

The State of Texas

Elections Division
P.O. Box 12060
Austin, Texas 78711-2060
www.sos.state.tx.us



Phone: 512-463-5650
Fax: 512-475-2811
Dial 7-1-1 For Relay Services
(800) 252-VOTE (8683)

Roger Williams
Secretary of State

REPORT OF EXAMINATION OF ELECTION SYSTEMS AND SOFTWARE, INC.'S UNITY ELECTION SYSTEM v. 2.4.3

PRELIMINARY STATEMENT

On January 6, 2005, Election Systems and Software, Inc. (the "Vendor") presented modifications to its Unity Election System for examination. The examination was conducted in Austin, Texas. Pursuant to Sections 122.035(a) and (b) of the Texas Election Code, the Secretary of State appointed the following examiners:

1. Mr. Nick Osborn, an expert in electronic data communication systems;
2. Mr. Tom Watson, an expert in electronic data communication systems;
3. Mr. Barney Knight, an expert in election law and procedure; and
4. Mr. Glenn Glover, an expert in electronic data communication systems.

Pursuant to Section 122.035(a), the Texas Attorney General appointed Dr. Jim Sneeringer, an expert in electronic data communication systems.

The Vendor first demonstrated Unity and the examiners then examined the system. Examiner reports on the system are attached hereto and incorporated herein by this reference.

BRIEF DESCRIPTION OF UNITY

Unity is an integrated suite of modular software programs that enable an election official to enter and maintain a database of jurisdiction and election information, format ballot layouts, and program election equipment. The system also collects, accumulates, and reports the voting results from the vendor's various voting systems. The overall version presented for re-examination was version 2.4.3, which consists of minor changes from previously-certified versions, and consists of the following components:

Election Data Manager	version 7.2.1.0
Ballot Image Manager	version 7.2.0.0
Optech Image Manager	version 3.2.0.0
iVotronic Image Manager	version 1.2.3.0
Hardware Program Manager	version 5.0.3.0
Data Acquisition Manager	version 5.0.3.1
Election Reporting Manager	version 6.4.3.0
Audit Manager	version 7.0.2.0

ES&S's Unity v. 2.4.3. was determined to meet federal voting system standards by a nationally recognized independent testing lab on August 27, 2004.

FINDINGS

The following are the findings, based on oral evidence presented at the examination to our examiners, written evidence submitted by the Vendor in support of its application for certification, and the findings of our voting system examiners as set out in their written reports.

Unity v. 2.4.3 meets the standards for certification as prescribed by Section 122.001 of the Texas Election Code, subject to the conditions stated below.

Specifically, the system:

1. Preserves the secrecy of the ballot;
2. Is suitable for the purpose for which it is intended;
3. Operates safely, efficiently, and accurately;
4. Is safe from fraudulent or unauthorized manipulation;
5. Permits voting on all offices and measures to be voted on at the election;

6. Prevents counting votes on offices and measures on which the voter is not entitled to vote;
7. Prevents counting votes by the same voter for more than one candidate for the same office or, in elections in which a voter is entitled to vote for more than one candidate for the same office, prevents counting votes for more than the number of candidates for whom the voter is entitled to vote;
8. Prevents counting a vote on the same office or measure more than once;
9. Permits write-in voting;
10. Is capable of permitting straight-party voting; and
11. Is capable of providing records from which the operation of the system may be audited.

CONDITIONS

The examiners agreed that the vendor had addressed the outstanding audit log issues from the most recent examination of Unity.

While a concern was expressed that the Data Acquisition Manager (DAM) should contain a real-time audit log printer, we believe this is unnecessary due to the fact that the DAM is not tabulating votes and is a means to allow the Election Reporting Manager (ERM) to accept already tabulated results either from scanners at the central counting station or remotely from regional sites to the ERM. (The DAM does not access the ERM; the ERM accesses the data residing on the DAM.)

An additional issue from the examination is the fact that the ERM does not print attempts to upload previously read data to the real-time printed audit log. It properly fails to accept the data a second time, but it should also log the attempt onto the real-time printed audit log.

Finally, although it is not a requirement for certification, vendor is urged to create the log inspection software as suggested in Mr. Osborn's examiner report to create a single location for inspection of the electronic logs created on all components of the voting system.

CONCLUSION

The vendor shall modify the ERM to print attempts to upload previously-read data to the real-time printed audit log. If this modification is not made and certified by the Secretary of State, certification of Unity v. 2.4.3 shall expire one year from the date of certification.

Accordingly, based upon the examination, review of the examiners reports, and materials submitted by the vendors, I hereby grant the Vendor's application for certification of the Unity Election System v. 2.4.3, subject to the above condition.

Signed under my hand and seal of office, this 29 day of MARCH 2005.



BUDDY GARCIA
ASSISTANT SECRETARY OF STATE