Dominion Democracy Suite 5.10 Volume Test Report

CDV-19027-VTR-02

Vendor Name	*Dominion Voting Systems*
Vendor System	*Democracy Suite 5.10*

Prepared by:

SLI Compliance[SM]
4720 Independence St.
Wheat Ridge, CO 80033
303-422-1566
www.SLICompliance.com

Accredited by the Election Assistance Commission (EAC) for Selected Voting System Test Methods or Services

Revision History

Date	Release	Author	Revisions
July 25, 2019	v1.0	*M. Santos*	Initial Release;
August 21, 2019	v2.0	*M. Santos*	Updates for CASOS comments

Disclaimer

The Certification Test results reported herein must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. Results herein relate only to the items tested.

Trademarks

- SLI is a registered trademark of SLI Compliance, a Division of Gaming Laboratories International, LLC.
- All other products and company names are used for identification purposes only and may be trademarks of their respective owners.

The tests referenced in this document were performed in a controlled environment using specific systems and data sets and results are related to the specific items tested. Actual results in other environments may vary.

Opinions and Interpretations

There are no SLI opinions or interpretations included in this report.

TABLE OF CONTENTS

Introduction

SLI Compliance is submitting this test report as a summary of the certification testing efforts for the **Dominion Democracy Suite 5.10** voting system. The purpose of this document is to provide an overview of the certification testing effort and the findings of the testing effort for the **Dominion Democracy Suite 5.10** voting system.

This effort included volume testing of the **Dominion Democracy Suite 5.10** voting system's ImageCast Evolution, ImageCast X Prime, ImageCast X Classic, and ImageCast Precinct 2 components.

References

- California Voting System Standards (CVSS)

System Overview

Scope of the Dominion Democracy Suite 5.10 Voting System

This section provides a description of the scope of **Dominion Democracy Suite 5.10** voting system components:

- ImageCast Evolution (ICE) firmware/hardware

- ImageCast X (ICX) firmware/hardware

- ImageCast Precinct 2 (ICP2) firmware/hardware

The Dominion Democracy Suite ICE system employs a precinct-level optical scan ballot counter (tabulator) in conjunction with an external ballot box. This tabulator is designed to mark and/or scan paper ballots, interpret voting marks, communicate these interpretations back to the voter (either visually through the integrated LCD display or audibly via integrated headphones) and, upon the voter's acceptance, deposit the ballots into the secure ballot box.

The Democracy Suite ICX ballot marking platform is a solution that is used for creation of paper Electronic Mobile Ballots. These ballots are later scanned and tabulated by the ImageCast Central optical ballot counter and/or scanned, verified, and cast by the ICE.

The Democracy Suite ICP2 is a precinct-based optical scan ballot tabulator that is used in conjunction with ImageCast compatible ballot storage boxes. The system is designed to scan marked paper ballots, interpret voter marks on the paper ballot, and safely store and tabulate each vote from each paper ballot.

System Topology Diagram

DEMOCRACY SUITE® · System High-Level Block Diagram
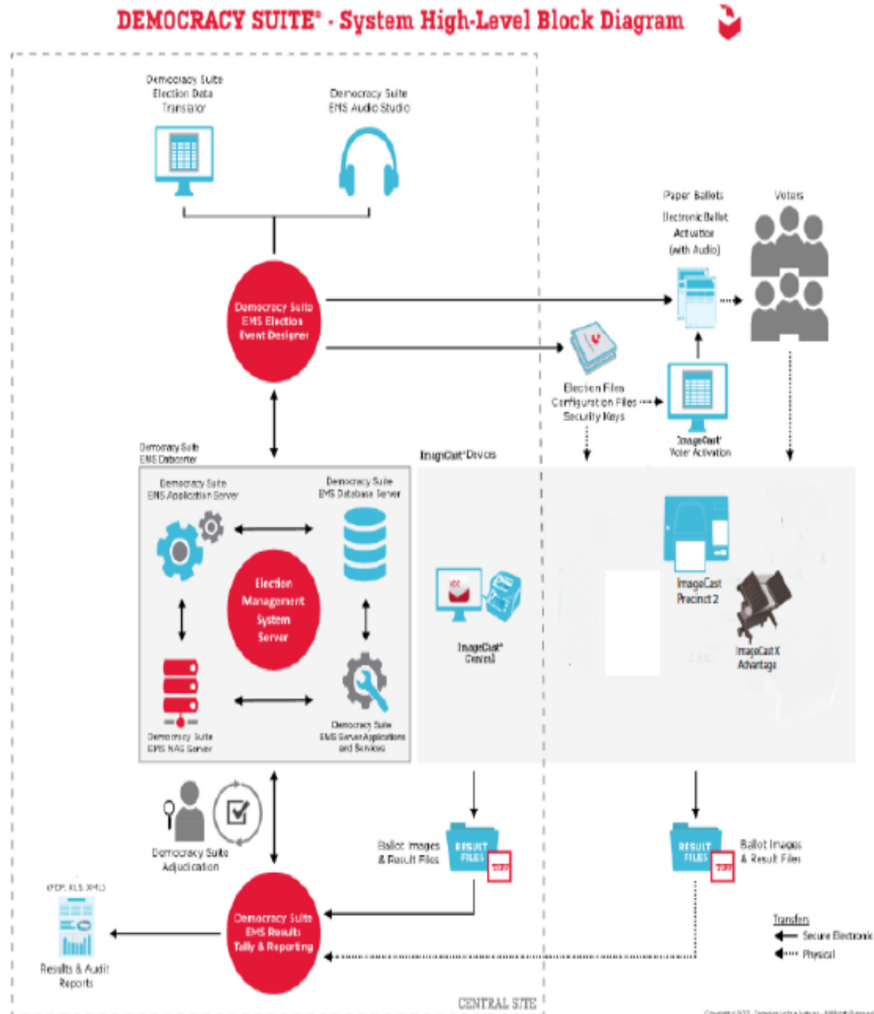
Volume Test Results Summary

