

TEST REPORT AND RECOMMENDATION

Jurisdiction: ACT

Authority: ACT Electoral Commission

Customer: Damian Cantwell AM CSC
ACT Electoral Commissioner

Manufacturer: Software Improvements
GPO Box 1928
Canberra ACT 2601

Submission Reference: N/A

Evaluated Product(s): eVACS® Voting and Counting modules

Issued By: BMM Testlabs

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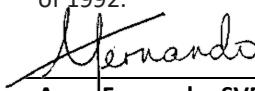
Report Number: ACTEC.1007.14 eVACS 2024

Date of Issue: 05-Apr-2024

Dates(s) of Evaluation: 29-Jan-2024 to 03-Apr-2024

Standards Tested: Electoral Act 1992.

Compliance Certification: The evaluation has confirmed that the integrity of the assessed modules has been maintained and that they adhere to the stipulations outlined in the Electoral Act of 1992.

Signed: 

Anna Fernando, SVP Operations

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1. Purpose

The ACT Electoral Commission has engaged BMM to conduct a full source code review of eVACS®. This source code review is intended to provide assurance of the code's integrity and its adherence to the requirements of the Electoral Act 1992.

2. Scope of Review

The source code review will examine the voting and counting components of eVACS®.

2.1. Voting Module

The voting component executes on Polling place servers, to create a record of electronically cast ballots. This module consists of *voting_client* and *voting_server* ADA projects ([13.1 Source Code File Structures](#)).

2.2. Counting Module

The counting component executes on the Election server, to determine the elected candidates from a database of formal ballots.

The counting component source for the casual vacancy feature will not be part of the current review.

The counting component review included SQL files starting with "*count_*.sql*", and omitted those containing "**_cv_*.sql*" which pertain to casual vacancy ([13.1 Source Code File Structures](#)).

3. Evaluation Method

BMM reviewed the eVACS® codebase to

- ensure compliance to relevant clauses in the Electoral Act of 1992 ("the Act") for electronic voting and counting. The outcome is presented in a structured tabular format, mapping legislative requirements to source code ([Appendix B – Electoral Act 1992 Mapping](#)).
- confirm the absence of any malicious or unintentional elements that could potentially impact the integrity of election results.

4. Evaluation Results

4.1. Summary

BMM has conducted a thorough examination of the source code pertaining to the voting and counting modules of the eVACS® system. Throughout this review,

- BMM has verified that eVACS® system accords with the requirements of the Electoral Act 1992. Please refer to section [Appendix B – Electoral Act 1992 Mapping](#) for the corresponding functionalities aligned with the Electoral Act 1992.
- BMM has not found any code that would have the effect of altering the election result and certified that the code is free of any such malicious or unintentional content.

5. Device Identification

5.1. EVACS® Application Files Identification

Please refer to [Appendix C – File Identification](#).

6. Non-Compliances:

None

7. Conditions:

BMM recommends conducting thorough functional testing of COUNTING module based on historical data, verifying that scrutiny sheets are populated correctly. BMM did not execute tests as test execution is not in the scope of the engagement.

8. Additional Information

None

9. Terms and Conditions

BMM Testlabs (“BMM”) has conducted a level of testing of the product which has historically been adequate for a submission of this type. However, inherent in testing in a laboratory environment are the unavoidable limitations of not being able to verify the effects of all possible configurations and environments that occur in production environments.

This test report is for use by the client for the jurisdiction (“Jurisdiction”) referenced in the report (the “Report”) and only verifies, as of the date stated, the product described in the Report subject to any conditions or limitations set forth therein.

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10. Attachments:

None

11. Appendix A – Glossary of Terms

Term	Explanation
ACTEC	ACT Electoral Commission
BMM	BMM Testlabs, an Accredited Test Facility
eVACS	Electronic Voting and Counting System
SHA256	Secure Hash Algorithm 256 - a cryptographic computer security algorithm
SQL	PostgreSQL Stored Procedures

--- End of Appendix A ---

12. Appendix B – Electoral Act 1992 Mapping

12.1. 118A Approval of computer program for electronic voting and vote counting

Electoral Act 1992	Source Code	BMM Comment
<p>1) The commissioner may approve 1 or more computer programs for any of the following:</p> <ul style="list-style-type: none"> a. to allow electronic voting in an election; b. to perform steps in the scrutiny of votes in an election. 	<p>Clause (a): Two main Ada projects: <i>voting_client/voting_client.gpr</i> and <i>voting_server/voting_server.gpr</i></p> <p>Clause (b): eVACS® Counting module</p>	<p>Clause (a): The <i>voting_client</i> project utilizes the GtkAda library and interacts with a Glade XML file (<i>voting_client/bin/evacs_act.glade</i>) to provide voting interface for voters. The communication between <i>voting_client</i> and <i>voting_server</i> is established through Ada Web Server ("<i>aws</i>") throughout the entire voting session. <i>voting_server</i> utilizes the "<i>gnatcoll</i>" package to store voting data into persistent database (PostgreSQL). <i>voting_server-model-vote.adb</i> contains function <code>Commit()</code> that saves voting data to "<i>vote</i>" table (1 record per voter); while function <code>Commit_Preferences()</code> saves data to "<i>vote_preference</i>" table (number of records = number of preferences entered by each voter). Both "<i>aws</i>" and "<i>gnatcoll</i>" can be found in AdaCore website (https://www.adacore.com/documentation)</p> <p>Clause (b): Two scrutiny sheets are established to meet this requirement: <i>Hc_pref_scrutiny_sheet1_<elec_id></i> and <i>Hc_pref_scrutiny_sheet2_<elec_id></i></p>

