

Engineering Change Orders

2022 - Anti-Virus & Windows Updates Engineering Change Orders 2022

Jan 1st, 2022- Dec 31st, 2022

Reviewed - Rick Weible 7/12/2024



**ES&S only updated EVS 6.0.6.0 and 6.2.0.0, in 2022, but not in 2023 or 2024
ALL OTHERS ARE NOT UPDATED AND ARE AT RISK**

There have been no antivirus updates or patches to any software to secure ensure that our elections would be secure during the primary or for the 2024 General Election by Clear Ballot, Dominion, Hart, Unisyn. ES&S only provided a partial update to 6.0.6.0 and 6.2.0.0 leaving the rest of the country at risk.

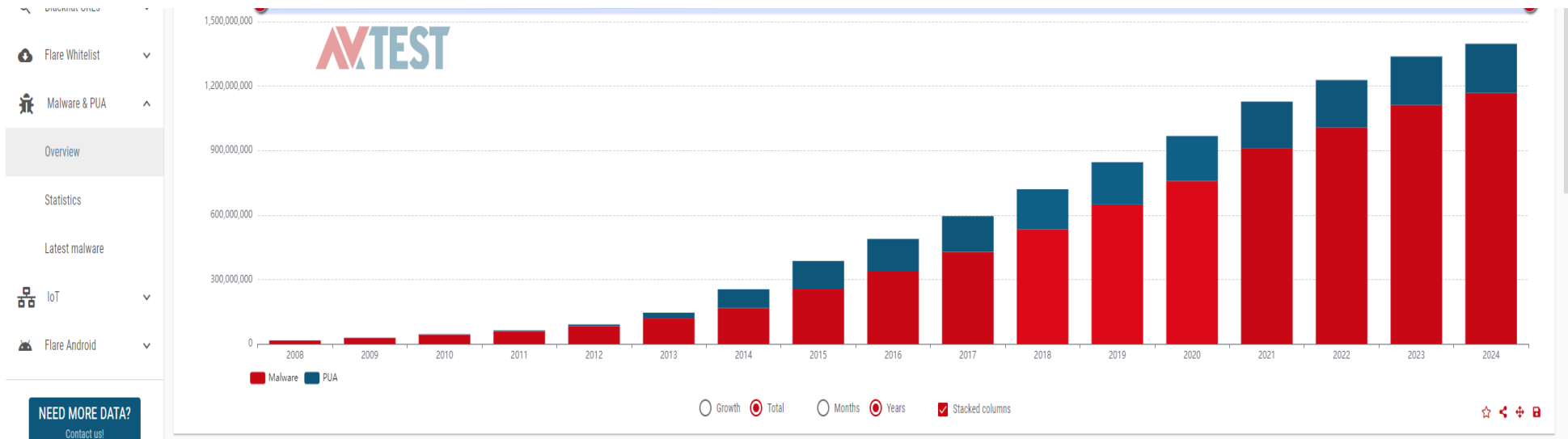
Windows Updates	AntiVirus Update	ECO	Manufacturer	Testing Lab	Impacted Device/System	Date Approved	Notes
No	No	CBG-191	Clear Ballot Group, Inc.	Pro V&V	ClearVote 2.2, EMS	11/2/2022	Add new Intel graphics driver v24.20.100.6025 on Dell OptiPlex XE3 desktop stations to enable output to multiple displays.
No	No	CBG-194	Clear Ballot Group, Inc.	Pro V&V	ClearVote 2.3, EMS	11/22/2022	Add new Intel graphics driver v24.20.100.6025 on Dell OptiPlex XE3 desktop stations to enable output to multiple displays.
No	No	DVS-100791	Dominion Voting Systems Corp	Pro V&V	ImageCast Evolution (ICE) with Democracy Suite (D-Suite) systems:5.5-B, 5.5-C, 5.5-D	9/13/2022	Addition of new Totex ICE battery packs as replacements for the current battery.
No	No	DVS-100803	Dominion Voting Systems Corp	Pro V&V	EAC certified D-Suite systems: 5.5-B, 5.5-C	1/26/2022	Added new Apacer memory module part number as a replacement for the current Swissbit and Smart Modular memory modules, which are no longer commercially available.
No	No	DVS-100812	Dominion Voting Systems Corp	Pro V&V	ImageCast Evolution on D-Suite systems: 4.14-D, 4.14-E, 5.5-B, 5.5-C	1/20/2022	Added alternate supplier for the ICE LCD-Touch Panel assembly to mitigate lead-time and availability issues with current supplier
No	No	DVS-100819	Dominion Voting Systems Corp	Pro V&V	ImageCast Precinct 2 on D-Suite 5.5-B, 5.5-C	3/17/2022	Added new Fujitsu thermal printer microcontroller due to the previous Fujitsu microcontroller version being commercially unavailable
No	No	DVS-100826	Dominion Voting Systems Corp	Pro V&V	Democracy Suite 5.5-B	3/31/2022	ICP modification to reset provisional flag on each ballot scan
