



FACULTY SENATE ELECTION SURVEY

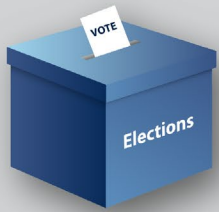
Barry Brummund, CIO

March 1, 2021



BACKGROUND

- Qualtrics is utilized as enterprise survey software tool for UArizona, ASU, and NAU.
- 13K surveys per year conducted at UArizona.
- The Faculty Center started using Qualtrics in 2016 specifically for the University of Arizona Faculty Senate elections.



FACULTY CENTER PROCESS PRE-ELECTION WORKFLOW

2 weeks prior

1 week prior

5 days prior



UPDATE SURVEY

ROLL-OVER SURVEYS FROM PREVIOUS CYCLE IN QUALTRICS
Remove content from previous election questions, update dates and relevant placeholder information.

STEP 01



GENERATE LIST

GENERATE CONTACT LIST VIA UACCESS USING THE GENERAL FACULTY CENSUS
Data is cleaned up to include: First Name, Last Name, Email, NetID. Any entry missing information will contain a "-" and must be removed from the contact list before uploading. This often includes emeriti who do not have an email address listed.

STEP 02



UPLOAD LIST

CONTACT LIST IS UPLOADED INTO QUALTRICS
Shared to the "FacultyVoting" group. It is then associated with the authenticator workflow for the election ballot survey.

STEP 03



VERIFY FLOW

ONCE THE CONTACT LIST IS ASSOCIATED, the authenticator workflow in Survey Flow is compared to the previous election cycle/notes to ensure the same options are selected and appropriate fields are selected.

STEP 04



ADD CONTENT

CONTENT IS ADDED TO THE SURVEY TO MATCH ELECTION CYCLE AND DECLARATIONS. Survey logic is applied (ex: if it is a college representative election, vote codes are added in the survey logic to ensure only members of certain colleges vote for certain candidates). Candidate statements are added to the survey as linked PDFs.

STEP 05



TEST SURVEY

SURVEY IS TESTED BY FACULTY CENTER STAFF AND FACULTY OFFICERS, depending on nature of the survey.
*proposed change to involve UITS in standardized and systematic testing.

STEP 06



ELECTION STARTS

ONCE ALL INFORMATION IS CORRECT ON THE BALLOT AND THE SURVEY FLOW IS TESTED, the link is shared at the start of the election cycle by the Faculty Center staff.

STEP 07

Faculty who are missing information are removed from the main contact list and saved in a separate spreadsheet. When faculty who were removed from the contact list try to vote, they are greeted with an error. These individuals are manually added back to the contact list with their complete information after cross checking them against the General Faculty Census in UAccess to ensure they are eligible to vote.

INCIDENT RESPONSE

2021 Faculty Election

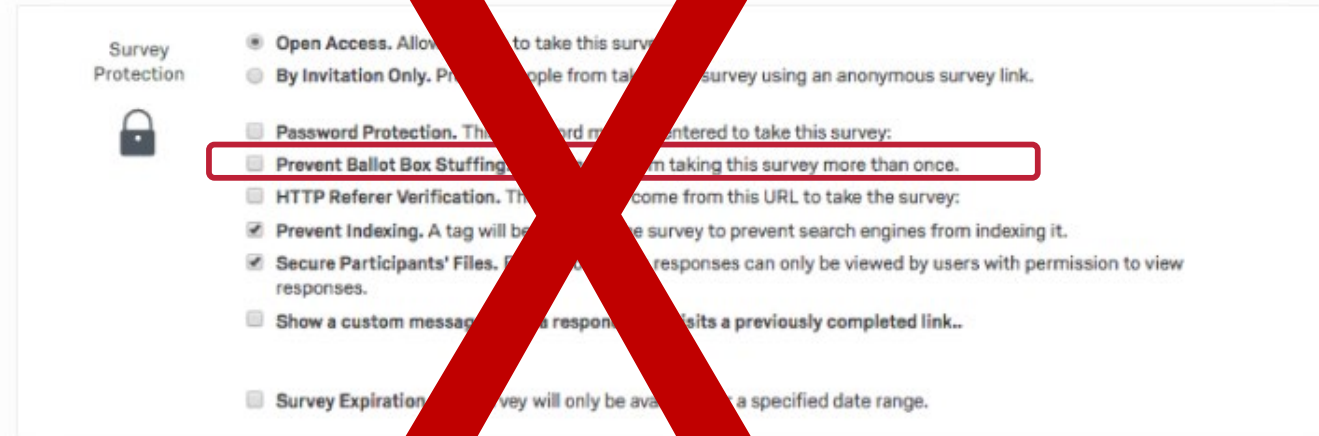
On Monday, February 15, 2021, a voting faculty member and election candidate expressed concern about the Faculty Center's survey tool (Qualtrics) for Faculty elections and the potential for 'Ballot Box Stuffing.'



