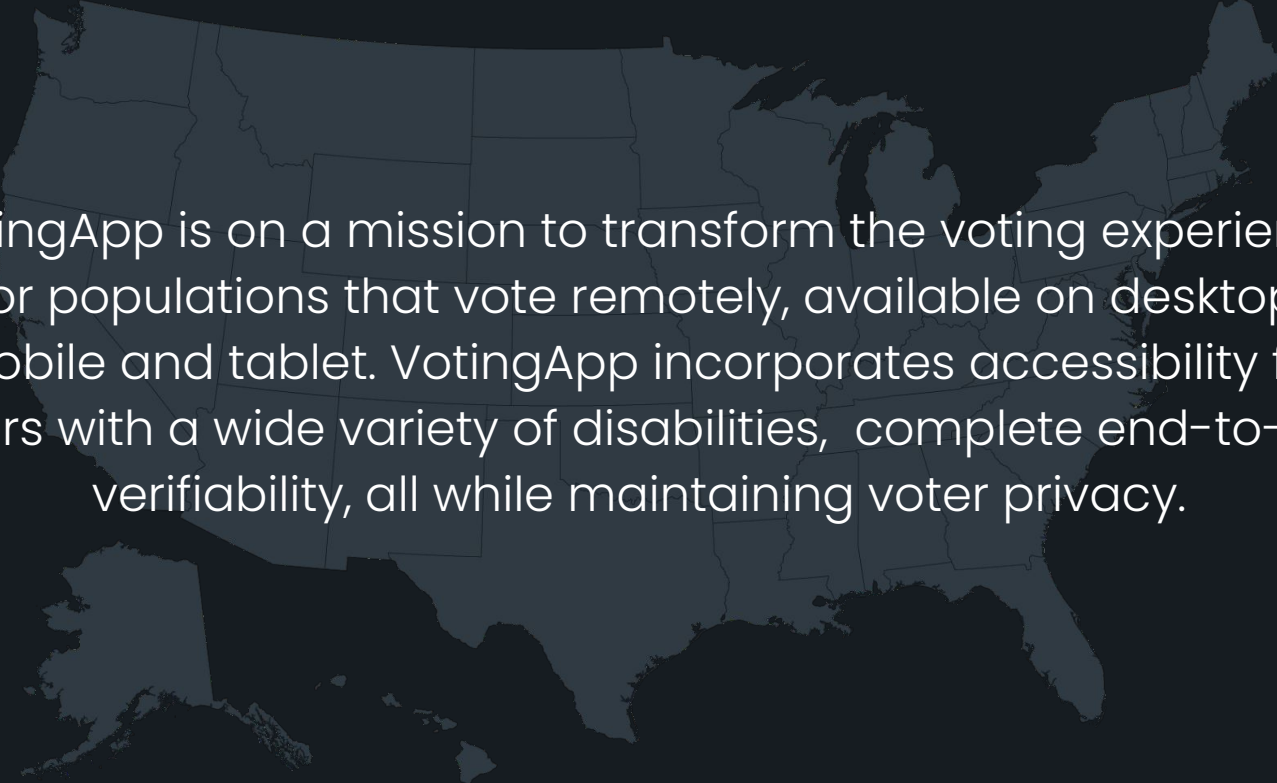# VotingApp Product Overview

December 2022

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VotingApp is on a mission to transform the voting experience for populations that vote remotely, available on desktop, mobile and tablet. VotingApp incorporates accessibility for voters with a wide variety of disabilities, complete end-to-end verifiability, all while maintaining voter privacy.

VotingApp Use Cases

UOCAVA Voters: Uniformed and overseas voters must often rely on international mail to receive and return their ballots. Some states offer dated solutions requiring voters to access printers, scanners and fax machines.

Voters with Disabilities: Polling places are required to provide in-person accessible voting devices. However, in all-mail states or when a voter with a disability choses to vote absentee, inaccessible paper-based voting and envelopes are the default.

