

Dominion Democracy Suite 5.2 Volume and ICX Backup Battery Test Report

CDV-306-VTR-01

Prepared for:

Vendor Name	<i>Dominion Voting Systems</i>
Vendor System	<i>Democracy Suite 5.2</i>

Prepared by:



SLI ComplianceSM
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***



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Revision History

Release	Author	Revision Summary
1.0	M. Santos	Initial Release

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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.



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Introduction

SLI Compliance is submitting this test report as a summary of the certification testing efforts for the **Dominion Democracy Suite 5.2** 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 5.2** voting system.

This effort included volume testing of the **Dominion Democracy Suite 5.2** voting system's ICE, ICX, and ICC components. Also included was the two hour backup battery test of the ICX component.

References

- California Voting System Standards (CVSS)

System Overview

Scope of the Dominion Democracy Suite 5.2 Voting System

This section provides a description of the scope of **Dominion Democracy Suite 5.2** voting system components:

- EMS – Results Tally and Reporting (RTR) application
- ImageCast Central (ICC) application
- ImageCast Evolution (ICE) firmware/hardware
- ImageCast X (ICX) firmware/hardware

The **Dominion Democracy Suite 5.2** Election Management System (EMS) represents a set of N-Tier software applications (EMS, RTR, Adjudication) for pre-voting and post-voting election project activities that are applicable to jurisdictions of various sizes and geo-political complexities.

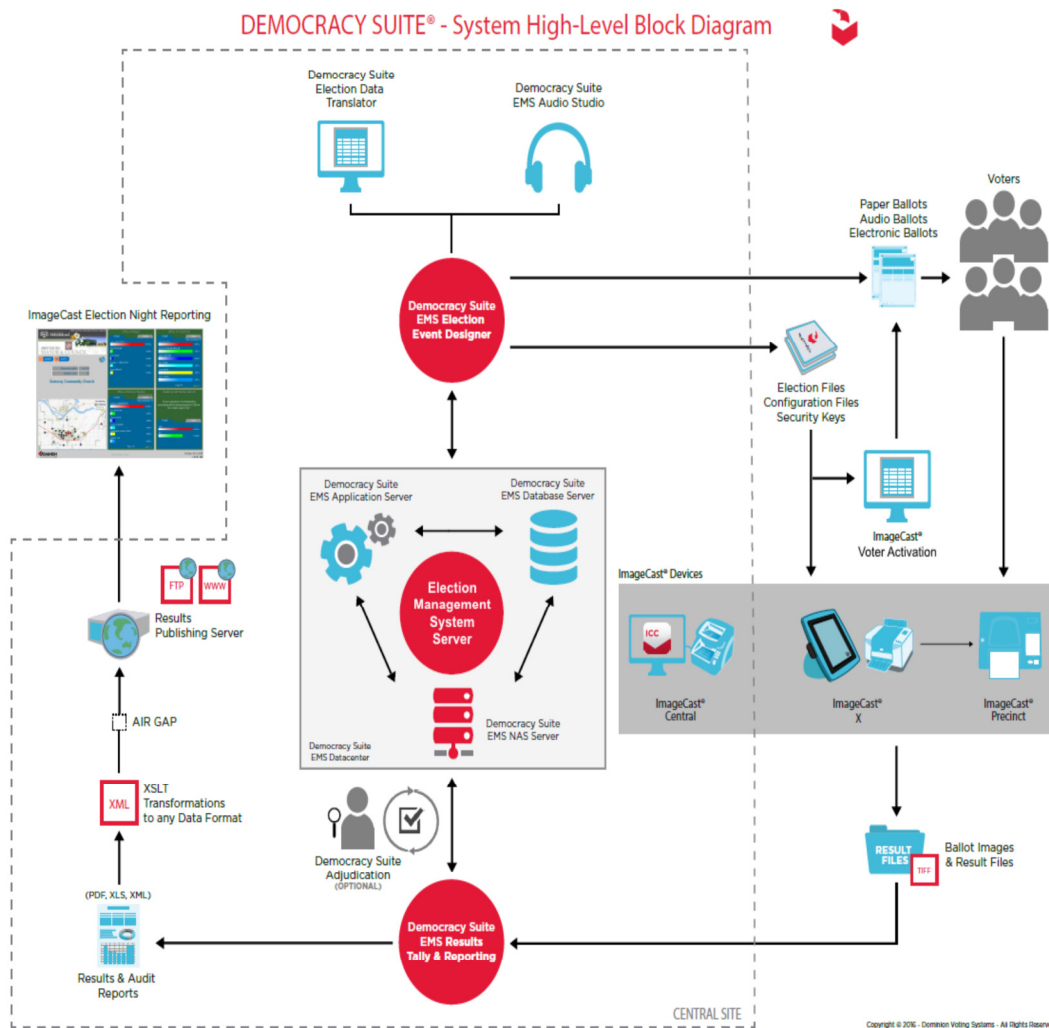
The **Dominion Democracy Suite 5.2** ICC system consists of a central high-speed optical scan ballot counter (tabulator) called the ICC Ballot Counter and is used for processing absentee ballots (such as vote by mail). This ballot counter unit is based on commercial off the shelf (COTS) hardware coupled with custom-made ballot processing application software. It is used for high-speed centralized scanning and counting of paper ballots.

The **Dominion Democracy Suite 5.2** 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 **Dominion Democracy Suite 5.2** ICX ballot marking platform is used for creation of paper Electronic Mobile Ballots. These ballots are later scanned and tabulated by the ICC optical ballot counter and/or scanned, verified, and cast by the ICE.

System Topology Diagram





Certification Test Results Summary

Functional Testing Summary

The tests run on the **Dominion Democracy Suite 5.2** voting system included a Volume test and an ICX two hour battery test.

Volume Test

An election was run utilizing:

- 20 ICX polling place devices
- 20 ICE polling place device
- 1 ICC DR-g1130 environment
- 1 ICC DR-x10c environment
- 1 EMS (EED, Adjudication, RTR)

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 20 ICX 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.

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

No issues were encountered.

4. The ICC central count location scanning devices were utilized to scan the same 20,000 voted ballots, plus the 1,000 ballots generated from the ICXs.

No issues were encountered.

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

No issues were encountered.

6. Post Election results were consolidated and reported based on the upload of results to EMS from all tabulating (ICE and ICC) units.



No issues were encountered.

No unexpected results or issues were encountered during this Volume test. All results were as expected for all the ICE results and ICX outputs, with all results matching with the ICC results.

Two Hour Battery Test, ICX

An election was run utilizing:

- 1 ICX polling place device, with printer.

The following steps were completed with results as noted:

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

Zero report was printed and verified.

No issues were encountered.

2. The ICX polling place scanning device was utilized to scan voted ballots for two hours on battery power, scanning one ballot every 10 minutes.

At the two hour mark, the ICE device was at 52% battery strength.

3. Polls were closed in accordance with California Use Procedures.

No issues were encountered.

The ICX environment met the criteria of staying powered for a minimum of two hours on its backup battery supply.

Evaluation of Testing

The above tests were conducted using the executables created in the EAC Trusted Build, in association with the appropriate hardware versions as declared during the national certification project for the **Dominion Democracy Suite 5.2** voting system.

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

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

End of Test Report
