the devices scanner, the device itself does not contain a Cancel button and instead display that the device fails the calibration test after 10 seconds.

Resolution:

The document image for Step 7 on page 67 was updated to match what is seen on the Verity Scan device when performing scanner speed calibration.



HV27-15 Security – User Roles

EAC Priority: 5-Informational

Status:

Discrepancy Addressed

Verity Software Architecture-Design 4005463 B02; page 32

Expected behavior:

Written documentation and workstation behavior follow the VVSG requirements that recommended policies for segregation of duties are written. Workstation behavior aligns with documentation such that each Verity user is allowed one role.

Witnessed behavior:

Verity Software Architecture-Design states that ever Verity user will be allowed one role. In every workstation **Users** tile, any user can have anywhere from zero to all available roles on the application.

Resolution:

Section 9.2.2.3 Roles and Permissions has been updated to identify that utilizing RBAC, Verity allows the authorized used to add and manage other users and their permissions and that users are allowed multiple user roles.

HV27-16 TDP – Outdated Reference

EAC Priority: 5-Informational Status: Discrepancy Addressed Description: Verity Voting Nation Certification Test Specification 4005527 B06; Pages 72-75

In the above document there are multiple references made to the **Verity Service and Maintenance Operations Technical Reference Manual 6610-001**, which is not included in the TDP. This document was replaced by **6643-062 A02_Verity_2.7_Support Procedures Guide**. **Resolution:**

The references made to the **Verity Service and Maintenance Operations Technical Reference Manual 6610-001** has been replaced with a reference to the **Verity Support Procedures Guide** in all instances on pages 72 through 75. The attached images are a sample of this replace in Battery Maintenance, Step 1.

HV27-18 Recovery vDrive – Missing Documentation

EAC Priority: 5-Informational Status: Discrepancy Addressed 6643-062 A02_Verity_2.7_Support Procedures Guide; pages 123-125 Expected behavior: When creating a recovery vDrive on any of the Verity Device, the instructions provided documentation, in the Help screens, and the functionality of the device are all consistent with details to prevent confusion.





Witnessed behavior:

TDP Documentation does not include information regarding the use of a vDrive which already has election data, or any other data, on it. The help screen, on the device, at the recovery vDrive screen does state: "Note: This process will overwrite any existing data on the vDrive that you insert for the recovery."

Overwriting a vDrive with different election data functions successfully. Overwriting a vDrive that was just used on the device with the same election data will cause the recovery vDrive creation to fail. This fail is not addressed in TDP documentation or the original help screen. A new help screen does address that "**Failed**: The Recovery vDrive could not be written. You can try again with a different vDrive."

Resolution:

The note for step 5 on page 124 added additional information regarding using a vDrive which contains the selected elections data that it will fail when attempting to create a recovery vDrive. The additional information clarifies this scenario.

HV27-20 Missing Documentation Information - Verity Transmit Troubleshooting

EAC Priority:

5-Informational

Status:

Discrepancy Addressed

Expected behavior:

The "6653-011 A01_Verity_2.7_Device Troubleshooting Field Guide.pdf" contains information regarding troubleshooting for all Verity devices including the new Verity Transmit device.

Witnessed behavior:

The "6653-011 A01_Verity_2.7_Device Troubleshooting Field Guide.pdf" only contains troubleshooting steps to fix a failed authorization issue. No other troubleshooting information for the Verity Transmit is included in documentation.

Resolution:

A troubleshooting section for the Verity Transmit device was added directly to the 6651-061 A03_Verity_2.7_Verity Transmit Field Guide.pdf, found on page 21.

HV27-23 Verity Build - IntoPrint does not support 20 & 22

EAC Priority:
5-Informational
Status:
Discrepancy Addressed
Description:
6641-057 A00_Verity_2.7_Administrators Guide_Build, page 61
Documentation states:
"Important the Brother HL-L6400DWVS & IntoPrint SP1360 printers support 20" and 22" ballots.
Customers with Okidata printers wishing to print 8.5" x 22" ballots must upgrade to one qualified for the size (the OKI B432 printer supports ballots up to 20"). For more information, contact Hart Support."

It was determined that the IntoPrint SP1360 does not support the 20" and 22" ballots.



Resolution:

The "Important" note at the bottom of page 61 has been updated removing references to the IntoPrint SP1360, now stating that only Brother HL-L6400DWVS printers support the printing of 20" and 22" ballots accurately.

HV27-24 Verity Central – Batch Report

EAC Priority: 5-Informational Status: Discrepancy Addressed Description: Referencing the Verity Administrators Guide: Central, page 83, the report should contain 6 totals for the batch:

- Total images scanned
- Total images accepted
- Total images rejected
- Total ballots scanned
- Total ballots accepted
- Total ballots rejected

When we run our reports, even intentionally using setting or ballots which would cause a rejection we only get the following fields:

- Total images scanned
- Total images accepted
- Total images rejected
- Total ballots accepted

Resolution:

Page 83 of the Verity Administrator's Guide Central for available reports has been updated to reflect the fields that appear on the Scanned Batch report.