Emergency Backup: Mail ballots often get lost, printers get delayed and vote centers fail to open. With VotingApp as a backup, voters can be added on demand. Additionally, unlike with paper, errors in ballot data can be instantly corrected.

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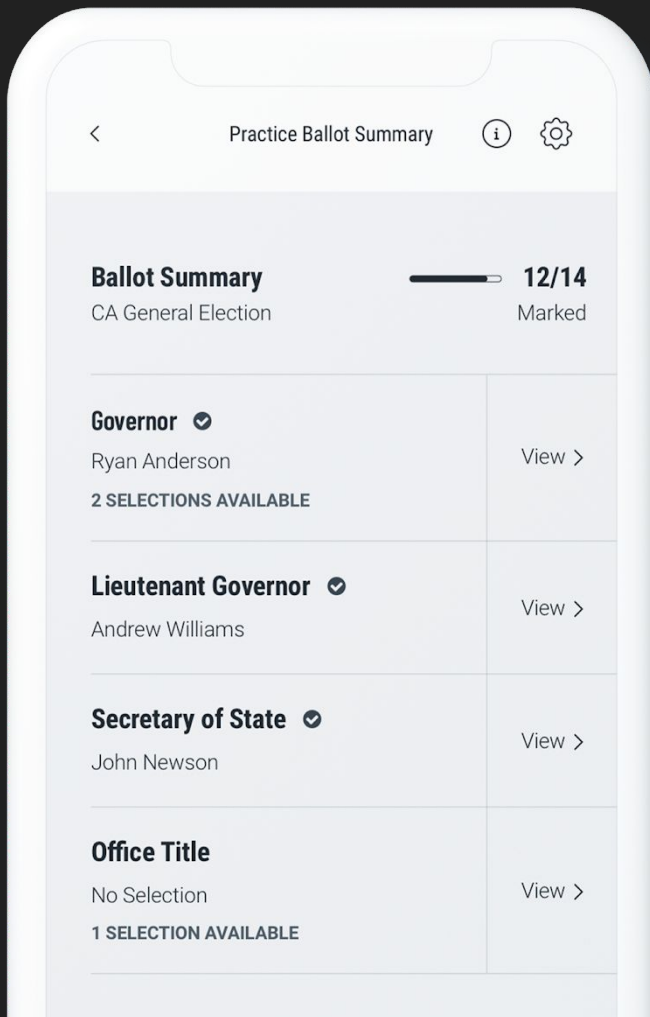
Accessible

- Tested to work with screen readers on iOS and Android devices as well as those with browsers on Windows and Mac computers.

- Supports keyboard and button device navigation as well as refreshable braille displays.

- Built to VVSG (Voluntary Voting System Guidelines) standards for poll station accessible voting machines, providing additional accessibility features including:

    - Built-In Audio Ballot
    - Adjustable Contrast
    - Adjustable Text Size
    - Screen Black Out Option (for voter privacy while using the audio ballot)

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Protect Voter Privacy

- VotingApp is unique among remote voting systems in that it protects voter privacy by using an air-gapped Security Device so voter identity and marked ballot data are never linked.

- For the first time, voters can return their ballots electronically without sacrificing their privacy.

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End-to-End Verifiable

- Voters can track their ballot and verify that their ballot has been submitted and accepted through a simple web-based interface.

- Outside of that interface, VotingApp also uses a variety of cryptographic techniques to supply the following proofs:

  - Marked As Intended - Voters can verify their choices are properly collected

  - Stored as Marked - All observers can verify the collected marked ballot has not changed since marking

  - Tallied as Stored - All observers can verify votes are not changed between storage and counting

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Secure & Tamper Proof

- A voter authenticates using a physical token provided by the jurisdiction, a unique set of credentials combined with a device's biometric capabilities.

- Industry-vetted and accepted encryption technology for protecting sensitive data.

- Immutable data storage for live election content including ballots, voter lists, authentication requests and responses, returned votes, spoiled ballots.

- Custom made air gap device that handles security-sensitive processes.

