E-Voting Companies Ordered To Submit Source Code

Expecting worries and auditing concerns that Election Day e-voting machines may cause, companies that develop the machines have provided the National Software Reference Library with copies of their software. This is a federally mandated security measure that has been added to verify that auditors are working with the same code the manufacturers state resides in their machines.

The software code was filed at the request of the Election Assistance Commission. This federal body was created in 2002 as part of the Help America Vote Act set up the same year. Commission members say they want reference copies of the code so that if any dispute arises over the validity of tabulated e-votes, officials can compare the software to see if any changes were made.

The library stores the individual voting programs as object code, so it can be viewed the way computers read this machine language. Unlike most software, voting systems have to meet state and federal laws to gain certification. Once the software is in the library's possession, no fixes at all - no matter how small - can be made. Even innocuous changes to source code to fix bugs invalidates the machine.

Companies whose code is now in the Software Library's hands include Diebold Election Systems, Election Systems and Software, Inc., Sequoia Voting Systems, and Hart InterCivic. The submissions include both hardware, the voting machine itself, and back-end tabulators.

Two other companies, that provide various e-vote auditing services, have already, or intend to, follow suit.

VoteHere presented their code, creating a second verification layer that can be authenticated. The VoteHere system offers auditing capabilities to all the machines that have filed source code with the National Software Reference Library.

Avante Technology, according to Barbara Guttman, manager of an interoperability group at the information technology lab at the National Institute of Standards and Technology, will be filing code for their VoteTrakker system.

While in theory the idea seems sound, some prominent figures have openly criticized e-voting technology. Harvard University computer scientist Rebecca Mercuri, said the code library does not take into account other elements that can also swing ballot counts, such as whether the electronic ballot is laid out correctly.

Will Doherty, executive director for e-voting watchdog group Verified Voting, offered a more moderate view. He said the software stored by the Reference Library, "is not all we would ask, but it is a step in the right direction."

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