HV27-27 Scan with Relay - No PVRs

EAC Priority: 5-Informational Status: Discrepancy Addressed 6641-060 A01_Verity_2.7_Remote Transmission Administrators Guide Page 76-77 Expected behavior: Decumentation includes instructions, for Verity Scan with Polay only, for changing do

Documentation includes instructions, for Verity Scan with Relay only, for changing default voting methods. Instructions are provided identifying how to set default voting methods on the Verity Scan which supports scanning of both PVRs and Paper Ballots in the same session. **Witnessed behavior:**

The Verity Scan with Relay does not include the Set default Voting Method menu option and the device will not scan Printed Voting Records.



Resolution:

Pages 76 and 77 were removed from the 6641-060 A01_Verity_2.7_Remote Transmission Administrators Guide. The document now transitions from "configuring transmission settings" pages 73-75 to "exporting log data" pages 76-77 (previously pages 78-79).

HV27-32 Verity Transmit, Verity Relay – Missing Documentation

EAC Priority: 4-Insignificant Status: Discrepancy Addressed Expected behavior:

The Verity System Administrator's Guide pages 31-33 details all available user roles and permissions for Verity workstations.

Witnessed behavior:

The documentation does not describe the available roles and permissions within the Verity Transmit Receiving Station nor Verity Relay Receiving Station. The documentation does not differentiate between the follow Transmit Receiving Station and Relay Receiving Station user roles:

- Relay Viewer
- Relay Operator
- Relay IT Administrator
- Relay Full Access

Requirement #(s) & Text:

Section 7.2.1.2.a,b,h:

Vendors shall provide a detailed description of all system access control measures designed to permit authorized access to the system and prevent unauthorized access. Examples of such measures include:

- a. User of data and user authorization
- b. Program unit ownership and other regional boundaries
- h. Controlled access security

Resolution:

Pages 76 and 77 were removed from the 6641-060 A01_Verity_2.7_Remote Transmission Administrators Guide. The document now transitions from "configuring transmission settings" pages 73-75 to "exporting log data" pages 76-77 (previously pages 78-79).

FCA Functional Discrepancies

HV27-17 Controller/Duo – Daisy-Chain Configuration

EAC Priority: 4-Insignificant Status: Discrepancy Addressed 6651-053 A01_Verity_2.7_Polling Place Field Guide - CDS; Page 16 Expected Behavior:

Based on the above documentation, the Controller/Duo may be configured with multiple Duo devices daisy-chained in one or both ports. The documentation notes that on each daisy-chain "Up to two Duo units in a row can be powered off, or have their tablets disconnected, without



affecting other Duo devices in the chain."

Observed Behavior:

The SLI Compliance Lab currently has a single Controller with two Duo devices daisy-chained on one Controller port. When the first Duo device is powered off or the tablet is unlocked and undocked, the connection is lost between the second Duo and the Controller.

Resolution:

The Duo device was returned to Hart for further investigation through an RCA. A second Duo was provided to SLI Compliance, and the configuration was retested with no issues found.

HV27-19 Devices – Delete Backup with Active Status

EAC Priority:

4-Insignificant

Status:

Unresolved – Intended Functionality

Expected Behavior:

When a device is powered on with no vDrive installed, Backup Election data can be deleted through the Administrator Menu. The most recent or "Active" election requires its Verity key to be inserted in order to proceed with deleting the backup.

Observed Behavior:

Elections with the "Active" status are unable to be deleted from the "Delete Backup" list. When the Verity key is not inserted the expected warning appears stating to insert the Verity key. When the Verity key is inserted, and the deletion of the backup is attempted an error screen occurs with only one option to return to the Administrator Menu.

Elections with the "Inactive" status are able to be deleted without issue. The above error occurs on all device when following procedures outlines in the "Verity Support Procedures Guide." **Resolution:**

Hart's determination this is intended functionality and will not be altered. Resolution of help screen mismatch has occurred through documentation.

HV27-22 Touch Writer - Printed ballots missing customized text

EAC Priority:

3-Significant

Status:

Discrepancy Addressed

Expected Behavior:

When ballots voted and printed from the Verity Touch Writer device, they are complete and able to be read by the Verity Scan and Verity Central.

Observed Behavior:

A scenario occurred during Official Test Execution that printed seven ballots from the Verity Touch Writer without the Customize System Text. Items such as "Write-In," "Precinct," "Page _ of _", and "This side intentionally left blank" are all missing from these ballots. These text fields not included in the print caused the contests to reposition on the ballot and when scanned they are rejected due to "One or more contests are damaged."