No	No	DVS-100827	Dominion Voting Systems Corp	Pro V&V	Democracy Suite 5.5-C	3/31/2022	ICP modification to reset provisional flag on each ballot scan
Partial Windows 10 (1909)	No	DVS-100829	Dominion Voting Systems Corp	Pro V&V	EMS Express Server on D-Suite5.5, 5.5-A, 5.5-B, 5.5-C	4/28/2022	Added DELL Precision 3450 XE computer as an EMS Express Server configuration due to the DELL Precision T3420, 3430, 3431, and 3440 XE computers becoming commercially unavailable for purchase. (Windows 10 -1909) Previously purchased desktops and laptops would be at earlier version of Windows 10.
Partial Windows 10 (1909)	No	DVS-100830	Dominion Voting Systems Corp	Pro V&V	ICC Canon Scanner Workstation on D-Suite 5.5, 5.5-A, 5.5-B, 5.5-C	4/28/2022	Added DELL Precision 3450 XE computer as an ICC Canon Scanner Workstation configuration due to the DELL Optiplex 3050, 5270, and 3440 XE computers becoming commercially unavailable for purchase. (Windows 10 - 1909) Previously purchased desktops and laptops would be at earlier version of Windows 10.
Partial Windows 10 (1909)	No	DVS-100831	Dominion Voting Systems Corp	Pro V&V	EMS Client Workstation and ADJ Client Workstation on D-Suite 5.5, 5.5-A, 5.5-B, 5.5-C	4/28/2022	Added DELL Precision 3450 XE computer as an EMS Client Workstation and ADJ Client Workstation configuration due to the DELL Precision T3420, 3430, 3431, and 3440 XE computers becoming commercially unavailable for purchase.(Windows 10-1909)Previously purchased desktops and laptops would be at earlier version of Windows 10.
No	No	DVS-100832	Dominion Voting Systems Corp	Pro V&V	ICC with D-Suite 5.5-B and 5.5-C	4/27/2022	Added Lenovo 11GCPAR1US monitor as a display device for ICC HiPro scanner workstation configuration due to the Dell P2418HT experiencing very long lead times
No	No	DVS 100833	Dominion Voting Systems Corp	Pro V&V	Imagecast X on D-Suite 5.5, 5.5-A, 5.5-B, 5.5-C	4/21/2022	Update to BIOS on the ICX Prime Motherboard due to the revision change on the Intel Celeron processor
No	No	DVS-100843	Dominion Voting Systems Corp	Pro V&V	Imagecast Precinct 2 - DVS 5.5-B and 5.5-C	4/21/2022	Removal of Ethernet Port. "as is the chip and other components that support the Ethernet port communications, due to those components never having been used or enabled." Previous sold systems still have them in them.