Electoral Act 1992	Source Code	BMM Comment
		<p><i>count_create_pref_scrutiny_sheets.sql</i> shall create these two sheets at the beginning of counting process.</p> <p>Both <i>count_update_pref_scrutiny_sheet_hc1.sql</i> and <i>count_update_pref_scrutiny_sheet_hc2.sql</i> shall update these 2 sheets during counting process.</p>
<p>2) The commissioner may approve a program under subsection (1) (a) only if the program will—</p> <ol style="list-style-type: none"> allow an elector to show consecutive preferences starting at ‘1’; and give an elector an opportunity to correct any mistakes before processing the elector’s vote; and allow an elector to make an informal vote showing no preference for any candidate; and not allow a person to find out how a particular elector cast their vote. 	<p>Clause (a): <i>voting_server/system/user/voting_server-model-ballot.adb</i></p> <p>Clause (b): <i>voting_client/system/gui/vc_main_voting_screen.adb</i></p> <p>Clause (c): <i>voting_client/system/gui/vc_informal_vote_screen.adb</i></p> <p>Clause (d): <i>voting_client/system/gui/vc_hidden_vote_screen.adb</i></p>	<p>Clause (a): <i>Next_Preference_Number()</i> function in <i>voting_server/system/user/voting_server-model-ballot.adb</i> will manage the next available Preference Number.</p> <p>Clause (b): There are few options to correct any mistakes:</p> <ol style="list-style-type: none"> “UNDO LAST CHOICE” to undo last selection “CLEAR CHOICES” to clear all selections and start over again. <p><i>Initialise()</i> function in <i>voting_client/system/gui/vc_main_voting_screen.adb</i> file associates on-click event of “UNDO LAST CHOICE” and “CLEAR CHOICES” buttons to respective procedures.</p> <p>Clause (c): <i>voting_client/system/gui/vc_informal_vote_screen.adb</i> file provides options to either</p> <ul style="list-style-type: none"> ⇒ Go back and redo ⇒ Confirm to cast Informal Vote <p>Clause (d):</p>

Electoral Act 1992	Source Code	BMM Comment
		voting_client/system/gui/vc_hiddden_vote_screen.adb file.

12.2. Part 4.1 Preliminary

Electoral Act 1992	Source Code	BMM Comment
<p>1A Meaning of count votes</p> <ol style="list-style-type: none"> 1) For this schedule, count votes, in relation to a candidate, means the number of votes worked out as follows: BP x TV 2) Any fraction must be rounded down to 6 decimal places. 3) In this clause: BP means the number of ballot papers to be dealt with at a count that record the next available preference for the candidate. TV means the transfer value of those ballot papers. 	<p>count_update_pref_scrutiny_sheet_hc2.sql</p>	<p>Various parts in the code which <code>TRUNC(votes, 6)</code> to 6 decimal places (round down). Examples:</p> <pre>f_total := TRUNC((c_total * numer)/denom, 6);</pre> <pre>EXECUTE format('SELECT TRUNC(votes_xferred_to_sc 2,6) FROM %I WHERE cnt_num = %s', scrutiny_sheet1, count_num) INTO v_xferred;</pre> <pre>v_exhausted1 := TRUNC((v_exhausted1 * transfer_value), 6);</pre> <pre>loss_by_frac := TRUNC(v_xferred - v_exhausted1 - f_distrib, 6);</pre>
<p>1B Meaning of quota</p> <ol style="list-style-type: none"> 1) For this schedule, quota means the quota of an electorate for an election worked out as follows: $\frac{BP}{N + 1} + 1$ 2) However, any fraction is to be disregarded. 3) In this clause: BP means the number of ballot papers for the election. N means the number of positions to be filled at the election. 	<p>count_hare_clark.sql</p>	<p>Variable <code>quota</code> is declared as INT data type:</p> <pre>quota INT;</pre> <p>Hence, Line below will disregard the fraction part.</p> <pre>quota := (count_number_of_votes(elec_id) / (number_to_elect + 1)) + 1;</pre> <p><code>quota</code> will be saved into database:</p> <pre>EXECUTE format('UPDATE %I SET quota = %s WHERE frac_id = %s',</pre>