Hart InterCivic Attachment N - Verity Voting 2.7 Discrepancy Report



Resolution:

Hart has submitted a new Source Code and Trusted Build to address this issue. In Verity 2.7.1 a retry strategy for loading system text at the time of loading the election has been implemented. Multiple elections were loaded onto the Verity Print and Verity Touch Writer devices with multiple ballots being printed from each election. No incorrect ballots are printed from the system.

HV25- Verity Central – Adjudicating PVR

EAC Priority: 5-Informational Status: Discrepancy Addressed

Expected Behavior:

Using the Verity Central, after scanning a batch of PVRs when viewing the batch for adjudication the options to view the previous unresolved or next unresolved will navigate between the PVRs. The navigation will display the next contest that requires attention for adjudication or notify that user that the beginning or end of the list has been reached and no additional contests require adjudication.

Observed Behavior:

Print Vote Records cannot be adjudicated for Undervotes or Overvotes, only write-ins. The writein adjudication occurs on a different menu of the review screen. When viewing the batch of PVRs which require adjudication, no contests are highlighted, and no notes are provided as to what requires adjudication. When view the PVRs selecting Previous Unresolved or Next Unresolved will cause the Verity Central to get stuck in a thinking loop. This can only be cleared by restarting the workstation.

Resolution:

Hart has submitted a new Source Code and Trusted Build to address this issue. When reviewing a batch of PVRs in the Verity Central the <u>Previous Unresolved</u>, <u>Accept</u>, and <u>Next Unresolved</u> buttons are disabled. These buttons are unresponsive when clicked. The Next and Previous buttons are still active and work appropriately when switching between the PVRs in the batch for viewing. This defect has been corrected through the updated Trusted Build.

HV28- Verity Reader – Contrast Calibration

EAC Priority: 4-Insignificant

Status: Discrepancy Addressed

Expected Behavior:

The scanner on the Verity Reader device is able to be calibrated using a bi-tonal sheet, contrast calibration sheet, speed sheet, and multi-feed of thermal paper. All tests are able to be performed and pass, calibrating the scanner to accurate view paper ballots and printed voting records.

Hart InterCivic Attachment N - Verity Voting 2.7 Discrepancy Report



Observed Behavior:

When performing the Contrast Calibration on the Verity Reader, the new style contrast calibration sheet will be accepted, and the calibration will being as normal. Part way through the calibration will stop with the sheet halfway into the rollers and the screen will become unresponsive. No amount of waiting time will resolve the issue, the tablet must either be unlocked and relocked or the device must be power-cycled. Both of these options will only unfreeze the display, though the issue will repeat when attempting to perform the contrast calibration again.

<u>Update:</u> Using an old style contrast calibration sheet will cause the calibration to complete successfully. After which the new style contrast calibration sheet will also create a successful calibration - which is required to scan PVRs.

Resolution:

HART has submitted a new Source Code and Trusted Build to address this issue. Scanner successfully fails when no calibration sheet was entered, or the wrong sheet was entered. A message displays stating the relevant error and no longer hangs from a failed contrast calibration. The scanner successfully calibrated with the new style calibration sheet.

HV29- Keyboard Shortcut not Disabled

EAC Priority: 5-Informational Status: Discrepancy Addressed Expected Behavior:

When a keyboard is connected to a device, undocumented keyboard shortcuts illicit no response from the system. Undocumented keyboard shortcuts are disabled on workstations.

Observed Behavior:

When a keyboard is connected to a device, the shortcut **Ctrl + Shift + Win + B** restarts the device. When a keyboard is connected to a workstation, the shortcut restarts the graphics driver, causing the screen to flicker momentarily.

Resolution:

HART has submitted a new Source Code and Trusted Build to address this issue. Verified on all workstations and devices that the Ctrl+Shift+Win+B key input combination elicits no response from the system. No graphics flickers or rebooting occurs on any device or workstation.

<u>HV30- Verity Count – Importing Aliases for Similar Contests Only imports First Instance</u> EAC Priority:

5-Informational Status: Discrepancy Addressed

Expected Behavior:

When importing an alias set for contests in which all contests were exported with unique aliases, all contests should import with the unique alias given to them, per page 65 of the Verity Administrator's Guide: Count document.



Hart InterCivic Attachment N - Verity Voting 2.7 Discrepancy Report

Observed Behavior:

While attempting to import aliases for contests which have the same 'Original Name' and 'Notes' values, only the first instance of each 'Original Name' and 'Notes' pair were imported and the remaining instances were left blank. Moreover, the aliases which were imported to the first instances where the aliases set to the *last* instances of the contests.

Resolution:

Verify that the described functionality is intended functionality. The unique alias in this instance must either have a different contest title or different note, true duplicates will not import alias information.