

Minutes
State Election Commission Meeting
July 11, 2022

The State Election Commission meeting was called to order by Chairman Kent Younce at 12:00 Noon, Central Daylight Time, July 11, 2022.

The following members and staff were present: Commissioners Barrett, Eldridge, McDonald, Wheeler and Younce; Coordinator of Elections Mark Goins, and Kathy Summers, Elections Specialist.

Commissioner Eldridge made a motion to adopt the April 11, 2022, minutes, seconded by Commissioner McDonald.

(Aye votes: Barrett, Eldridge, McDonald, Wheeler and Younce; No votes: None; Abstention: None.)

Commissioner McDonald made a motion to adopt the May 31, 2022, telephonic meeting minutes, seconded by Commissioner Barrett.

(Aye votes: Barrett, Eldridge, McDonald, Wheeler and Younce; No votes: None; Abstention: None.)

Commissioner Barrett made a motion to adopt the June 28, 2022, telephonic meeting minutes, seconded by Commissioner McDonald.

(Aye votes: Barrett, Eldridge, McDonald, Wheeler and Younce; No votes: None; Abstention: None.)

Commissioner Barrett made a motion pursuant to TCA. § § 2-12-101 and 2-12-106 to approve any nomination(s) for county election commission appointments submitted, and to leave the nomination process open until 4:30 p.m. Central Daylight Time, Monday, July 11, 2022, seconded by Commissioner Eldridge. (Aye votes: Barrett, Eldridge, McDonald, Wheeler and Younce; No votes: None; Abstention: None.) **(See attached county election commission appointments made.)**

Old Business

- None Given

New Business

- **Hart InterCivic – Elisabeth Spring, Certification Project Manager – Certification request for approval of de minimis change to Verity 2.5.**

Elisabeth Spring gave a presentation requesting approval of de minimis changes to Verity 2.5. **(See attached presentation and documents provided.)**

Commissioner Wheeler made a motion to approve the Verity 2.5 de minimis ECO-01524 change, seconded by Commissioner Barrett.

(Aye votes: Barrett, Eldridge, McDonald, Wheeler and Younce; No votes: None; Abstention: None.)

Commissioner Eldridge made a motion to approve the Verity 2.5 de minimis ECO-01538 change, seconded by Commissioner McDonald.

(Aye votes: Barrett, Eldridge, McDonald, Wheeler and Younce; No votes: None; Abstention: None.)

Chairman Younce requested Hart Inter Civic to provide answers to the below questions.

- What does a county need to know about retro fitting their machines?
- What is needed to upgrade?
- What is the cost?
- How many states currently have DRE's without a paper audit trail?

Ms. Spring stated she recently started working for Hart InterCivic and will need guidance in answering these questions and will provide the Elections staff with their response.

Coordinator Update

- Coordinator Goins discussed funds appropriated by Governor Lee's budget, in the amount of \$15 Million, to go towards buying voting machines with a voter verified paper audit trail. All counties must have machines with a voter verified paper audit trail by 2024.
- Williamson County is participating in a pilot program for the audit bill passed in 2022; all counties will be required to perform audits going forward in 2024.
- Coordinator Goins stated any county election commissioner who recused themselves will automatically go back on the county election commission after the county election commission certifies the election.
- Coordinator Goins asked commission members to encourage voters to vote early due to the length of the ballot.
- Coordinator Goins advised there is a paper shortage.

The meeting was adjourned at 12:33 p.m. Central Time.

The next scheduled meeting is set for October 10, 2022, and will be held in Conference Room D – Tennessee Tower, Nashville Room - 3rd floor at 12:00 Noon, Central Standard Time.

Respectfully submitted,


Tom Wheeler – Acting Secretary
State Election Commission

State of Tennessee



State Election Commission
312 Rosa L. Parks Avenue, 7th Floor
Nashville, Tennessee 37243-1102

Vacant Status

July 11, 2022

Montgomery R Donna Barrett / D Mike McDonald

D

Putnam R Kent Younce / D Mike McDonald

D

Total Vacancies: 2

State of Tennessee



State Election Commission
312 Rosa L. Parks Avenue, 7th Floor
Nashville, Tennessee 37243-1102

New Appointment Status

July 11, 2022

Putnam

R Kent Younce / D Mike McDonald

D Linda Ann Daniel

Total New Commissioners: 1

Appointment

7/11/2022

PROCEDURES FOR CERTIFYING VOTING MACHINES BY THE TENNESSEE STATE ELECTION COMMISSION

All voting machines/vendors must receive certification from the state election commission and the coordinator of elections before any voting machines or systems may be sold in the State of Tennessee.