Electoral Act 1992	Source Code	BMM Comment
		<p><code>fractions_table, quota, 0);</code></p> <p>Note: <code>fractions_<elec_id>.Quota</code> column is created in count_setup_fractions_table.sql with data type <code>INT</code> and default value 0.</p>
<p>1C Meaning of transfer value</p> <ol style="list-style-type: none"> 1) For this schedule, the transfer value of a ballot paper is the transfer value worked out under this clause. 2) For the allotment of votes from the surplus of a successful candidate, the transfer value of a ballot paper that specifies a next available preference is worked out as follows: $\frac{S}{CP}$ 3) For the allotment of votes under clause 9 (2) (c) (Votes of excluded candidates), the transfer value is— <ol style="list-style-type: none"> a. for a ballot paper in relation to which votes were allotted to the excluded candidate under clause 3 (First preferences)—1; or b. for a ballot paper in relation to which count votes were allotted to the excluded candidate under clause 6 (3) (Surplus votes) or clause 9 (2) (c) (Votes of excluded candidates)—the transfer value of the ballot paper when counted for that allotment. 	<p>Clause (2): count_hare_clark_over_quota_part_2.sql</p> <p>Clause (3): count_hare_clark_exclde_part_2.sql</p> <p>Clause (4):</p>	<p>Clause (2): Lines 75 to 103.</p> <p>Calculated transfer value is stored in <code>fraction_to_apply</code> variable (<code>NUMERIC(10,9)</code>, Line 54) and <code>fractions_<elec_id>.frac_value</code> column.</p> <p>Note: <code>fractions_<elec_id>.frac_value</code> column is created in count_setup_fractions_table.sql with data type <code>NUMERIC(10,9)</code> and default value 1.000000.</p> <p>Clause (3): <code>PERFORM count_update_pref_scrutiny_sheet_HC2(elec_id, cand_id, curr_count, electing, fraction_ids);</code></p>

Electoral Act 1992	Source Code	BMM Comment
<p>4) However, if the transfer value of a ballot paper worked out in accordance with subclause (2) would be greater than the transfer value of the ballot paper when counted for the successful candidate, the transfer value of that ballot paper is the transfer value of the ballot paper when counted for the successful candidate.</p> <p>5) In this clause: CP means the number of ballot papers counted for the candidate at the count at which the candidate became successful and that specify a next available preference. S means the surplus.</p>	<p><i>count_hare_clark_over_quota_part_2.sql</i></p>	<p>Clause (4): Lines 105 to 110</p>

12.3. Part 4.2 General

12.3.1. 3 - First Preferences

Electoral Act 1992	Source Code	BMM Comment
<p>1) For each ballot paper recording a first preference for a continuing candidate, 1 vote shall be allotted to the candidate.</p>	<p><i>count_first_preferences.sql</i></p>	<p>preferences_<elec_id>.v_value = 1</p> <pre>EXECUTE format('UPDATE %I SET v_value = 1, count_num = %s WHERE cand_id = %s AND preference_number = %s', prefs_table_name, first_count, i, first_pref);</pre>
<p>2) For subclause (1), a ballot paper on which a first preference for a candidate who died before polling day is recorded shall be taken to record a first preference for the candidate for whom the next available preference is recorded.</p>	<p><i>count_deal_with_death.sql</i></p>	<p>set preferences_<elec_id>.preference_number = preference_number - 1</p> <pre>EXECUTE format ('UPDATE %I SET preference_number = (preference_number - 1) WHERE vote_id = %s', prefs_table_name, v_id);</pre> <p>set preferences_<elec_id>.v_value = 0 where preference_number = 0</p> <pre>EXECUTE format ('UPDATE %I SET v_value = %s WHERE vote_id = %s AND preference_number = %s', prefs_table_name, 0, v_id, 0);</pre> <p>set preferences_<elec_id>.v_value = 1 where preference_number = 1</p> <pre>EXECUTE format ('UPDATE %I SET v_value = %s, count_num = %s WHERE vote_id = %s AND preference_number = %s', prefs_table_name, 1, 1, v_id, 1);</pre>

Electoral Act 1992	Source Code	BMM Comment
3) After the allotment of votes under subclause (1), each continuing candidate's total votes shall be calculated and, if the votes equal or exceed the quota, the candidate is successful.	count_deal_with_death.s.sql	Line 106 to 124: Recalculate first preference totals and update scrutiny sheets after resetting preference_number = 1 for deceased candidates.

12.3.2. 4 - Scrutiny to cease

Electoral Act 1992	Source Code	BMM Comment
1) If, after a calculation under clause 3 (3), 6 (4) or 9 (2) (d), the number of successful candidates is equal to the number of positions to be filled, the scrutiny shall cease.	count_hare_clark.sql	Various parts with the following check: <code>EXIT WHEN number_elected = number_to_elect;</code>
2) If, after a calculation under clause 3 (3) or 6 (4) or after all the ballot papers counted for an excluded candidate have been dealt with under clause 9— a) the number of continuing candidates is equal to the number of positions remaining to be filled; and b) no successful candidate has a surplus not already dealt with under clause 6; each of those continuing candidates is successful and the scrutiny shall cease.	count_hare_clark.sql	Check the entire IF section below: <code>IF ((number_to_elect - number_elected) > 0) AND (number_continuing = (number_to_elect - number_elected))</code>

12.3.3. 5 - Scrutiny to continue

Electoral Act 1992	Source Code	BMM Comment
If the scrutiny has not ceased in accordance with clause 4 and— a) 1 or more successful candidates have a surplus not already dealt with under clause 6—subject to clause 4, each surplus shall be	count_hare_clark.sql	Clause (a): Line 229 to 346 <code>WHEN highest_total > quota</code>

