



HAVA's Centralized Voter Registration Systems

10 Years Later & Looking Ahead

Overview

Following the 2000 Presidential Election, the citizens of the United States found themselves questioning the accuracy and validity of the electoral process. Problems were identified with ballot layouts, voting systems, tabulation devices, ballot review committees, voter registration rolls, as well as accessibility, civic education, and oversight and training of elections administrators.

In response, Congress and the President enacted the Help America Vote Act (HAVA) focusing on improving elections administration by implementing consistent standards across states, improving accessibility to polling places, and replacing outdated election tabulation systems. Central to its mandates was the creation of a statewide centralized voter registration system in each state – “a single, uniform, centralized, interactive computerized statewide voter registration list defined, maintained, and administered at the state level.”

At the time HAVA was enacted (October 29, 2002), only a handful of states had computerized statewide voter registration lists, mostly built on outdated technical platforms. The federal government saw that having a statewide list of voters was and is essential to instilling confidence in the electoral process and protecting the value of citizen participation. HAVA requires that these statewide centralized voter registration systems (SVRS) interface with other state and federal systems to verify the accuracy of the voter's record, including state drivers' licensing agency, death records agency, and felony records agency, and the U.S. Social Security Administration.

Unlike the National Voter Registration Act of 1993 and other federal elections mandates, Congress authorized and appropriated funds to the states for HAVA compliance. As a result, nearly every state has implemented a federally-compliant voter registration system today.¹ Many states maximize the federal appropriations by integrating new technologies with their SVRS.

Innovations

With both federal funding and state leadership, several states have expanded their solutions to modernize their elections administration processes, yielding both greater efficiency for elections officials and better service to the public. Many states sought to maximize the federal funds by improving both the voter registration and election management systems through an enterprise approach by implementing a statewide system with local administration.

GIS Interfaces

The foundation of a quality SVRS is its address library – a series of valid address ranges in which eligible voters can reside and be assigned election districts. While the voter registration system is administered centrally at the state level, the data maintenance most often occurs at the local level. Address maintenance can

be a tedious operation, especially in metropolitan areas with hundreds of streets to manage and periodic redistricting. Therefore, implementing an interface with Geographic Information Systems (GIS) can reduce the labor effort and improve accuracy of the voter registration system by minimizing human error.

In Oregon, the linking of the state's voter registration system with various county GIS systems has proven highly successful. Election officials are now able to leverage their county GIS systems for data extracts and import into the Oregon Centralized Voter Registration system (OCVR). Among the benefits realized by elections officials are:

- Less opportunity for human error. The GIS interface creates a bridge between that tabular data in OCVR and each county's GIS system, so that the election officials leverage GIS power to quickly, accurately assign address ranges to a particular district.
- Increased accuracy. With GIS, you can compare voter registration data with other county databases the utilize GIS, including tax lot data.
- Time and cost savings, especially during redistricting. Before the GIS interface, local election officials would be expected to spend weeks reviewing and implementing changes using revised maps.

Looking forward, the Oregon officials predict the GIS interface will prove useful not just for redistricting, but also in helping them to more effectively implement annexations, in which addresses are pulled into a city's database.

Online Voter Registration

Simplifying the burden of updating voter registration information for eligible voters improves data accuracy and reduces inefficiencies in administering voter records and elections. Since first implementing in Arizona in 2003, at least 8 other states have implemented online voter registration with 3 more in process today. Taking advantage of the efficiencies of the Internet and the HAVA interface with the state drivers' licensing agency for voter verification and digital signatures has produced demonstrable savings.

In a 2009 study, Maricopa County, Arizona, documented the cost savings of online voter registration versus paper registration costs at \$0.80 per registration. When applied to 2007 registrations, the county saved \$175,305.² With measurable results and declining budgets, online voter registration offers state and local election officials tangible opportunities for savings.

Document Imaging and Retrieval Solution

Finding and tracking correspondence and other documents related to a voter's record can be cumbersome. Some SVRS provide little document imaging and storage features while others offer complete solutions. In New Jersey, the state opted to deploy a uniform document imaging and storage solution which links to its SVRS. This project provided strategic value to local elections officials who recognized the need for a more efficient solution to track all correspondence with each voter.

¹ North Dakota is exempt from maintaining a HAVA voter registration list as the state does not formally require voter registration as a condition of voting. California is under a Memorandum of Agreement with the U.S. Department of Justice to deploy a HAVA compliant statewide voter registration system.

² Online Voter Registration Systems in Arizona and Washington: Evaluating Usage, Public Confidence and Implementation Processes" (April 1, 2010) http://www.pewstates.org/uploadedFiles/PCS_Assets/2010/online_voter_reg.pdf

To that end in 2010, the NJ Elections Division deployed a custom document imaging solution to manage voter correspondence and its newly implemented Vote by Mail process. Today, this custom solution manages more than 1.6 million records with hundreds being added daily across the state. Each local office has the flexibility to organize and manage records within their local business practices with links to the SVRS for statewide reporting.