No	No	DVS-100845	Dominion Voting Systems Corp	Pro V&V	ImageCast Evolution on D-Suite 5.5-B and 5.5-C	5/16/2022	Removal of Ethernet Port. "as is the chip and other components that support the Ethernet port communications, due to those components never having been used or enabled." Previous sold systems still have them in them.
No	No	DVS 100849	Dominion Voting Systems Corp	Pro V&V	ImageCast Precinct 2, on D-Suite 5.5-B and 5.5-C	5/16/2022	Add Centon 8GB SDHC memory device, due to previous 8GB SDHC going end of life
No	No	DVS-100850	Dominion Voting Systems Corp	Pro V&V	ImageCast Precinct 2 on D-Suite 5.5-B and 5.5-C	5/16/2022	Add Centon 8GB micro SDHC memory device, due to previous 8GB micro SDHC going end of life
No	No	DVS 100864	Dominion Voting Systems Corp	Pro V&V	All D-Suite configurations - Election Management System	7/6/2022	Add Dell Monitor - 24" LED HD – P2422H
No	No	DVS-100898	Dominion Voting Systems Corp	Pro V&V	ImageCast Evolution PCOS-410A with D-Suite 5.5-B, 5.5-C, 5.5-D	11/29/2022	Removal of Smart Card reader and supporting mechanical components as it is unused and has never been enabled. To remove the unused smart card reader hardware, all mechanical hardware components that are part of the smart card reader assembly have been removed.
No	No	ECO-01524	Hart InterCivic, Inc.	SLI Compliance, a Division of Gaming Laboratories International, LLC	Verity Scan and Scan Relay on Verity 2.5 and Verity 2.6	4/12/2022	Security Performance Optimization. The ECO increases the pre-defined reorganization frequency from every 500 files to every 250 files. 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.
No	No	ECO 22-1	Clear Ballot Group, Inc.	Pro V&V	ClearVote 2.0 and 2.2	4/18/2022	Added Dell Latitude 5521 as Dell Latitude 5511 Laptop End-of-Life Replacement. (No indication of Windows version)
No	No	ES&S-1143	Election Systems & Software, Inc. (ES&S)	Pro V&V	EVS 6.2.0.0	11/21/2022	This ECO introduces document content updates pertaining to the Electionware Regional Results software. The TDP documents were missing content that instructs the user how to load unofficial results transmitted from Regional Sending Sites into Electionware. ES&S submitted updated TDP documents to reintroduce the missing content.
YES	YES	ES&S ECO 1141	Election Systems & Software, Inc. (ES&S)	Pro V&V	EVS 6.2.0.0, EVS 6.0.6.0 Windows 10, Windows Server 2016	6/8/2022	This ECO addresses the Critical Vulnerability CVE-2021-34527, also known as PrintNightmare, in the Windows Operating System. It also updates antivirus definitions for the applicable EVS systems.
For more info visit - https://nvd.nist.gov/vuln/detail/CVE-2021-34527							
No	No	Hart-01512	Hart InterCivic, Inc.	SLI Compliance, a Division of Gaming Laboratories International, LLC	Verity Voting 1.0, 2.0, 2.2 Mod, 2.2.1, 2.2.2, 2.3, 2.3.3, 2.3.4, 2.4, 2.6 Systems	2/4/2022	ECO-01512 makes several clarifying clerical updates and adds an additional construction method for an existing internal device cable. There are no changes to the production Verity device assemblies. The following changes are made in this ECO: Clerical Verity Duo series baseboards correction. A duplicate reference designator is removed. Three cable drawings are updated to clarify that any connector tooling points are to be covered. An alternate construction method for an internal cable is provided.
No	No	HRT-01502	Hart InterCivic, Inc.	SLI Compliance, a Division of Gaming Laboratories International, LLC	All Verity Devices and Releases	7/12/2022	Add additional equivalent orderable part numbers to the Approved Manufacturing List (AML) for Hart Verity components. All added components all exact equivalent functional matches. This is due to End of Life status and due to high lead times caused by worldwide electronic component shortages
No	No	HRT 01529	Hart InterCivic, Inc.	SLI Compliance, a Division of Gaming Laboratories International, LLC	Verity Voting Devices that use 2.25" wide thermal printer	5/18/2022	Adds two additional sources for the thermal paper rolls for use in this printer, to reduce delays due to vendor shortages.
No	No	HRT 01538	Hart InterCivic, Inc.	SLI Compliance, a Division of Gaming Laboratories International, LLC	All Verity Voting systems	5/31/2022	New COTS HP P24v G4 monitor for Verity workstations due to end-of-life of the current HP P24 G4 24 monitor.