Electoral Act 1992	Source Code	BMM Comment
<p>dealt with in accordance with clause 6; or</p> <p>b) there are no successful candidates with such a surplus— 1 continuing candidate shall be excluded in accordance with clause 8 and the ballot papers counted for the candidate shall be dealt with in accordance with clause 9.</p>		<p>Clause (b): Line 352 to 706 <code>WHEN highest_total < quota</code></p>

12.3.4. 6 - Surplus Votes

Electoral Act 1992	Source Code	BMM Comment
<p>1) Subject to clause 7, this clause applies in relation to the surplus of a successful candidate.</p>		
<p>2) Each ballot paper counted for the purpose of allotting votes to the successful candidate at the count at which the candidate became successful shall be dealt with as follows:</p> <p>a) if it does not specify a next available preference – it shall be set aside as finally dealt with for this part</p> <p>b) if it specifies a next available preference – it shall be grouped according to the candidate for whom that preference is recorded.</p>	<p><code>count_hare_clark_over_quota_part_2.sql</code></p> <p><code>count_number_of_non_ongoing_votes_for_candidate.sql</code></p> <p><code>count_update_pref_scrutiny_sheet_hc2.sql</code></p>	<p>Clause (a): <code>count_hare_clark_over_quota_part_2.sql => count_number_of_non_ongoing_votes_for_cand.sql</code></p> <p>Clause (b): <code>count_hare_clark_over_quota_part_2.sql => count_update_pref_scrutiny_sheet_hc2.sql</code></p>
<p>3) The count votes for each continuing candidate shall be determined and allotted to the candidate.</p>	<p><code>count_hare_clark_over_quota_part_2.sql</code></p> <p><code>count_update_pref_scrutiny_sheet_hc2.sql</code></p>	<p><code>count_hare_clark_over_quota_part_2.sql => count_update_pref_scrutiny_sheet_hc2.sql</code></p>
<p>4) After the allotment under subclause (3), the continuing candidates' total votes shall be calculated and, if the total votes of a candidate equal or exceed</p>	<p><code>count_hare_clark.sql</code></p> <p><code>count_highest_total_candidate.sql</code></p>	<p><code>count_hare_clark.sql => count_highest_total_candidate.sql</code></p> <p>Successful candidate: <code>highest_total >= quota</code></p>

Electoral Act 1992	Source Code	BMM Comment
the quota, the candidate is successful.		

12.3.5. 7 - More than 1 surplus

Electoral Act 1992	Source Code	BMM Comment
1) In this clause - a) a reference to a successful candidate is a reference to a successful candidate with a surplus not already dealt with under clause 6; and b) a reference to the earliest count is a reference to the earliest count at which a successful candidate obtained a quota.	<i>count_hare_clark.sql</i> <i>count_hare_clark_over_quota_part_1.sql</i>	Clause (b): <i>count_hare_clark.sql => count_hare_clark_over_quota_part_1.sql</i>
2) If there are 2 or more successful candidates, the surplus of the relevant candidate shall be dealt with in accordance with clause 6.		
3) For subclause (2) – a) if only 1 successful candidate obtained a quota at the earliest count – that candidate is the relevant candidate.	<i>count_highest_total_candidate_1.sql</i>	<i>count_highest_total_candidate() where array_length(highest_candidate_ids, 1) = 1</i>
b) If 2 or more successful candidates obtained a quota at the earliest count – the candidate who, of those candidates, has the largest surplus is the relevant candidate	<i>count_get_highest_candidate_ids.sql</i>	<i>count_get_highest_candidate_ids.sql</i> returns the highest number of votes, i.e., the highest number of surplus values.
c) if 2 or more successful candidates (contemporary candidates) who obtained a quota at the earliest count have the same surplus, being a surplus larger than that of any other candidate who obtained a quota at the count and— i. 1 of the contemporary candidates had more total votes than any other	<i>count_highest_total_candidate_1.sql</i>	Line 149 to 161 <i>FOR rev_cnt IN REVERSE curr_count-1..1</i>

Electoral Act 1992	Source Code	BMM Comment
<p>contemporary candidate at the last count—that candidate is the relevant candidate; or</p>		
<p>ii. 2 or more contemporary candidates have the same total votes, being a total larger than that of any other contemporary candidate (a non-tied contemporary candidate) at the last count—each non-tied contemporary candidate is no longer considered under this clause and—</p> <p>A. subparagraph (i) and this subparagraph are applied to each preceding count until a relevant candidate is worked out; or</p> <p>B. if a relevant candidate cannot be worked out by applying subparagraph (i) and this subparagraph to the preceding count—the contemporary candidate who is determined by the commissioner by lot is the relevant candidate.</p>	<p>Clause (A): <i>count_highest_total_cand_1.sql</i></p> <p>Clause (B): <i>count_coin_toss_cand.sql</i></p>	<p>Clause (A): Line 149 to 161 <code>FOR rev_cnt IN REVERSE curr_count-1..1</code></p> <p>Clause (B): will register candidate records for tie-break scenario.</p>
<p>4) If—</p> <p>a) a person becomes the relevant candidate under subclause (3) (c) (ii) (B); and</p>		<p><i>coin_toss_<elec_id>.chosed_c_id</i> has been assigned a value manually.</p>
<p>b) the ballot papers are recounted in accordance with section 187; and</p>	<p><i>count_hare_clark.sql</i></p>	
<p>c) the same candidates would, apart from this subclause, become the contemporary candidates once again under that subparagraph;</p>	<p><i>count_hare_clark.sql</i></p> <p><i>count_highest_total_cand.sql</i></p>	<p><i>count_hare_clark.sql</i> => <i>count_highest_total_cand.sql</i> => Query <i>coin_toss_<elec_id>.chosed_c_id</i></p>

Electoral Act 1992	Source Code	BMM Comment
the person shall be taken to be the relevant candidate for subclause (2) in the recounting of those ballot papers.		