Faculty Senate leadership asked UITS to conduct a review of the Faculty Center's voting software and investigate this concern.

NOT SUFFICIENT PREVENT BALLOT BOX STUFFING OPTION

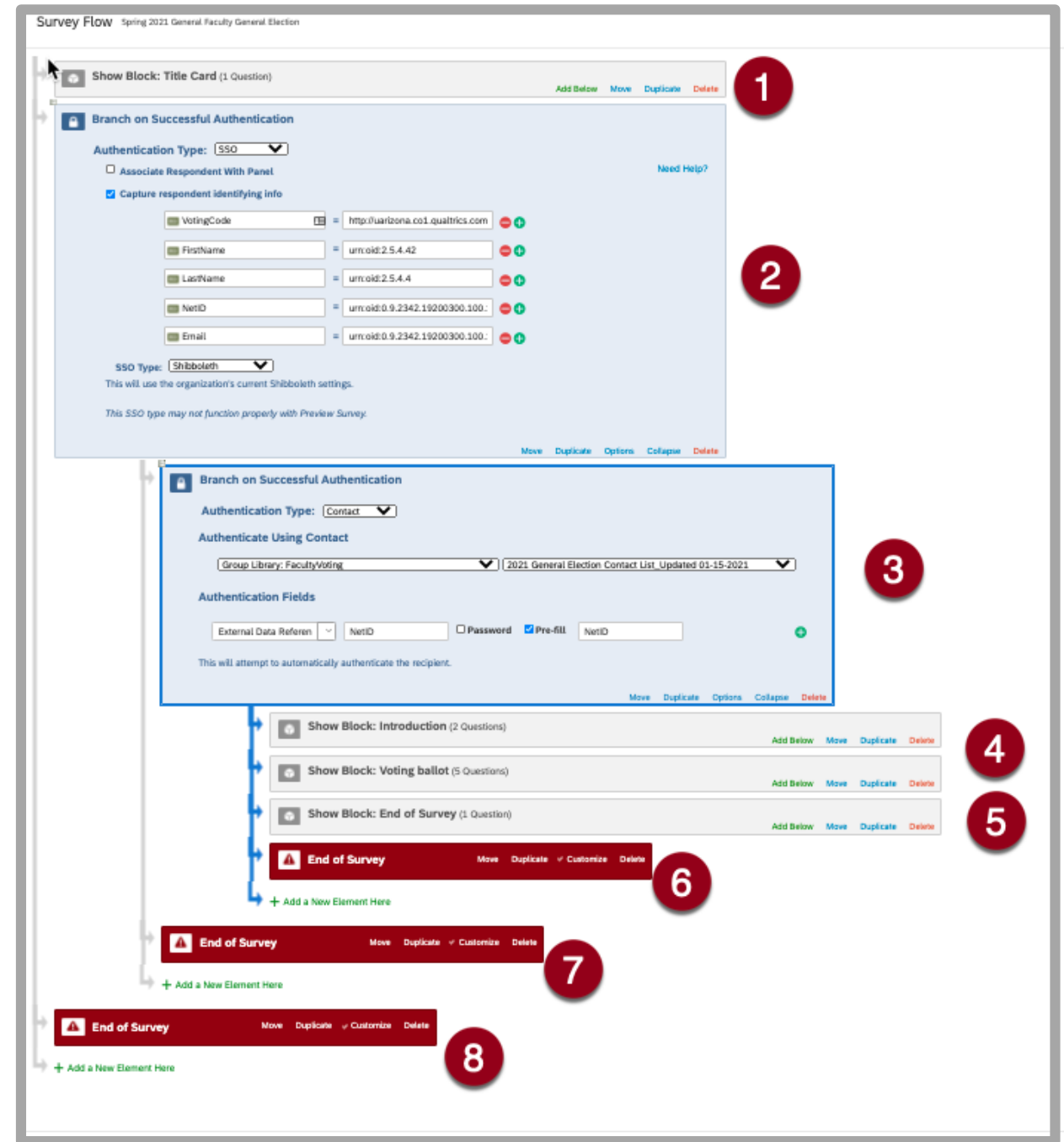
Option can be circumvented by clearing browser cookies, switching to a different web browser, or using a different device.