The tests run on the **Democracy Suite 5.10** voting system included a Volume test.

Volume Test

An election was run utilizing the following tested equipment:

- 20 ImageCast X (ICX) Prime devices (new equipment)
- 10 ICX Classic devices (firmware change only)
- 50 ImageCast Precinct 2 (ICP2) devices (new equipment)
- 10 ballot box stackable plastic ballot boxes

- 10 collapsible stacking plastic ballot boxes
- 20 ImageCast Evolution (ICE) devices (firmware change only)
- 200 prime activation voter cards
- 100 classic activation voter cards
- 20 prime poll worker cards
- 10 classic poll worker cards
- 10 prime tech cards
- 10 classic tech cards
- 3 ImageCast Voter Activation (ICVA) stations (Smartcard Activation)

The election definition was the same general election used in functional testing.

- 400 single sheet ballots were scanned on each ICE device. Four hundred single sheet ballots were scanned on each ICP2
- 50 blank ballots were marked and printed on each machine for each version of ICX
- 50 ballots were marked on each ICE device
- Dominion did supply sufficient identical test decks of ballots, pre-marked in a pattern approved by the Secretary of State
- Additional blank ballots were provided to replace any ballots that were damaged during the test
- Sufficient quantities of blank ballots or ballot paper were supplied to mark on the ICX and ICE devices

The following steps were completed with results as noted:

1. Polls were opened in accordance with California Use Procedures.

   Zero reports for all devices were printed and verified.

   No issues were encountered.

2. The 50 ICP2 polling place ballot marking devices were utilized to create 50 voted ballots each.

   Twenty-eight of the ICP2 devices experienced ballot jams. In each case, the jam was mitigated by opening the ballot box and pulling the ballot through.

3. The 10 ICX Classic polling place ballot marking devices were utilized to create 50 voted ballots each.

   No issues were encountered.

4. The 20 ICX Prime polling place ballot marking devices were utilized to create 50 voted ballots each.

   One ICX encountered a screen freeze situation, was restarted, and continued without further issue. No other issues were encountered.

5. The 20 ICE polling scanning devices were utilized to scan 1,000 voted ballots each, for a total of 20,000 ballots

    No issues were encountered.

6. Polls were closed in accordance with California Use Procedures, including printing results from ICP2, ICE, and ICC; removing results media to transfer results back to EMS; and then shutting down the devices.

    No issues were encountered.

7. Post-election results were consolidated and reported based on the upload of results to the Election Management System (EMS) from all tabulating (ICE and ICP2) units.

    No issues were encountered.

One ICE device, one ICP2 device, and one ICX device were equipped and prepared to operate on battery power for at least two hours. The ICP2 device ran for two hours and was re-connected to power.

Two ICP2 devices (ICP2 32 & ICP2 43) scanned 399 ballots. Ballots were scanned through ICC and verified quantity of 399. One ICP2 device (ICP2 14) scanned 410 ballots. Ballots were scanned through ICC and verified quantity of 410. One ballot was damaged and was unreadable from ICP2 21 and was not replaced.

Evaluation of Testing

The above testing was conducted using the executables created in the Trusted Build, in association with the appropriate hardware versions as declared during the certification project for the **Dominion Democracy Suite 5.10** voting system.

No issues were encountered during the Volume testing, with testing producing expected results.

As per the direction given by the California Secretary of State, this volume testing report does not include any recommendation as to whether or not the system should be approved.

End of Volume Test Report