First Step:

Any interested vendor should submit a written request to the coordinator of elections and the state election commission requesting certification of your company together with the EAC certification number, a financial report and a list of all states that have already bought your voting machines or systems. If you would like to demonstrate your product at a meeting of the state election commission, please make that request in your letter. You will be notified of the date, time, and place of the meeting where you may make your presentation.

Second Step:

A. Voting Machine Procedure

Following verification of EAC certification and an initial presentation of your product and/or services, you would need to arrange for at least two (2) State Election Commissioners (of opposite parties) and the coordinator of elections (or designee) to view your machines or system in use in an election of a substantial size in another state. An election of a substantial size involves at the minimum the following characteristics:

- The jurisdiction has a population of at least 10,000 persons;
- The jurisdiction has at least two (2) or more district races on the ballots; and
- There are at least two (2) contested races involving both at large and district races on the ballot.

B. Voting Machine Software or Hardware Upgrade

- EAC Certification;
- Presentation of upgrade before State Election Commission at a meeting; and
- Viewing of upgrade in another state (In lieu of viewing machine in another state, at the discretion of the State Election Commission, letters of recommendation from users in other jurisdiction may be used as support for approval.)

C. De Minimis Voting System Changes

- Any De Minimis change to an EAC certified voting system shall be submitted to the state election commission and coordinator of elections to be approved. For purposes of approval of the de minimis change to the voting system, all that will be required is a letter from the EAC stating the change is de minimis, unless further information is requested by the state election commission or coordinator of elections.

Third Step:

The State Election Commission must vote to certify the machine in order for the machines to be used in an election in Tennessee.

You may send any correspondence for both the state election commission and the coordinator of elections to the following address:

312 Rosa L. Parks Avenue, 7th Floor
William R. Snodgrass Tower
Nashville, Tennessee 37243
(615) 741-7956

If you have any further questions regarding certification of your company, please feel free to contact the office of the state election coordinator at the phone number listed above.



State of Tennessee

Verity Voting System 2.5





Agenda



- ECO Change Notes
 - ECO – 01512
 - ECO – 01524
 - ECO - 01538





Minor Change Definition



Minor Change – Defined:

A minor change is a change to a certified voting system's hardware, software, technical data package (TDP), or data, the nature of which will not materially alter the system's reliability, functionality, capability, or operation...





ECO – 01512



Summary:

- Several clarifying clerical updates
- Adds additional construction method for existing internal device cable

Specific Changes:

- Clerical Verity Duo series baseboards correction. Duplicate reference designator removed
- Three cable drawings updated to clarify any connector tooling points to be covered
- Alternate construction method for internal cable provided

Reason/Justification:

- Ensure manufacturing documentation is unambiguous & clear
- Mitigate long lead times





ECO - 01524



Summary:

- Introduces scanning speed performance optimization developed in Verity 2.7

Specific Changes:

- Predefined reorganization frequency increases from every 500 files to every 250 files
- vDrive signing/validation algorithm optimizations developed in Verity 2.7 implemented
- Algorithm's optimizations reduce number of system calls needed to perform signature validation function, further improving performance

Reason/Justification:

- Improve ballot processing time, improve voter experience and maximizing throughput





ECO - 01538



Summary:

- Updated Commercial-Off-The-Shelf (COTS) HP Monitor for Verity Workstations

Specific Changes:

- The **P24v G4** monitor is a replacement for **P24 G4 24**
 - COTS monitor (display) used with Verity workstations is end-of-life & replaced
 - Monitors are identical in size, contrast ratio, brightness, and resolution
 - DisplayPort output removed & connectivity to workstation via an HDMI to MiniDP cable
- Updated Approved Manufacturer's List (AML)
 - Orderable part number for **P24v G4** monitor added to AML for item #2005880

Reason/Justification:

- Hewlett Packard **P24 G4 24** monitor no longer available





THANK YOU





ECO-01524 Change Summary

Verity 2.5 & 2.6 Security Performance Optimization

February 28, 2022

Doc. 4005805

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	Document Number: 4005805	Revision: A.00
	Document Name: ECO-01524 Verity 2.5 & 2.6 Security Performance Optimization	
		Page 1 of 6

Change History

Version	Date	Author(s)	Description
A.00	02/28/2022	J. Bernal	Initial release.