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Key System Components

- **Voting Applications**
  - Mobile, desktop, and tablet

- **Administrative Interface**
  - Data import/export
  - Ballot proofing
  - System config & customization

- **Security Device**
  - Air gapped offline hardware
  - Conduct sensitive operations

- **Ledger**
  - Tamper proof
  - Auditable log
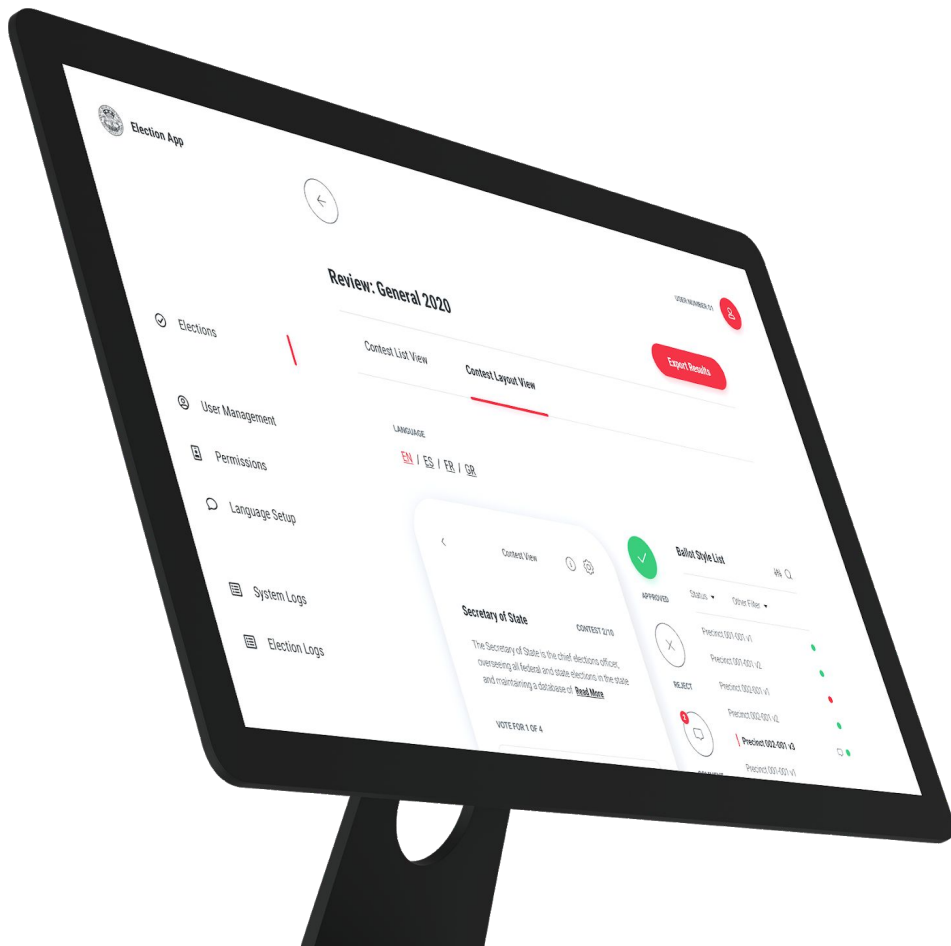
Supporting Technical Information

White Papers

End-to-End Verifiability Overview
https://pub.votingapp.com/nass-winter-2022/E2EV-VotingApp-short-v2.0.pdf

End-to-End Verifiability Whitepaper
https://pub.votingapp.com/e2ev-whitepaper.pdf

Closing the Accessibility Gap in Remote Voting
https://pub.votingapp.com/votingapp-accessibility-2022-v1.pdf

Patents

End To End Verification Of An Election Run Over A Public Network
https://patentimages.storage.googleapis.com/8b/b9/8a/f1d11fa439930b/US11475726.pdf

Security device and methods for end-to-end verifiable elections
https://patentimages.storage.googleapis.com/76/5f/94/c1dc1dd7e96a62/US11362844.pdf

Thank you!

For additional information, reach out to us at
contact@votingapp.com.

www.votingapp.com

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