No	No	HRT-01551	Hart InterCivic, Inc.	SLI Compliance, a Division of Gaming Laboratories International, LLC	Verity Controller and Verity Touch Duo using Verity Voting 2.5	8/24/2022	This ECO eliminates the cause of extended set up time during Verity Touch Writer Duo (Touch Duo) booth assignment, performed during equipment setup at the polling place.
No	No	HRT-01553	Hart InterCivic, Inc.	SLI Compliance, a Division of Gaming Laboratories International, LLC	Verity Devices with Verity Voting 2.7	9/1/2022	New Source for 3.3v Power Regulator on Verity Baseboard.
No	No	HRT-01565	Hart InterCivic, Inc.	SLI Compliance, a Division of Gaming Laboratories International, LLC	Verity Controller	12/12/2022	This ECO incorporates the identical Duo Networking Improvements. It eliminates a cause of extended set up time during Verity Touch Writer Duo (Touch Duo) booth assignment.
No	No	UNS 1025	Unisyn Voting Solutions (a division of International Lottery and Totalizator, Inc)	Pro V&V	OpenElect 2.2	2/24/2022	Updated Transport Media flash drive to 4GB from 1GB, which is no longer commercially available.
No	No	UNS 1026	Unisyn Voting Solutions (a division of International Lottery and Totalizator, Inc)	Pro V&V	OpenElect 2.2 - Freedom Vote Scan	2/24/2022	Update current fan manufacturer to alternate manufacturer due to current model becoming unavailable for purchase. Update part number description to: FAN and Heatsink, CPU G5400 LGA115x
No	No	UNS 1027	Unisyn Voting Solutions (a division of International Lottery and Totalizator, Inc)	Pro V&V	OpenElect Freedom Vote Scan	7/26/2022	Added DDR4-2400 Memory Module (Vendor Part Number CT4G4SFS8266/ASI#227313) as an alternative component for CT4G4SFS824A. Added USB Flash Drive (Model 2SE-1GB, Vendor Part Number DEUA1-01GDQ1AC1SB-B088) as an alternative component to Model 3SE-4GB.
No	No	UNS 17050	Unisyn Voting Solutions (a division of International Lottery and Totalizator, Inc)	Pro V&V	OpenElect Voting Optical (OVO) 2.2	5/17/2022	Addresses an issue where two concurrent close sessions can be initiated. Two lines of code are added to prevent this.
No	No	UNS 17059	Unisyn Voting Solutions (a division of International Lottery and Totalizator, Inc)	Pro V&V	Freedom Vote Scan	7/13/2022	Replaced the heat formed ABS plastic sheet part, with precision bent aluminum part.
No	No	UNS 3476	Unisyn Voting Solutions (a division of International Lottery and Totalizator, Inc)	Pro V&V	OpenElect Voting Optical (OVO) 2.2.1	7/28/2022	This modification addresses the possibility of inserting a ballot during the transition to jammed ballot handling on the OVO. This introduces a potential race condition that can result in a cast ballot being returned to the user. This encompasses minor changes to 6 files

Source: https://www.eac.gov/voting-equipment/engineering-change-orders?title=&field_date_approved_by_eac=2022-01-01&field_date_approved_by_eac_1=2022-12-31&page=0

The screenshot shows the Atlas dashboard interface. On the left is a sidebar with navigation icons and labels: Dashboard, Current Threats, Threat Intelligence Feeds, Tests and Services, Tools, Spam, and Blackhat URLs. The main content area features four summary cards: 'New malware this year' (59,541,205), 'New malware in the last 14 days' (3,520,549), 'Total Malware' (1,400,891,311), and 'Latest detection' (Expiro, a minute ago). Below these is a section titled 'ABOUT MALWARE AND PUA' with a 'Dismiss hint' button. At the bottom, a 'TOTAL AMOUNT OF MALWARE AND PUA' section is partially visible.



Source: <https://portal.av-atlas.org/malware>

7.4.2 of the Voluntary Voting System Guide 1.0 (2005) states:

"Voting systems shall deploy protection against the many forms of threats to which they may be exposed such as file and macro viruses, worms, Trojan horses, and logic bombs.

Vendors shall develop and document the procedures to be followed to ensure that such protection is maintained in a current status."

https://www.eac.gov/sites/default/files/eac_assets/1/28/VVSG.1.0_Volume_1.PDF