Owners and List of Contacts

Name	Email	Phone	Role
Jim Canter	jcanter@hartic.com		Chief Technology Officer
Pamela Geppert	pgeppert@hartic.com		Vice President Product Management
Jared Bernal	jbernal@hartic.com		Principal Regulatory Engineer
Manjari Shah	mshah@hartic.com		Quality Assurance Director

Table of Contents

1 SUMMARY 4

2 REASON / JUSTIFICATION FOR CHANGE 4

3 DESCRIPTIONS OF CHANGES 4

 3.1 About Verity Scan digitally signed records4

 3.2 Software Change.....4

 3.3 Impacted Device Images5

4 DATA JUSTIFYING CHANGE 5

5 JUSTIFICATION OF MINOR CHANGE STATUS 5

6 MINOR CHANGE DEFINITION 5

1 SUMMARY

Security enhancements introduced in Verity 2.5 increased average scanning time in the Verity Scan series devices. The average scanning time increases as additional CVRs, and ballot images are added. This ECO introduces a scanning speed performance optimization that was developed in Verity 2.7.

This change affects Verity Scan and Verity Scan with Relay devices on Verity 2.5 and 2.6 only.

There are no changes to other Verity devices or workstations.

2 REASON / JUSTIFICATION FOR CHANGE

The change described in this ECO improves ballot processing time, improving the voter experience and maximizing throughput.

3 DESCRIPTIONS OF CHANGES

3.1 About Verity Scan digitally signed records

The amount of time needed to process a ballot varies between elections based on ballot size, density, and other factors. Verity Scan digitally signs immutable files and folders associated with each scanned sheet for tamper-evidence and nonrepudiation. The duration of this process increases over time as more files accumulate until Scan performs a periodic reorganization of those records, optimizing the file system, thus reducing the time needed for a single scan back to approximately what it was at the beginning of scanning.

Reorganization occurs when the total number of files to sign reaches a predefined level. At that point, a message regarding reorganization appears on the device while those files are compressed into a single digitally signed compressed file, and then returns to the "Ready to Scan" screen when the process is complete. Depending on the sizes of the files to be zipped, this may take up to 30 seconds to complete.

3.2 Software Change

The ECO increases the predefined reorganization frequency from every 500 files to every 250 files. Additionally, vDrive signing/validation algorithm optimizations developed in Verity 2.7 are implemented. The algorithm's optimizations reduce the number of system calls needed to perform the signature validation function, further improving performance.

The change is limited to Verity Scan and Verity Scan with Relay device software only and is applicable to for Verity Voting 2.5 and 2.6 only. There is no impact to the Base OS master images.

Verity 2.5 Software Updates

- Verity Scan software is updated from 2.5.1 to 2.5.2
- Verity Scan with Relay software is updated from 2.5.1 to 2.5.2

Verity 2.6 Software Updates

- Verity Scan software is updated from 2.6.0 to 2.6.1
- Verity Scan with Relay software is updated from 2.6.0 to 2.6.1

3.3 Impacted Device Images

The follow device images (CFast cards) will be created by this change

- Verity Scan 2.5.2 (1204 Tablet)
- Verity Scan 2.5.2 (38BT Tablet)
- Verity Scan with Relay 2.5.2 (1204 Tablet)
- Verity Scan with Relay 2.5.2 (38BT Tablet)
- Verity Scan 2.6.1 (1204 Tablet)
- Verity Scan 2.6.1 (38BT Tablet)
- Verity Scan with Relay 2.6.1 (1204 Tablet)
- Verity Scan with Relay 2.6.1 (38BT Tablet)

4 DATA JUSTIFYING CHANGE

The change described on this ECO has been fully tested by Hart's Quality Assurance Engineering team. Please see the ECO-01524 QA Test Report (Document Number: 4005806) for full details.

