



Testing the WHOLE System

What is done after certification is obtained?

Certifying the Voting System

- States have procedures for testing those devices they classify as “Voting Systems”
- Tests take place and the system either passes or fails
- If the system becomes certified for use, then the version of the system is “Frozen”
- When changes occur in related systems, what happens?



During Certification Testing

- Data is obtained from election-related systems (i.e., voter registration, candidate qualifying, etc.) and loaded into the candidate voting system to test its ability to perform
- Data comes from systems that are not required to be frozen
- During testing if issues arise, rarely are changes made to the data systems in use. Instead changes are requested of the voting system – Make the voting system fit the mold established by the unfrozen systems

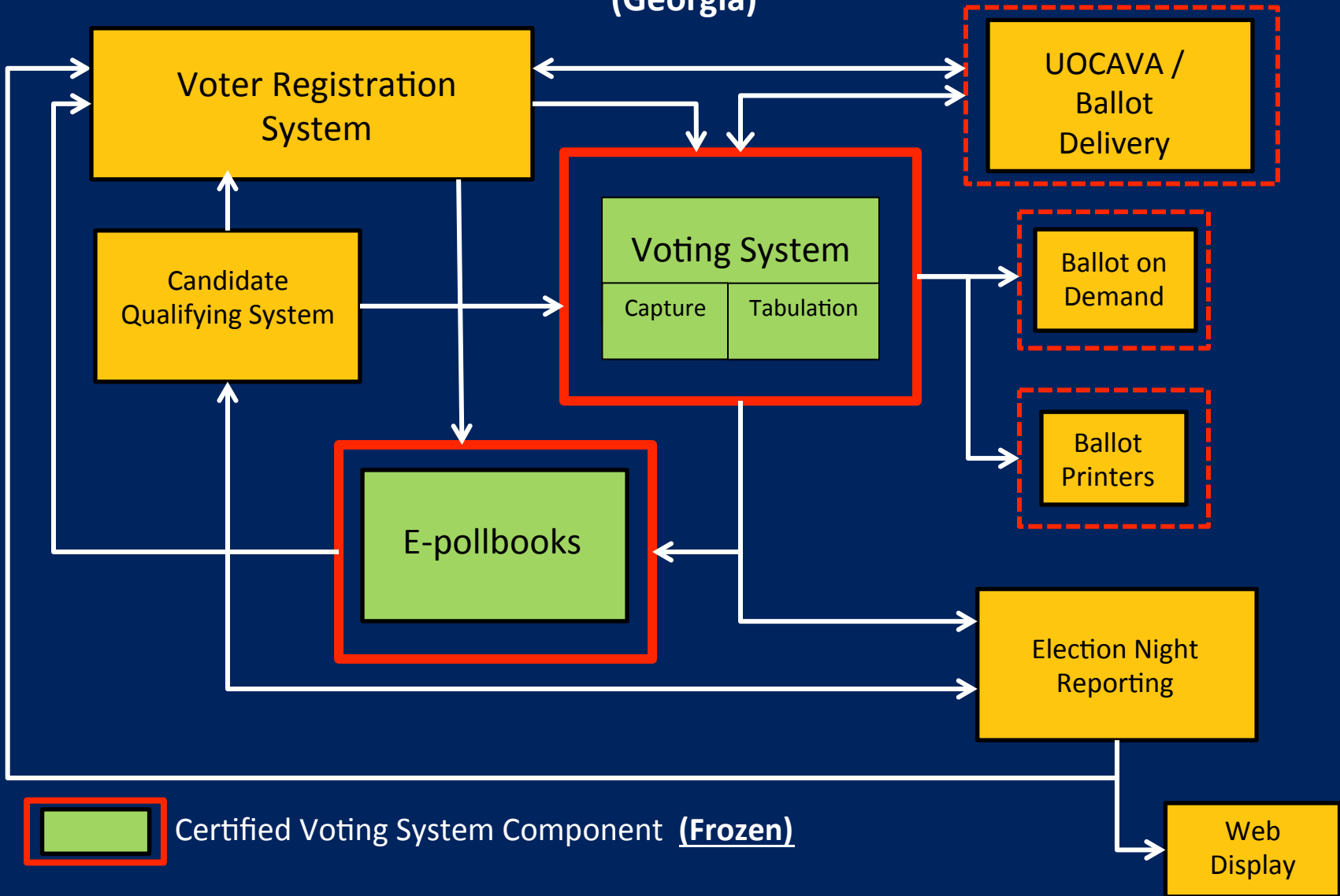


After Certification Testing

- Election-related systems are allowed to be continually updated
- Do updates / changes to “Non-Frozen” systems affect the “Frozen” system’s ability to function?
- Who is reviewing the output / inputs of Non-Frozen systems to make sure changes put into play have not adversely affected their ability to communicate and work with the Frozen system?



Interaction of Frozen and Non-Frozen Systems (Georgia)



 Certified Voting System Component (**Frozen**)

 Reviewed Election System Component

 Non-frozen system



Continual Assessment

- Continually assess the ability of Frozen and Non-Frozen systems to effectively interact
- Different organizations involved in the process
 - State Election Office
 - State Certification Testing Authority
 - County Users
 - Vendors
- Identify roles and establish lines of communications between the entities involved on regular intervals



Continual Assessment - Examples

- Ballot building / county team(s) continually reviewing reports from VR system to verify that data within the output reports reflects the needed / correct data
- Pollbook preparation team continually extracting data from VR system to verify that data can be read and loaded into the Frozen Pollbook platform
- Results communicated back to the VR System Management team (State / Vendor)



Continual Assessment - Examples

- Candidate Qualifying Team (State / Vendor) – Verifies that output of Non-Frozen system is of a format that can be easily uploaded or entered into the Frozen System and to an Non-Frozen Election Night Reporting System
- Election Night Reporting Team (State / Vendor) – Verifies the results displayed are an accurate reflection of the results compiled by the Frozen system (i.e., candidate names, race titles, vote totals)
- Teams test the final outputs of the ENR system to confirm upload reflects the correct winners / loser so the proper history / commission can be assigned to each candidate



Continual Assessment - Examples

- Certification / Examining teams – Review peripheral items (i.e., Ballot On-Demand, Ballot Printers) to determine if end product can be recognized by the Frozen System
- Certification / Examining teams – Review potential ballot delivery systems to determine if reliable and ready, as well as its ability to receive data easily from the Frozen system



Publicize the Environment

- State / Counties need to make sure potential vendors know what systems are in play within the jurisdiction's election structure
- Avoid as many assumptions as possible



Conclusion

- Testing does not stop with certification
- Jurisdictions need to have a plan in place to continually assess any of their certified systems to verify that they continue to communicate properly with all the election-related systems to which they must interact



Questions?

- Michael Barnes, Director mbarne28@kennesaw.edu

470-578-6900

1-866-KSU-VOTE