12.3.6. 8 - Exclusion of candidates

Electoral Act 1992	Source Code	BMM Comment
1) If clause 5 or 15 requires a candidate to be excluded, the candidate with the least total votes shall be excluded.	<i>count_exclude_zero_vote_candidates.sql</i> <i>count_get_cand_to_exclude.sql</i>	To exclude candidates with 0 first preference vote: <i>count_exclude_zero_vote_candidates.sql</i> To get the candidates with lowest votes: <i>count_get_cand_to_exclude.sql</i>
2) If 2 or more candidates each have the same total votes, being fewer total votes than any other candidate and— a) 1 of the candidates had fewer total votes than any other of the candidates at the last count—that candidate is excluded; or	<i>count_get_cand_to_exclude.sql</i> <i>count_get_lowest_cand_ids.sql</i>	<i>count_get_cand_to_exclude.sql</i> => <i>count_get_lowest_cand_ids.sql</i> where array_length(lowest_cand_ids,1) = 1
b) 2 or more of the candidates have the same total votes, being a total fewer than that of any other candidate (a non-tied candidate) at the last count—each non-tied candidate is no longer considered under this clause and— i. paragraph (a) and this paragraph are applied to each preceding count until 1 candidate is excluded; or	<i>count_get_cand_to_exclude.sql</i>	Line 93 to 103 to loop through preceding counts.
ii. if 1 candidate cannot be excluded by applying paragraph (a) and this	<i>count_get_cand_to_exclude.sql</i>	Line 54 to 63: Query <i>coin_toss_<elec_id>.choose_n_c_id</i>

Electoral Act 1992	Source Code	BMM Comment
paragraph to the preceding count— the candidate who is determined by the commissioner by lot is excluded.		
<p>3) If—</p> <p>a) a person is excluded under subclause (2) (b) (ii); and</p> <p>b) the ballot papers are recounted in accordance with section 187; and</p> <p>c) that paragraph would, apart from this subclause, be applicable once again to the same candidates;</p> <p>the person shall be taken to be excluded in the recounting of those ballot papers.</p>		As <code>coin_toss_<elec_id>.chosen_c_id</code> records stay during recounting, the same candidates shall be excluded in the recounting round.

12.3.1. 9 – Votes of excluded candidates

Electoral Act 1992	Source Code	BMM Comment
1) If a candidate is excluded in accordance with clause 8, the ballot papers counted for the candidate shall be sorted into groups according to their transfer values when counted for the candidate.	<i>count_hare_clark.sql</i>	Refer to <code><<LOOP_OVER_FRACTIONAL_VOTES>></code> loop.
2) Subject to subclause (3), each group under subclause (1) shall be dealt with as follows:	<i>count_hare_clark.sql</i>	Line 444 to 451 <code>PERFORM count_number_of_non_ongoing_votes_for_cand(elec_id, cand_id, curr_count, fraction_ids);</code>
a) if a ballot paper in the group does not specify a next available preference—it shall be set aside as finally dealt with for this part;		
b) if a ballot paper in the group specifies a next available preference—it shall be grouped according to the	<i>count_exclude_candidate_with_fraction.sql</i>	

Electoral Act 1992	Source Code	BMM Comment
candidate for whom that preference is recorded;		
c) each continuing candidate's count votes shall be determined and allotted to the candidate;	<i>count_exclude_candidate_with_fraction.sql</i>	
d) continuing candidates' total votes shall be calculated and, if the votes of any of those candidates equal or exceed the quota, the candidate is successful.	<i>count_hare_clark.sql</i>	Refer to <<DETERMINE_WINNERS>> loop
3) The groups referred to in subclause (1) shall be dealt with under subclause (2) starting with the group with the highest transfer value and, subject to subclause 4 (1) or 15 (2), continuing in descending order until all the groups have been dealt with.	<i>count_hare_clark.sql</i>	FOR f_value IN EXECUTE format('SELECT frac_value FROM %I WHERE frac_value >= 0.0 GROUP BY frac_value ORDER BY frac_value DESC', fractions_table) inside <<LOOP_OVER_FRACTIONAL_VO TES>> loop

12.3.1. 10 – Setting aside ballot papers

Electoral Act 1992	Source Code	BMM Comment
If, after a calculation under clause 3 (3), 6 (4) or 9 (2) (d), the total votes of a candidate who became successful on that calculation equal the quota, the ballot papers counted for that candidate shall be set aside for this part.	<i>count_hare_clark_at_quota_part_1.sql</i>	

--- End of Appendix B ---

13. Appendix C – File Identification

13.1. Source Code File Structures

BMM has received two batches of eVACS source code in compressed zip files, organized with the following file structures.