The report can be found in the attached archive: 4005805A_Supporting_Documents.zip

5 JUSTIFICATION OF MINOR CHANGE STATUS

The change described on this ECO improve Verity Scan device performance only.

- These changes do not materially alter the system's reliability.
- These changes do not materially alter the system's functionality.
- These changes do not materially alter the system's capability.
- These changes do not materially alter the system's operation.

6 MINOR CHANGE DEFINITION

From the United States Election Assistance Commission's Document titled: Voting System Testing & Certification Program Manual, Version 3.0.

3.5.1. Minor Change — Defined. A minor change is a change to a certified voting system's hardware, software, technical data package (TDP), or data, the nature of which will not materially alter the system's reliability, functionality, capability, or operation...

End of Document



***U.S. ELECTION ASSISTANCE COMMISSION
633 3rd St. NW, Suite 200
Washington, DC 20001***

April 12, 2022

Sent via email

Pam Geppert, Senior Director of Product Management
Hart InterCivic
15500 Wells Port Drive
Austin, TX 78728

Re: ECO 01524

Dear Ms. Geppert,

This correspondence is to inform you that Hart ECO 01524 is approved.

Sincerely,

A handwritten signature in dark ink, appearing to read "Paul Aumayr", is written over a horizontal line.

Paul Aumayr
Senior Election Technology Specialist

Cc: SLI Compliance

SLI Compliance

Hart Verity ECO-01524 Software Minor Change Evaluation & Review Form

Vendor:	Hart InterCivic	Date:	March 14, 2022
Change ID:	ECO-1524	System(s):	Verify Voting 2.5, Verity Voting 2.6
Product:	Verity Scan and Verity Scan with Relay devices	Relevant Application(s):	Verity Scan and Verity Scan with Relay software

Put an X in the appropriate box(es):

	TDP Change
X	Data Change
X	Software Change

Change Summary Description

The ECO increases the pre-defined reorganization frequency from every 500 files to every 250 files.

Additionally, vDrive signing/validation algorithm optimizations developed in Verity 2.7 are implemented. The algorithm's optimizations reduce the number of system calls needed to perform the signature validation function, further improving performance.

Currently in 2.5 and 2.6, when a folder is signed, the files in the folder must first be validated. For each file added, the individual file is signed and then the entire set of files is signed. The time to digitally sign the full set of saved records is increased, which drives the increased save time. During signature validation, the application accesses the files on the file system more often than is needed. The code was making N² calls to the file system, however validating N files should require N calls to the file system.

With the proposed change, the CVR and image signing code is refactored to reduce the number of file system calls and improve performance with no change to the function or strength of the hashing algorithm. The time to sign a set of files will increase linearly with each file added rather than exponentially.

The changes are limited to Verity Scan and Verity Scan with Relay device software only and is applicable to Verity Voting 2.5 and 2.6 only. There is no impact to the Base OS master images.

Manufacturer Reasoning for Minor Change Determination

The change described on this ECO improve Verity Scan device performance only.

- These changes do not materially alter the system's reliability.
- These changes do not materially alter the system's functionality.
- These changes do not materially alter the system's capability.
- These changes do not materially alter the system's operation.


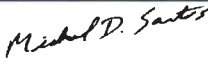

Put an X in the appropriate box:

Change Evaluation		Comments
	The change affects the form, fit or function of the voting system component(s) and therefore requires further testing to be performed.	
	Minor change: a change to a certified voting system's data and/or TDP, the nature of which will not materially alter the system's reliability, functionality, capability, or operation	
X	Software Minor change: a change to the system's software that meets the EAC requirements as identified below.	Two Changes: <ol style="list-style-type: none"> 1. Periodic file reorganization increases from every 500 files to every 250 files. 2. vDrive signing/validation algorithm optimizations developed in Verity 2.7 are incorporated.

