Acceptance Testing

Techniques, Tips, and Musts: A General Overview of Acceptance Testing

Why Acceptance Testing?

Security

Accuracy

Not the responsibility of the vendor…

A vendor may offer support but **staff or members of the board** should be completing every aspect of the test.

Questions to Consider

- Is the equipment physically sound and intact?
- Does the equipment meet the certified requirements?
- Does the equipment function as expected?
- Does the equipment match what was purchased?
- Does the equipment record and tabulate results correctly?

Multiple Tests in One

- Physical and Visual Examination
- Diagnostic Examination
- Functional Examination

If a portion of the test fails, the whole test fails.

Baseline Guides Provided

First Steps

1. Develop your plan and checklist.
2. Determine the method of logging properly the tests, maintenance, and custody of each unit.
3. Train staff on how to complete the acceptance testing on each component of the system.
4. Perform quality assurance to ensure all portions of the test are conducted by bipartisan staff.

Asset Management Tool

https://www.myassettag.com/assettiger/

What to test?

- Ballot scanners (and ballot container function)
- Touchscreen ballot markers
- DRE devices
- Report and VVPAT Printer functionality
- Barcode scanners (available on some voting equipment)
- The election management software
- Ballot printers

Test the Features

- Battery life
- Password features
- Media security
- Security lock attachment
- Printer operation
- ADA Devices
- Scanner speed

Starting the Acceptance Testing

- Inspect and visually verify the physical state of the equipment.
- Verify the Federal and State certified version of the voting system.
- Load the report or VVPAT printer.
- Verify the date and time are accurate.
- Review screen display for quality and calibration.
- Test the battery.

Testing the Logic

- Verify the accuracy of the equipment.

- Ensure selection choices match the results report or VVPAT and the printed ballot (if applicable).

- Test the over-vote and under-vote detection on each machine.

Other Considerations

- Verify the counters function correctly.
- Verify the machine closes properly.
- Verify the machine properly zeroes out to reflect zero ballots cast.
- Remove all media from the machine.

End-to-end Testing

It is important to ensure that the system as a whole functions properly. This is where a board will test the election management system.

Performing an End-to-End Test

Test the election management system to ensure:

- The federal and state certified version of the software is installed;

- All components connected to the system are operating properly;

- That all votes cast on the voting equipment are properly imported into the election management system;

- The accuracy or results tabulation and report; and

- The security and function of voting system overall.

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Ohio Secretary of State

Voting System and EPBs

While it is not a part of the voting system certification, the electronic poll book system used by the county interacts with the voting system.

This interaction should be tested as part of an end-to-end test.
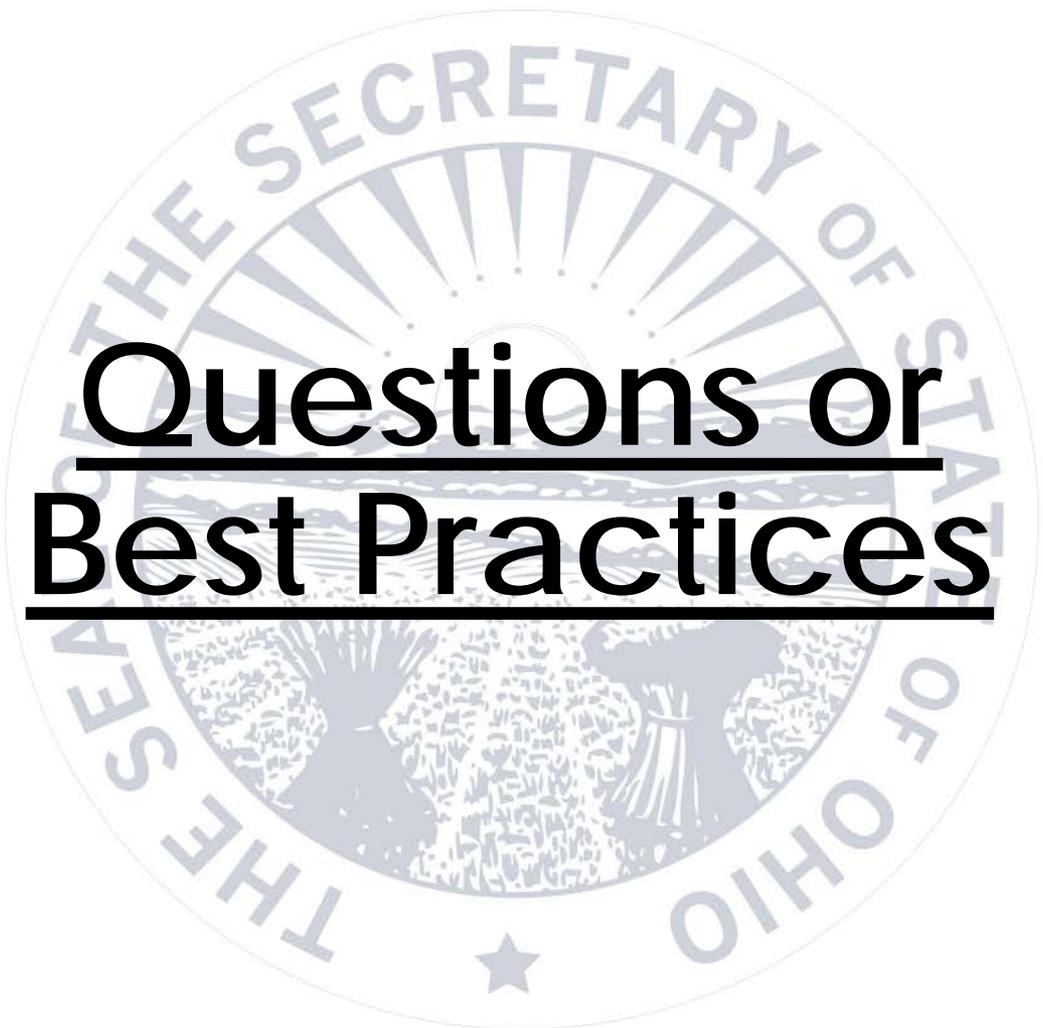
Boards purchasing a ballot printing system…

The system used to print ballots as needed must be fully tested.

If the system interacts with the voter registration system to print absentee ballots, the board should ensure the two systems are interacting properly and that the correct ballot styles are being produced.

When to Perform Acceptance Testing?

If a component of the voting system leaves an election officials direct control for any reason (i.e., repair, upgrade, etc.), a repeat of the initial acceptance test should be conducted.

Questions or Best Practices