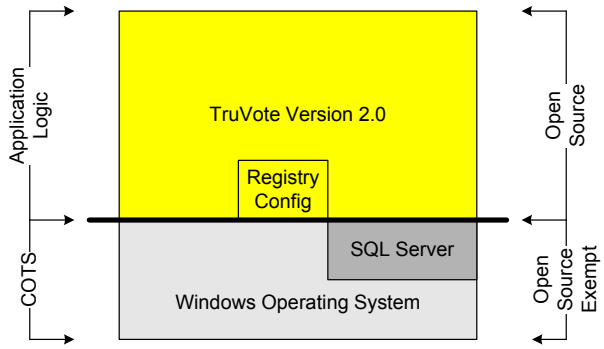
Voting Systems Open Source

Open Source is a critical requirement for voting systems in the United States. The requirement emerged from voting system vendors refusal to allow inspection of its software and where some source was discovered, significant security exposures and potentials for malfeasance were discovered. Security of the election process is exposed.



A counter problem exists however, as most voting systems are built using commercial off-the-shelf operating and data base systems. These commercial systems are fundamental assets of the major software companies such as Microsoft. To provide access to this highly complex and valuable resource, a software interface is provided where applications can access the standard operating system functions without requiring access to the operating system details. This standard application interface has an additional advantage in that updates to the operating system can be provided while the application remains the same. Thus applications remain compatible as the operating system is updated. Conversely, applications can be updated without affecting the operating system.

The Technical Guidelines Development Committee (TGDC) of the Election Assistance Commission is acutely aware of these requirements and has proposed an effective solution in the Voluntary Voting Systems Guidelines Recommendations to the Election Assistance Commission of August 31, 2007.

> ## 2.7 Treatment of COTS in Voting System Testing
>
> To clarify the treatment of components that are neither manufacturer-developed nor unmodified COTS (commercial off-the-shelf software/hardware) and to allow different levels of scrutiny to be applied depending on the sensitivity of the components being reviewed, different subdivisions of COTS have been identified, with various requirements scoped to the new terminology. For example, a COTS operating system may not require source code review, but configuration files that support the configuration of the operating system would require test lab review. The way in which COTS is tested has also changed; the manufacturer must deliver the system to test without the COTS installed, and the test lab must procure the COTS separately and integrate it. If the integration is successful, the COTS can safely be assumed to be unmodified. [VVSG-August 2007, page 60 The full document is available at http://www.eac.gov/vvsg]

This is an effective solution for voting systems. It provides details of the voting system software for review and to insure transparency. TruVote will provide its software in an open source environment.. The TruVote system uses the Windows Operating System and the Microsoft SQL Server. These COTS components of the TruVote system will be unmodified and off the shelf and open source review is not required as defined in the Guidelines.