Software minor changes should have the following general characteristics:

(1) Update a discrete component of the system and do not impact overall system functionality. (2) Do not modify the counting or tally logic of a component or the system (formatting changes to reports are allowable). (3) Do not affect the accuracy of the component or system. (4) Do not negatively impact the functionality, performance, accessibility, usability, safety, or security of a component or system. (5) Do not alter the overall configuration of the certified system (e.g. adding ballot marking device functionality to a previously certified DRE component). (6) Can be reviewed and/or tested by VSTL personnel in a short amount of time (approximately less than 100 hours)

SLI Evaluation and Minor Change Determination
<p>The pre-defined re-organization frequency of files is a configuration adjustment with no logic affect.</p> <p>The vDrive signing/validation algorithm optimizations implemented reduce the number of system calls needed to perform the signature validation function, as was verified by a source code review of the modifications implemented.</p> <p>The testing of performance, functionality, regression, accuracy and security, as detailed in "ECO-01524 QA Test Report for Verity 2.5 2.6 Verity Security Performance Optimization 4005806 A02 provides sufficient coverage of the implemented updates to verify that the intended performance improvements are attained, no loss of accuracy or functionality is introduced, nor any security concerns found.</p> <p>All testing passed with no issues or anomalies observed.</p> <p>As required under section 3.5.1 of the EAC's Voting System Testing and Certification Program Manual Version 3.0, and in accordance with the instruction provided in <i>NOC 19-01: Software De Minimis Changes</i>, SLI Compliance considers the nature of ECO-01524 to be Minor and therefore not to affect the Federal certification status for the Verity 2.5 and Verity 2.6 voting systems.</p>

	Approved by/Title	Signature:	Date:
	Michael D. Santos Voting Senior Test Manager		March 29, 2022
	Traci Mapps Vice President, SLI Compliance		March 29, 2022

Hart Verity ECO-01524 Software Minor Change Evaluation & Review Form		Page 2 of 2 Template Rev 2015-04 Confidential
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slicompliance.com SLI Compliance, a Division of GLI*

March 29th, 2022

U.S. Election Assistance Commission
1335 East West Highway, Ste. 4300
Silver Spring, MD 20910

Re: ECO-01524 Security Performance Optimization

Dear Mr. Panek,

At the request of Hart InterCivic, SLI is providing an assessment of ECO-01524, including supporting documentation provided by Hart InterCivic, to determine if this change is De Minimis, and no additional testing is required.

Reference Documents:

- EAC 2005 Voluntary Voting System Guidelines (VVSG) Volume II, Sec. 1.7.2
- EAC Voting System Testing and Certification Program Manual v. 3.0, Sec 3.5.1
- NOC 19-01 Software De Minimis Changes

Summary Description:

Security enhancements introduced in Verity 2.5 increased average scanning time in the Verity Scan series devices. The average scanning time increases as additional CVRs, and ballot images are added.

The ECO increases the predefined reorganization frequency from every 500 files to every 250 files.

Additionally, vDrive signing/validation algorithm optimizations developed in Verity 2.7 are implemented. The algorithm's optimizations reduce the number of system calls needed to perform the signature validation function, further improving performance.

The changes are limited to Verity Scan and Verity Scan with Relay device software only and is applicable to Verity Voting 2.5 and 2.6 only. There is no impact to the Base OS master images.

Hart Verity ECO-01524 Security Performance Optimization Letter

Documentation used in SLI's Assessment:

- "ECO-01524 QA Test Report for Verity 2.5 2.6 Verity Security Performance Optimization 4005806 A02"

Determination:

Regarding the Hart ECO-01524 for Verity 2.5 & 2.6 Verity Security Performance Optimization, SLI Compliance has reviewed the submitted documentation from Hart. This included a review of the Hart documents listed above.

Based upon the examination of ECO-01524 with supporting documentation, SLI considers the nature of this change to be Minor and therefore not to affect the Federal certification status for all applicable Verity releases. No additional testing is required at this time.

As required under section 3.5.1 of the EAC's Voting System Testing and Certification Program Manual Version 3.0, Hart InterCivic has provided the necessary information to verify the ECO-01524 change is Minor.

If you have questions regarding this assessment, please contact Michael Santos.