Looking Ahead

Mobility

Although HAVA appropriations are reaching an end, state and local elections officials continue to seek new avenues to engage the electorate. Mobile enabled websites offer interim solutions for voters to access web sites from their mobile devices; however, mobile applications offer better opportunities for push technologies³ and feedback communications. With today's focus on "iTech," elections mobile solutions can offer a more efficient method for educating voters about candidates, their platforms and the issues on their respective ballots, as well as push election results directly to the voters' mobile device. Mobile applications offer a new dynamic for elections officials to actively engage voters before an election, after an election and provide an opportunity for voters to engage their peers with using social media.

Mobility can enable elections officials to not only share elections information, but also gives a meaningful feedback channel allowing election officials to enhance services and delivery of them. Mobility has brought forth a renaissance that has been lost in the age of the modern computing world that election officials have always managed to keep first - voters matter.

Cloud Solutions

Cloud is the latest major shift in the IT industry and everyone is talking about it. Cloud & Elections – can they go together? Absolutely. There are many different cloud deployment models, such as private clouds, virtual private clouds, public cloud, community clouds along with service models such as Infrastructure as a Service (IaaS), Platform as a Service (PaaS), Software as a Service (SaaS) and everything as a service (XaaS) that provide unique opportunities for election officials today.

But what makes a cloud? What is it? Cloud computing is a IT model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. Not all cloud computing have the same features, so here are five essential characteristics from the National Institute of Standards and Technology for what makes a cloud and why these elements create new possibilities for elections officials:⁴

NIST Cloud Characteristic	Definition	But, what does it mean?
On-demand self-service	A consumer can unilaterally provision computing capabilities, such as server time and network storage, as needed automatically without requiring human interaction with each service provider.	For election officials utilizing a self-managed IT model, this characteristic allows your IT team to access the cloud compute resources you need, when you need them.
Broad network access	Connectivity - Capabilities are available over the network and accessed through standard mechanisms.	For election officials, this refers to having access to your data when and wherever you need it with any device.
Resource pooling	Leveraging - The provider's computing resources are pooled to serve multiple consumers using a multi-tenant model, with different physical and virtual resources dynamically assigned and reassigned according to consumer demand.	For election officials, the use of a virtual private or community cloud would offer the flexibility of shared compute resources and provide the security to isolate your data and application from other cloud tenants.
Rapid elasticity	Capabilities can be elastically provisioned and released, in some cases automatically, to scale rapidly outward and inward commensurate with demand. To the consumer, the capabilities available for provisioning often appear to be unlimited and can be appropriated in any quantity at any time.	For election officials, this means having the additional compute resources during the peak elections cycles (e.g., preparing poll books) to quickly process tasks and not paying for the additional IT costs during non-peak elections cycles as you would under a traditional IT model.
Measured service	Cloud systems automatically control and optimize resource use by leveraging a metering capability at some level of abstraction appropriate to the type of service (e.g., storage, processing, bandwidth, and active user accounts). Resource usage can be monitored, controlled, and reported, providing transparency for both the provider and consumer of the utilized service.	With measured services, election officials will be able to accurately see the computing resources they need and are consuming while not paying for services that go unused.

³ Push technologies refer to the delivering content to the end users rather than users searching for content.

⁴ Cloud Computing Synopsis and Recommendations, NIST, SP 800-146 May 2012, <http://csrc.nist.gov/publications/nistpubs/800-146/sp800-146.pdf>

State elections officials should evaluate the benefits of moving to cloud computing to better marshal their financial and technology resources by taking advantage of the flexibility, scalability and pay-as-you go models that cloud provides. Voter registration and elections preparation activities are well suited for cloud computing. Rather than expending large amounts of capital to procure servers and storage on five-year lifecycles, state election officials can offload the costs of traditional IT models to extend the value of their scarce resources and take advantage of on-demand cloud consumption without expending capital expenses.

With private, virtual private or government community clouds that support various government security regulations, the industry has evolved for these cloud models to be able to support protecting critical data such as personally identifiable information providing election officials the confidence in the security of their data.

Summary

As a result of the Help America Vote Act, nearly every state has implemented a federally-compliant centralized voter registration system. From this successful platform, states are poised to capitalize on the investments they have made in centralized voter registration systems by integrating new technologies such as cloud computing and mobile solutions with their SVRS. States can realize savings by investing in the next wave of technology and offer their constituents a transparent, responsive voter experience.

About the author

Michael Boyd

Michael Boyd is the Elections Portfolio Practice Leader for Hewlett-Packard State and Local Enterprise Services. In this role, he is responsible for charting the strategic direction for elections IT services for HP. He is a seasoned professional who has delivered IT projects successfully for state governments and previously served as Governor's Policy Director and State Elections Director. His expertise in government systems allows him to creatively consult with clients to develop and revise business processes and systems to efficiently scale to the growing demands of our public sector clients.

For more information

Please contact the author via:

email: michael.boyd2@hp.com

phone 919.622.8288

visit our website: <http://www.hp.com/enterprise/gov/election>

Get connected

hp.com/go/getconnected

Get the insider view on tech trends, support alerts, and HP solutions.



Share with colleagues

© Copyright 2012 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

4AA4-2291ENW, Created June 2012