NetID authentication and custom survey logic are the best methods to prevent duplicate votes.

ELECTION SURVEY LOGIC

1. Voters are required to sign in with University's WebAuth Authenticator.
2. Voting code, name, NetID, and voter email captured.
3. NetID is compared to list of eligible voters.
4. If match is found and contact does not show a previous submission, voter can submit vote.
5. Voter must confirm submission.
6. Response is recorded.
7. If a match is found, and contact does show a previous submission, the voter receives a message their vote was already submitted.
8. If no match is found, the voter receives a message that they are not eligible to vote.



DID THIS CONFIGURATION ERROR AFFECT
AN ELECTION OUTCOME?

SCOPE OF DUPLICATE ENTRIES

After discovering the issue, we analyzed all previous votes since shifting from the custom web tool to Qualtrics in 2016. It was determined the configuration issue originated in the 2019 General Election.

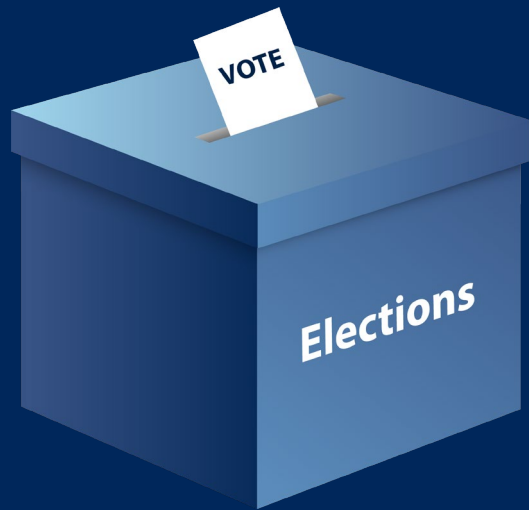
DATE / ELECTION	DUPLICATES	VOTES SUBMITTED	PERCENTAGE
2021 General	4	757	0.53%
2020 Runoff	0	669	0.00%
2020 General	6	818	0.73%
2019 General	2	604	0.33%

DID THIS CONFIGURATION ERROR AFFECT AN ELECTION OUTCOME?

2021 General Election

Removing the 4 duplicate votes caused a tie between the 4th and 5th candidate for SPBAC.

RECOMMENDATIONS FOR FUTURE ELECTIONS



- Conduct a code review
- Create a test script and add a test condition attempting to complete the survey more than once.
- Review the survey results data specifically looking for duplicate submissions.

QUESTIONS?

Barry Brummund
Chief Information Officer
brummund@arizona.edu

Adam Brokamp
IT Manager, Student & Academic Technologies
acadtech@arizona.edu