Sincerely,



Traci Mapps
Vice President, SLI Compliance

Kathy Summers

From: Michael Choate <mchoate@hartic.com>
Sent: Tuesday, June 7, 2022 12:27 PM
To: Kathy Summers
Subject: [EXTERNAL] Hart Verity De Minimis Change Requests
Attachments: 1524_State Documents.zip; State Documents.zip

***** This is an EXTERNAL email. Please exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email - STS-Security. *****

Kathy,

Please find attached the supporting documentation for the EAC approved ECO – 1512 Verity Security Performance Optimization and ECO – 1538 Updated COTS Monitor for Verity Workstations. ECO 1512 handles some slow scanning issues while ECO 1538 adds a new monitor to our COTS list.

Please let me know if you have any questions and let me know when I can come present to the SEC.

MC



Michael W. Choate, JD, CIPM
Certification Program Manager
Hart InterCivic
15500 Wells Port Drive
Austin, Texas 78728
Mobile: 325.374,1859

[3](#)

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ECO-01538 Change Summary
Updated COTS (HP) Monitor for Verity Workstations

Doc. 4005711

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	Document Number: 4005711	Revision: A.00
	Document Name: ECO-01538 Change Summary: Updated COTS (HP) Monitor for Verity Workstations	
		Page 1 of 5

Change History

Version	Date	Author(s)	Description
A.00	05-20-22	J. Bernal	Initial release.

Owners and List of Contacts

Name	Email	Phone	Role
Jim Canter	jcanter@hartic.com		Chief Technology Officer
Dan Gately	dgately@hartic.com		Director, SCM
Jared Bernal	jbernal@hartic.com		Principal Regulatory Engineer
Lynn Simpson	lsimpson@hartic.com		Sr. Mechanical Engineer

Table of Contents

1 SUMMARY 4

2 REASON / JUSTIFICATION FOR CHANGE 4

3 DESCRIPTIONS OF CHANGES 4

 3.1 New Monitor Description 4

 3.2 Updated AML 4

4 DATA JUSTIFYING CHANGE 5

5 JUSTIFICATION OF MINOR CHANGE STATUS 5

6 MINOR CHANGE DEFINITION 5

1 SUMMARY

The Commercial-Off-The-Shelf (COTS) monitor (display) for use with Verity workstations is End-Of-Life (EOL) and replaced. The manufacturer, Hewlett Packard has recommended that the **P24 G4 24** is replaced with the **P24v G4**. The **P24v G4** display is a complete form, fit, and function match with the HP P244 with all the same specifications, and features. The DisplayPort output is removed and connectivity to the workstation is via an HDMI to MiniDP cable.

There are no changes to software or OS images for this change.

2 REASON / JUSTIFICATION FOR CHANGE

The Hewlett Packard **P24 G4 24** monitor is no longer available. Hewlett Packard has suggested the **P24v G4** as an equivalent replacement.

3 DESCRIPTIONS OF CHANGES

3.1 New Monitor Description

The P24v G4 monitor is a replacement for the P24 G4 24. The monitors are identical in size, contrast ratio, brightness, resolution. The DisplayPort output is not present on the P24v G4 and connectivity to the workstation is via an HDMI to MiniDP cable.

Datasheets for the two displays are included in the following zip file:

4005711_Supporting_Documents.zip

3.2 Updated AML

The orderable part number for the P24v G4 monitor will be added to Approved Manufacturer's List (AML) for Item Number 2005880 Rev C. Updates below are shown in green.

Manufacturer	Manufacturer Part	Description	Preferred/Alternate
Hewlett Packard	9TT78AA	Model: P24v G4	Preferred
Hewlett Packard	1A7E5AA	Model: P24 G4 24	Alternate
Hewlett Packard	5QG35A8	Model: P244	Alternate

Table 1 – Updated AML for 2005880

An export of the AML is included in the following zip file:

4005711_Supporting_Documents.zip

4 DATA JUSTIFYING CHANGE

The P24v G4 COTS monitor is the direct replacement suggested by the manufacturer, Hewlett Packard. The replacement monitor is identical in size, contrast ratio, brightness, and resolution to P24 G4 24. Both monitors are equivalent in regulatory certifications and operational environmental specifications.

No software is modified to accommodate this change. No OS Image updates are needed to accommodate this change.

