

Denver Elections – Cybersecurity

Discussion with Elections Assistance Commission October 4, 2017

Before Election Day

- Validation of PC configuration
 - Antivirus
 - Hardening (Group Policy Object Trustwave Blog GPO, e.g., screen lock)
 - Patch level
- Penetration Test
- **Network Hardware** Configuration
- WiFi Scanning
- Training
- AUP Attestation Acceptable **Use Policy**
- Software Change Freeze (before and after election)



Customer Spotlight:

How One Major American City Got Serious About Securing Elections

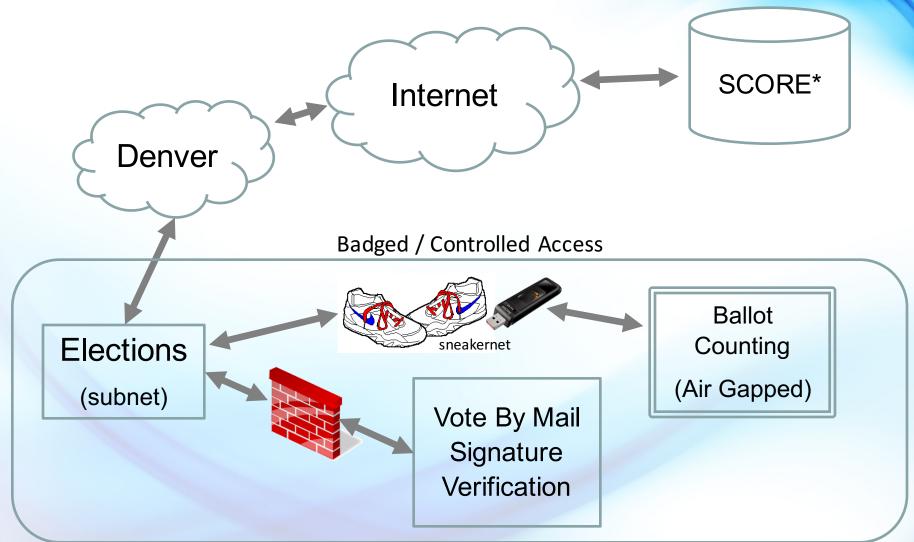
October 26, 2016 Posted By: Dan Kaplan Comments (0) Q



Election Night Monitoring Colorado Division of Homeland Denver Colorado Security **Denver Web** Security Information **Elections Operations** and Analysis Operations Center Center (SOC) Center (CIAC) (WebEOC) Colorado Office of Denver Denver Information Colorado **Technology** Elections Technology Services: Secretary (OIT) **Project HSIN** Control Management of State Office. Center **Federal** Network Bureau of Operations, Investigations Applications, (FBI) Desktop **Denver Emergency** Indirect Support, & **Operations Center** Denver 311 (EOC) & Denver **Federal** Police Department Denver Department (DPD) Threat & of **Vulnerability** Multi-State Jefferson Homeland **Monitoring** Information County Security Sharing and (DHS) **Analysis Center** INFORMATION (MS-ISAC)

TECHNOLOGY SERVICES

Elections Network Segmentation





*SCORE: Statewide Colorado Registration and Election system

Michael's Chart

Monitoring Technologies

- HSIN Portal Homeland Security Information Network
 - Like a WebEx with Screen Sharing, but approved for govt use
- SCORE: Statewide Colorado Registration and Election system – statewide network performance monitoring
- SolarWinds & OP5 Network node status (Denver)
- QRadar Security Event & Information Management (SEIM) – log monitoring (Denver)
- WebEOC Web Elections Operations Center Voter Service Center monitoring (Denver)
- ELK Elasticsearch, Logstash, and Kibana
- Geofeedia location based analytics platform didn't work out

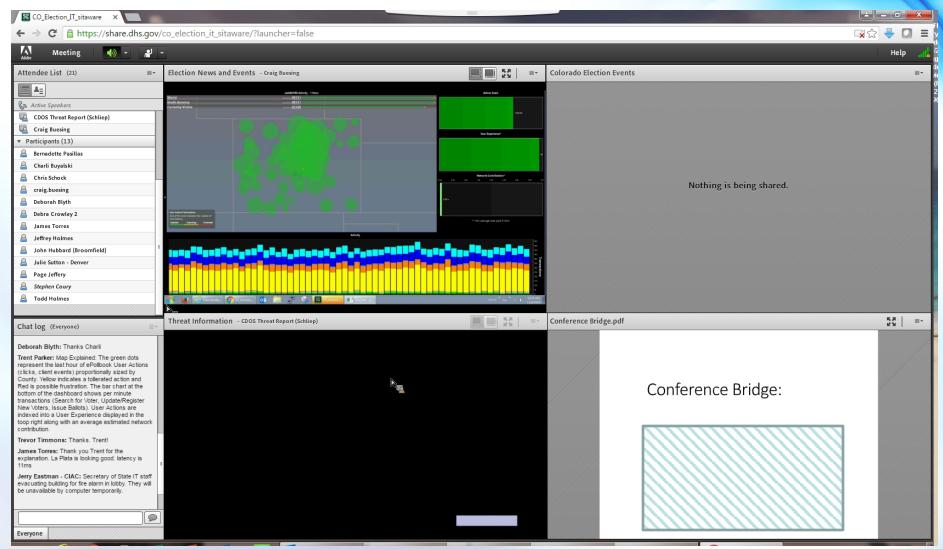


Monitoring Technologies — continued

- Bridge line
- Listserv
- List of names and cell numbers
- SMS Text Messaging
- Face to Face Status



Homeland Security HSIN Portal





Election Day

Denver Mayor Michael Hancock