Please be advised that only those highlighted items fall within the project scope and thoroughly reviewed.

For the scope of

- ⇒ voting module, please refer to section [2.1 Voting Module](#).
- ⇒ counting module, please refer to section [2.2 Counting Module](#).

13.1.1. 30-Jan-2024: BMM_Code_Review_Files.zip

```
+ eVACS_Count_HC-Structure_Charts
- *.png
+ eVACS_SQL_300124
- *.sql
+ Voting_Source_File_Ada_20230718
+ common
+ load_scan_votes
+ tools
+ view_ballots
+ voting_client
+ voting_server
```

13.1.2. 23-Feb-2024: evacs_src-audit.zip

```
+ ada_source
+ common
+ counting
+ load_scan_votes
+ tools
+ view_ballots
+ voting_client
+ voting_server
+ db_functions
+ eVACS_Count_HC_Struct_Charts
- *.png
- *.sql
+ evacs_scripts
+ ballot-view
+ election-server
+ telephone-server
+ voting-server
```

13.1.1. 08-Mar-2024: Updated_SQL_Counting_Files_07022024.zip

12 Counting SQL files received.

```
- count_coin_toss_cand.sql
- count_exclude_candidate_with_fraction.sql
- count_exclude_zero_vote_candidates.sql
- count_get_highest_cand_ids_in_group.sql
- count_hare_clark.sql
- count_hare_clark_at_quota_part_1.sql
- count_hare_clark_exclude_part_2.sql
- count_highest_total_cand.sql
- count_highest_total_cand_1.sql
- count_set_null_to_excluded_cand.sql
- count_setup_elected_cands_table.sql
- count_update_pref_scrutiny_sheet_hc1.sql
```

13.1.2. 11-Mar-2024: Latest_BMM_Reviewed_Files_11032024.zip

5 Counting SQL files received.

```
- count_get_highest_cand_ids_in_group.sql
- count_hare_clark.sql
- count_highest_total_cand.sql
- count_highest_total_cand_1.sql
- count_update_pref_scrutiny_sheet_hc1.sql
```