The P24v G4 monitor was operationally tested with the following models of the COTS workstations used with Verity:

- HP Z240
- HP Z4 G4

The monitor was confirmed to be plug and play and identical in use to the existing approved monitor model with the use of an HDMI to MiniDP cable. Specification sheets and declaration of conformity are included in the follow zip file: *4005711_Supporting_Documents.zip*

5 JUSTIFICATION OF MINOR CHANGE STATUS

The replacement COTS equivalent COTS displays are permitted for de minimis change, as defined in *EAC NOC-01: Clarification of COTS Product Equivalency for De Minimis Change*.

- These changes do not materially alter the system's reliability.
- These changes do not materially alter the system's functionality.
- These changes do not materially alter the system's capability.
- These changes do not materially alter the system's operation.

6 MINOR CHANGE DEFINITION

From the United States Election Assistance Commission's Document titled: Voting System Testing & Certification Program Manual, Version 3.0.

3.5.1. Minor Change — Defined. A minor change is a change to a certified voting system's hardware, software, technical data package (TDP), or data, the nature of which will not materially alter the system's reliability, functionality, capability, or operation...

End of Document



U. S. ELECTION ASSISTANCE COMMISSION
VOTING SYSTEM TESTING AND CERTIFICATION PROGRAM
633 3rd Street NW, Suite 200
Washington, DC 2100

May 31, 2022

Sent via e-mail

Pamela Geppert
Hart InterCivic
3800 Quick Hill Road
Building 1, Suite 200
Austin, TX 78728

Re: ECO HRT-01538

Dear Pam Geppert,

The EAC has reviewed the evaluation from SLI Compliance regarding ECO HRT-01538, and agrees with the lab recommendation that this be considered a de minimis engineering change order, applicable to all EAC certified Hart Verity systems.

This correspondence is to inform you that ECO HRT-01538 is approved.

Sincerely,

Jonathon Panek
Director, Testing & Certification

Cc: SLI Compliance

SLI Compliance Engineering Change Evaluation and Review Form

Vendor:	Hart InterCivic	Date:	26-May-2022
Change ID:	ECO-01538	System(s):	Applicable to all Verity releases
Product:	COTS HP P24v G4 Monitor for Verity Workstations		

Change Summary Description

Summary Description: The Commercial-Off-The-Shelf (COTS) monitor (display) for use with Verity workstations is End-Of-Life (EOL) and replaced. The manufacturer, Hewlett Packard has recommended that the P24 G4 24 is replaced with the P24v G4. The P24v G4 display is a complete form, fit, and function match with the HP P244 with all the same specifications, and features. The DisplayPort output is removed and connectivity to the workstation is via an HDMI to MiniDP cable.

Reason for Change: The Hewlett Packard P24 G4 24 monitor is no longer available. Hewlett Packard has suggested the P24v G4 as an equivalent replacement.

ECO Category: EOL / Preferred

Change Evaluation		Comments
<input type="checkbox"/>	The change affects the form, fit or function of the equipment and therefore requires hardware testing to be performed. The testing requirements are defined in the Hardware Test Matrix table below. Any changes made to a system under test will result in the manufacturer supplying a list and detailed description of all changes.	N/A
<input checked="" type="checkbox"/>	Minor change order: A minor change order is a change to a certified voting system's hardware, software, Technical Data Package (TDP), or data, the nature of which will not materially alter the system's reliability, functionality, capability, or operation.	This change request does not materially alter the system's reliability, functionality, capability, or operation of the certified devices.
<input checked="" type="checkbox"/>	System documentation: The manufacturer has provided a description of how this change will impact any relevant system documentation and has provided the updated documentation, if applicable.	Updates will not go into effect until after the EAC ruling.

Summary Comments




There are no changes to software or OS images associated with this ECO.

SLI Compliance performed a comparison of key specifications for the COTS P24 G4 24 monitor and their requested replacement the COTS P24v G4 monitor. The analysis showed the manufacturer datasheet specifications are equivalent with respect to performance characteristics, power consumption, environmental compliance, operating environment, efficiency compliance, and regulatory certifications.

SLI has assessed the proposed change in ECO-01538 including supporting documentation and Hart's internal QA testing. The requested change does not affect the system's reliability, functionality, capability, or operation.

