Testing in the Real World: Voting System Manufacturer & Test Lab

OR: What are we really trying to accomplish at the TGDC?

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What Is It?

The VSTL Testing Process is **Compliance Testing.**

Does the system meet the VVSG? Yes or No.

Does the system do what manufacturer says it does? Yes or No.

It is NOT Quality Assurance

Preparation: Manufacturer

1. Application: Modification or New?

2. Technical Data Package (TDP)

3. Source Code

4. Hardware

5. Usability Test

Voting Variations

Closed primaries

Open primaries

Partisan offices

Non-partisan offices

Write-in voting

Primary presidential delegation
   nominations

Ballot rotation

Split precincts

Vote for N of M

Recall issues, with options

Cumulative voting

Ranked order voting

Provisional or challenged ballots

Pre-Testing : VSTL

1. Technical Readiness Review (TRR)

2. TDP Review

3. Source Code Review

   Automated

   Manual

4. National Certification Test Plan Creation

Functional Testing : VSTL

1. Compliance Build

2. Compliance Testing

   Physical Configuration Audit (PCA)

   Functional Configuration Audit (FCA)

3. Security Testing

   Penetration Test

4. Volume and Stress Test

5. Limits Testing

Physical Configuration Audit (PCA)

Inspection by an accredited test laboratory that compares the voting system components submitted for certification testing to the vendor's technical documentation and confirms that the documentation submitted meets the national certification requirements. Includes witnessing of the build of the executable system to ensure that the certified release is built from the tested components

Functional Configuration Audit (FCA)

Exhaustive verification of every system function and combination of functions cited in the vendor's documentation. The FCA verifies the accuracy and completeness of the system's Voter Manual, Operations Procedures, Maintenance Procedures, and Diagnostic Testing Procedures.

Post Test

1. National Certification Test Report

2. Trusted Build

3. Scope of Certification

4. Acceptance by the EAC

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1. State Certifications

Challenges of New Standards

Transitions

Interpretation Issues

Changes and timelines.

RFI Process

Thank you

Questions?