13.1.3. 03-Apr-2024

1 Counting SQL file received.

```
- count_hare_clark.sql
```

13.2. Voting Module File Identification

13.2.1. Voting Client Project

File Name	SHA256 File Hash
./bin/act_crest.png	a12678d06ffe3caafadff9602bd6ab7caecdaee38293e1ebeaa9022d9cfd959d
./bin/audio/electorates/e1.wav	5211b0e1771c795270df68a2dcd5de27c7e7c0f061a80306b77382d1907ed6c1
./bin/audio/electorates/e1/e1g1.wav	0c0eaaebf71384269641063ae148805ea6d50a5ae31c07c32048cce9c5e21ca4
./bin/audio/electorates/e1/e1g1/e1g1s1c1.wav	73c1fd2c72a32c2168c63cb27f4eaad2b7e5df11aa24c7ec4dccebb8d18ae1cc
./bin/audio/electorates/e1/e1g1/e1g1s1c2.wav	3454881e89453b9155db968501cca52eacc797e00393a7334d936dfd9960594f
./bin/audio/electorates/e1/e1g2.wav	6cf6659ef1b213b8f1e34ab7770620d2c8d6110eef231af378ee6a1b693452c4
./bin/audio/electorates/e1/e1g2/e1g2s1c1.wav	055b03c4f527933045c2f6483459bd78898069589634d24333b44a3c3907163e
./bin/audio/electorates/e1/e1g2/e1g2s1c2.wav	edb8e0b891a6d9d238f73dfa4d087d378f8744f6603e49c989220e47e2a37c98
./bin/audio/electorates/e1/e1g2/e1g2s1c3.wav	9a16d0f8d6c590b63e0e44ed2fa625c4961fab97f95f50ec41afb67dca94bc03
./bin/audio/electorates/e1/e1g2/e1g2s1c4.wav	ddd4059afcaa97e033ab3faaf588ef91439ed636545434e90f4ef385ae7d6efb
./bin/audio/electorates/e1/e1g2/e1g2s1c5.wav	c749a6aa4b1150b5ce737b67f16f5eb8671e688b0438e2dde5d219f9b8b4c743
./bin/audio/electorates/e1/e1g3.wav	1840bcc794871630e883ded2113656bc2403357a0e91502642ba9f641399f901
./bin/audio/electorates/e1/e1g3/e1g3s1c1.wav	74112d746b997c6abdc7edd46d52e585789f9e311a2d672e08635958b0478bee
./bin/audio/electorates/e1/e1g3/e1g3s1c2.wav	083960bdd3b5453cf57f476ea23805b44c2d4fdd979cb30f1b950e0df0800eac
./bin/audio/electorates/e1/e1g4.wav	6162a27950b288fc8773be2669b7db1a21bc81430fe9fe169558ccc3aac8cd7c
./bin/audio/electorates/e1/e1g4/e1g4s1c1.wav	189b610d6b9be3e4bd4ca5adb3a856a38a45232f4e18054c9fe2a41bc086d169
./bin/audio/electorates/e1/e1g4/e1g4s1c2.wav	69bde8be5d7e52032345e1d344702820e51c3c39fd846c7ef693138b09b189bf
./bin/audio/electorates/e1/e1g5.wav	98a5fdd7b28bb97f0e08e0598ba23e970cddaf2fd81e4daf88a2d8e1cc3cfd65
./bin/audio/electorates/e1/e1g5/e1g5s1c1.wav	a77f5a0a6ea5d6e34a1bc203fba8fba34664eef907b9fc0166ec5f90eca5cfc9
./bin/audio/electorates/e1/e1g5/e1g5s1c2.wav	ca8d11c534826421f919dbf002cdf8e6d264943f74c1d3483cd1391775bbc20
./bin/audio/electorates/e1/e1g5/e1g5s1c3.wav	6802758bf0d7c86fe6d63192d42b97ff374b131d8e64b5df95f2f3074583c0f4
./bin/audio/electorates/e1/e1g5/e1g5s1c4.wav	a1b0f94064ce6843ea07561782f70d1d69507c2b8250f9cc94f36336fc3c54ab
./bin/audio/electorates/e1/e1g5/e1g5s1c5.wav	5d7ea768842fb32c04d0f66061d538934c5992c7f49c35a35f444e0b9ed5ad8e
./bin/audio/electorates/e1/e1g6.wav	f0cf9fb1141c4d16669a20735450d2fb166351641d71ec2b1820a7b3f676e3bf
./bin/audio/electorates/e1/e1g6/e1g6s1c1.wav	4b522f16b8670f82f58938ac58babadde7af999b1d58981ddb6812d6a230f861
./bin/audio/electorates/e1/e1g6/e1g6s1c2.wav	7c2a4d0e00822dd5f646779fd1a8a97cf5b652c0cc356aceb03add2edb9bd5ae
./bin/audio/electorates/e1/e1g6/e1g6s1c3.wav	b63d71789b377527377fda402a7eee166edfaee3b201adc01b8231c76341bcb7
./bin/audio/electorates/e1/e1g7.wav	c1f8597df05f15f1ccf16f9a4ed5814dd26f44c9cb9f4074fa9bac604d64d27e
./bin/audio/electorates/e1/e1g7/e1g7s1c1.wav	b777af0c17e83949d6620b5eb4e59d5fab075cc71f483cef4eb34917b490d21b
./bin/audio/electorates/e1/e1g7/e1g7s1c2.wav	c5f89399ec5c763edcd65bbd5209fa5f2bce0249d02287baab2478f120e8b35b
./bin/audio/electorates/e1/e1g8.wav	b15ec3f5097c634ec66071008b532ef74823621f74d211a2f19569c17e15194e
./bin/audio/electorates/e1/e1g8/e1g8s1c1.wav	345e83df3e7689b4a6713cecc2046ff83503d73f974d74d6c2ddac74a9e5149a
./bin/audio/electorates/e1/e1g8/e1g8s1c2.wav	a0f400a468fc6b50378225abc91b5d11f6908184d65e750616e10e9cde265b1e
./bin/audio/electorates/e1/e1g8/e1g8s1c3.wav	6aff3e5ff0ac326520ec3bb3ba357530c9a6bc3ef5fa347e8e40b66e6f70de61
./bin/audio/electorates/e2.wav	f13568395b63b7e510f885217195b23a6556d0eac19db70a400721ba0679aeed
./bin/audio/electorates/e2/e2g1.wav	a50b74a92695d470b3cf991ab4953390e094c456175a0e17f41cd15cef8bc30d
./bin/audio/electorates/e2/e2g1/e2g1s1c1.wav	77db6e3262c5b69a786d444538fffb4b08e3c53a29b0c9f8ced703549d640cbf
./bin/audio/electorates/e2/e2g1/e2g1s1c2.wav	48a85c8b46726227abcc331f3a83dd5e56328499158d6d52a526cb65d501fe83
./bin/audio/electorates/e2/e2g2.wav	8eb2563411a9a2cc77a27819b32b861a484117f75e5a867eb34fc8a6dfb01e61
./bin/audio/electorates/e2/e2g2/e2g2s1c1.wav	7c97858d4509d7348c542416f584ab639644babf20065f419d69464521129496
./bin/audio/electorates/e2/e2g2/e2g2s1c2.wav	86ae41ca1a8ffe35fe713a1b6be905a72f3e97dda4405966729755d9dfe7aea2
./bin/audio/electorates/e2/e2g2/e2g2s1c3.wav	a05cc2b5fc838f92d65d2e8d7bd207b3f181a0a57eed45b44f27804039e80439
./bin/audio/electorates/e2/e2g2/e2g2s1c4.wav	0577ff4fe1ba3cb0d9f184cbb5dab5a113ecc833b2c550036d24137631304e88
./bin/audio/electorates/e2/e2g2/e2g2s1c5.wav	6a241a815f64e5979ee082d9ee87b87307c10444263f934a8b42fc23b77d859d
./bin/audio/electorates/e2/e2g3.wav	a31cdef775aad0af576ddde443c02e3180329e58fef29874b8994a44f39d0c08
./bin/audio/electorates/e2/e2g3/e2g3s1c1.wav	89efc7a779c9de13f4aa128852e640ee94143fa2debfc81a87d3b8be4bb4176
./bin/audio/electorates/e2/e2g3/e2g3s1c2.wav	36c09539676f8cb56f2ef0bca77b1dcdc5fcc68ccea303399efd118e276ab3c2
./bin/audio/electorates/e2/e2g3/e2g3s1c3.wav	5799dd5f87184f5a98c39a47bf883db3c2367a01c2128f6b220cf8d426faa49a
./bin/audio/electorates/e2/e2g4.wav	e141d8f5098669f974bc359d6f62157512d1a3edbc19d484996740425694dab

