

VENDOR APPLICATION FOR VOTING SYSTEM CERTIFICATION

Vendor Name: Clear Ballot Group, Inc.

Vendor Address: 2 Oliver St., Suite 607, Boston, Massachusetts 02109

Name and Telephone Number of Technical Support: Russ Dawson (512) 350-5720

Name of the System: (include version numbers/release numbers): ClearVote 2.3

Type of System (i.e., DRE, Optical Scan, etc.):
(Provide a brief description of how it functions)

The ClearVote 2.3 voting system product suite is an optical-scan voting system accompanied by an accessible ballot-marking device. ClearVote 2.3 is a modification to the currently certified ClearVote 2.2 voting system in the State of Washington. The ClearVote 2.3 system remains comprised of three products in WA:

ClearDesign—ClearDesign is the ballot layout and election definition software in the ClearVote system. It runs on Linux and allows for a server-client architecture. ClearDesign allows for the import of jurisdiction information such as geographic data, ballot text, and election logic rules (such as vote for n). ClearDesign allows the jurisdiction to rapidly try different layout parameters, such as varying the number of columns on the ballot, ballot length, etc. to obtain an optimal layout. Languages and associated text are easily produced or imported. ClearDesign has over 90 proofing reports to aid the jurisdiction in ensuring the quality of the finished ballot. ClearDesign then exports digitally signed PDF packages for the ballot printer, as well as election definition files for ClearAccess (ADF) and ClearCount (BDF).

ClearAccess—ClearAccess is a highly accessible ballot marking device (BMD). The ClearAccess system runs on a COTS touchscreen computer. Voters privately and independently indicate their choices on the touchscreen, review selections, make corrections as necessary, print a machine-marked ballot, and cast it into a ballot receptacle. ClearAccess software logs all transactions without compromising voter privacy and stores no results data because its output is a marked paper ballot.

ClearCount—ClearCount is the heart of the ClearVote system. It provides for central ballot scanning, results reporting, and adjudication/write-in resolution. ClearCount runs on a closed, isolated Ethernet network in which a ScanServer running Linux is attached to one or more ScanStation computers. Each ScanStation computer has a scanner attached via USB cable. Additional computers (election administration stations) can be

attached to the closed network and used to obtain operational reports before polls close and results reports after polls close. There are several native reports available from ClearCount, and additional custom reports can be defined and generated as needed. Ballots can be adjudicated through the election administration stations.

The *ClearVote 2.3 System Overview* for each component provides high-level descriptions of these ClearVote products. *ClearVote 2.3 Change Notes* record the main hardware and software features that have been fixed or enhanced for this modification. These documents, plus training guides, maintenance manuals and documentation for all third-party (COTS) components, are part of the full ClearVote 2.3 Technical Data Package (TDP).

What functions do you want to certify in the State of Washington? (Provide electronic copies of operating and maintenance manuals, training materials, technical and operational specifications, etc.)

Clear Ballot would like to certify the following product versions:

- ClearDesign 2.3.0
- ClearAccess 2.3.0
- ClearCount 2.3.1

The full ClearVote 2.3 TDP, along with a hard copy of this Application to the Office of the Secretary of State, will be mailed to your offices directly from the federally accredited voting system test lab (VSTL), Pro V&V, on a secure USB.

Is this a modification of a system currently certified with Washington State?

Yes

If so, provide a brief description of the extent of the changes as well as a list that describes in complete operational and technical detail all differences between the originally certified equipment or system and the modified equipment or system.

Refer to the *ClearVote 2.3 Change Notes* for a complete list describing the differences in operational and technical capabilities of the enhanced system (focusing on the review of the ClearDesign, ClearAccess and ClearCount products). This document is contained in the ClearVote 2.3 TDP. Notable additions and enhancements include:

HARDWARE

Minor additions to ClearVote 2.3's hardware are described below.

ClearAccess

New COTS hardware as follows:

- Printer: Lexmark MS-521dn
- UPS: APC SRT1500MXLA

ClearCount

Addition of a COTS computer (Dell 5521).

ClearDesign

Addition of a COTS computer (Dell 5521).

SOFTWARE

Notable modifications to ClearVote 2.3 are described below. The majority of ClearVote 2.3's modifications reside in ClearCount.

ClearAccess

Updated Zebra CoreScanner driver to version 3.07.0011.

ClearCount

Enhancements:

- Filtering of multiple card thumbnail images using either/or contest logic;
- In the Statement of Votes Cast reports, the user can now select the Choice Order column, the display of which matches the order of how these choices appear on the ballot; and
- A variation on the Cast Vote Record format designed for Colorado has been added to the Cast Vote Record zip file package.

Performance optimization:

- Partitioned the results tables in the database to better manage large election databases (>500,000 ballots);
- Faster loading of oval images in the oval visualization page especially benefitting larger election databases (>500,000 ballots);
- Table data for web statement reports is now passed as JSON to DataTables, drastically improving client-side rendering for tables with numerous rows;
- Query used to generate the list of card images to display; and
- Saving of ballot images on the CountServer while scanning.

Bug fixes:

- A default log filter was setting an end date/time value that prevented log messages from within the last minute from appearing;
- A potential dead lock when an error occurs during uploading of ClearCast results;
- The "Show All" option under "Show / hide columns" on web reports; and
- An issue that caused target cards to be erroneously categorized as unreadable ballots.

ClearDesign

Enhancements:

- Most notably (3) new contest rotation methods,
- Additional card footer placement options, and
- Additional page number macros.

Bug fixes:

- The cbg_profile.sh script was not being run when logging in to the system;

- and
- Removed the 'readonly' status from TMOU environment variable because it caused errors.

Clear Ballot reiterates that it has included comprehensive ClearVote 2.3 Change Notes as part of its Application for Voting System Testing. TDP and APL documentation updates to match new and enhanced system functionality configurations are also included.

Is the system certified or used in other states? (Which states?).

Not yet. ClearVote 2.3 recently earned an EAC Certificate of Conformance on 10/31/2022. Clear Ballot intends to certify this product in several other states, but Washington is among the first few to which CBG has applied for a state-level certification.

Does the system comply with Washington state law, including the ability to handle Washington's "split precincts"?

Clear Ballot has reviewed WAC 434-335 and RCW 29A.04 and 29A.12, as well as other sections of Washington statutes and rules to confirm that ClearVote 2.3 complies with Washington state law, including the ability to program and report split precincts.