Draft Concept for Voting System Software Design and Certification Process

The idea here is that the system be broken into modules representing key stages of the voting process. Most of the modules would be proprietary in design and have only general requirements. The key being that the finalized data set transported from one module to another must meet certified format requirements and allow for open source review. This design will give vendors maximum freedom and innovation in the design of their modules, encourage regular upgrades, allow them to maintain proprietary products, and reduce certification costs. This will give administrators a broader selection to choose from, allow them to have updated software, and select modules that best fit their jurisdiction's specific needs. Activists, regulators, and administrators will be able to have an open and transparent method of verifying that the most sensitive modules and that the output from all modules is accurate. Additional certification and requirements for the Ballot By-Mail, In-Person, Tabulation, and Post-Election Module would be established and would allow limited party or full open source review. The illustration below uses blue boxes to indicate areas with fewer certification requirements, red boxes to show areas with much higher requirements for certification, and red arrows to show "hot spots" or areas of intense review.