As required under section 3.5.1 of the EAC's Voting System Testing and Certification Program Manual Version 3.0, SLI considers the nature of ECO-01538 to be minor change and therefore not to affect the Federal certification status for all applicable Verity releases.



	Approved by/Title	Signature:	Date:
	Darrick Forester Hardware Test Engineer		26-May-2022
	Traci Mapps Vice President, SLI Compliance		26-May-2022





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slicompliance.com SLI Compliance, a Division of GLI*

May 26, 2022

Director, Voting System Testing and Certification
U.S. Election Assistance Commission
633 3rd Street NW, Suite 200
Washington, DC 20001

Re: Hart ECO-01538 – Updated COTS HP P24v G4 Monitor for Verity Workstation

Dear Mr. Panek,

Hart has requested that SLI review ECO-01538 and supporting documentation to determine if the proposed update can be considered a minor change.

Summary Description:

The Commercial-Off-The-Shelf (COTS) monitor (display) for use with Verity workstations is End-Of-Life (EOL) and replaced. The manufacturer, Hewlett Packard has recommended that the P24 G4 24 is replaced with the P24v G4. The P24v G4 display is a complete form, fit, and function match with the HP P244 with all the same specifications, and features. The DisplayPort output is removed and connectivity to the workstation is via an HDMI to MiniDP cable.

The Hewlett Packard P24 G4 24 monitor is no longer available. Hewlett Packard has suggested the P24v G4 as an equivalent replacement.

Reference Documents:

- EAC 2005 Voluntary Voting System Guidelines (VVSG) Volume II, Sec. 1 & 4
- EAC Voting System Testing and Certification Program Manual Version 3.0, Sec. 3.5.1
- NOC 12-01 COTS Computer Equivalency for de minimis Change

Documentation used in SLI's Assessment:

- ECO-01538 Summary - Updated HP Monitor 4005711 A00
- 4005711_Supporting_Documents:
 - AML:
 - 2005880 Rev B AML Report.pdf

- 2005880 Rev C AML Report.pdf
- Datasheets:
 - c06691966.pdf
 - HP ProDisplay P24 G4 24 Monitor Datasheet.pdf
 - HP ProDisplay P24v G4 Monitor Datasheet.pdf

Conclusion:

There are no changes to software or OS images associated with this ECO.

SLI Compliance performed a comparison of key specifications for the COTS P24 G4 24 monitor and their requested replacement the COTS P24v G4 monitor. The analysis showed the manufacturer datasheet specifications are equivalent with respect to performance characteristics, power consumption, environmental compliance, operating environment, efficiency compliance, and regulatory certifications.

SLI has assessed the proposed change in ECO-01538 including supporting documentation and Hart's internal QA testing. The requested change does not affect the system's reliability, functionality, capability, or operation.

As required under section 3.5.1 of the EAC's Voting System Testing and Certification Program Manual Version 3.0, SLI considers the nature of ECO-01538 to be minor change and therefore not to affect the Federal certification status for all applicable Verity releases.

Please refer to the attached SLI Evaluation Hart ECO-01538 form for additional information.

If you have questions regarding this assessment, please contact Darrick Forester.

Sincerely,



Traci Mapps

Vice President, SLI Compliance

Kathy Summers

From: Michael Choate <mchoate@hartic.com>
Sent: Tuesday, June 7, 2022 12:27 PM
To: Kathy Summers
Subject: [EXTERNAL] Hart Verity De Minimis Change Requests
Attachments: 1524_State Documents.zip; State Documents.zip

***** This is an EXTERNAL email. Please exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email - STS-Security. *****


Kathy,

Please find attached the supporting documentation for the EAC approved ECO – 1512 Verity Security Performance Optimization and ECO – 1538 Updated COTS Monitor for Verity Workstations. ECO 1512 handles some slow scanning issues while ECO 1538 adds a new monitor to our COTS list.

Please let me know if you have any questions and let me know when I can come present to the SEC.

MC



 Michael W. Choate, JD, CIPM
Certification Program Manager
Hart InterCivic
15500 Wells Port Drive
Austin, Texas 78728
Mobile: 325.374,1859

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