File Name	SHA256 File Hash
./bin/audio/electorates/e2/e2g4/e2g4s1c1.wav	4cb47013f76fab0ee91922e67607f1c5e56afb5a763545e6fde7004a6203ca21
./bin/audio/electorates/e2/e2g4/e2g4s1c2.wav	7060e9eccd0da2254542c5ba9c331ae42e3aaa9d993637df11163cfee7d02def
./bin/audio/electorates/e2/e2g4/e2g4s1c3.wav	260a5a751924e4a3814f59ba1b6eabb4648dd7b8c06ed237b66c38fe09609db9
./bin/audio/electorates/e2/e2g4/e2g4s2c1.wav	73e5315f4244f6d2bf10746cd8835ae51d41c83a10d4747d889c41266e45ab6
./bin/audio/electorates/e2/e2g4/e2g4s2c2.wav	e610b53bc8c9b2bfabd09c61f9409af3bd593a82db6891995dc6dc85f2ca7ed0
./bin/audio/electorates/e2/e2g4/e2g4s2c3.wav	1a099532150405f02f90b1e22d616f93e0e39637df0ab01d5cecc0058f56b0c7d
./bin/audio/electorates/e2/e2g5.wav	d2b28c1557004b22a2863957e8018b4b6d4d018434b6afa9c23403c9dce0900a
./bin/audio/electorates/e2/e2g5/e2g5s1c1.wav	42593802896daedacdc3bf93a564671fdf78e7d12007abc73a8f267c4833f91b
./bin/audio/electorates/e2/e2g5/e2g5s1c2.wav	578ea0b72b41def495b337bf108a5ba6b1fa0e5597d7a0c3b47ef1a47301c9c0
./bin/audio/electorates/e2/e2g6.wav	8243fee48d5c544f802d050e5c53eae2062ce01db08d30b2b58f10ec0175385f
./bin/audio/electorates/e2/e2g6/e2g6s1c1.wav	cfbfec849d0fe3627bee1f9f2225c61dbd9c76ef867e70eacff870e0ac818b85
./bin/audio/electorates/e2/e2g6/e2g6s1c2.wav	69dcd7aebc007c5896746d497a48e825633e6c5aaf08ebdb61986099adae47fa
./bin/audio/electorates/e2/e2g6/e2g6s1c3.wav	7d14d056d020cf024218a2b7fb68a844f50b0d16d076e064c86fee9dacc6666e
./bin/audio/electorates/e2/e2g6/e2g6s1c4.wav	e021acfc0a9d8ae0fa4107924306d6f7a48843218844d88cb84b9211512690ac
./bin/audio/electorates/e2/e2g6/e2g6s1c5.wav	1f50a8f92b1a7d4aec2d7e1676c0d1e5b91c23e21e06532ea68f527e68c226b6
./bin/audio/electorates/e2/e2g7.wav	9d6c19a496ffa0be64c868cbb275909dea27b4f71b24e1b5c33a42079dcf4216
./bin/audio/electorates/e2/e2g7/e2g7s1c1.wav	ee3026e63dca49c25528536c89f0bda1cd1a69e85a4cf0706f069e29c3c791be
./bin/audio/electorates/e2/e2g7/e2g7s1c2.wav	6173f05f5275840dd433ca01b3dc33de0fa645443e3d2ac2a37958ff3d29d7ce
./bin/audio/electorates/e2/e2g7/e2g7s1c3.wav	6dbc49bd4fc3ab53f22a19a3a7effb53e773129817e65bee354e3191ffba5727
./bin/audio/electorates/e2/e2g7/e2g7s1c4.wav	4d805f7003002aa273c36c1ff7dbcd4079f0ab03bb9e97233cedbc71ee9f51
./bin/audio/electorates/e2/e2g7/e2g7s2c1.wav	4d1a8226b084aae1d19119d98270f3eddfbd063896e74752774fe50e052c3780
./bin/audio/electorates/e2/e2g7/e2g7s2c2.wav	fb0903e349fa274c76c97037224b35935b348d68a4cd87af9b768ec728a8f898
./bin/audio/electorates/e2/e2g7/e2g7s2c3.wav	0a6df8caa3f38c029badd3a0dbe7fd3c2400bbc410b11d9c29c2686faa802e89
./bin/audio/electorates/e2/e2g7/e2g7s2c4.wav	0a02e4160071b138aa5ffd8b69560ad5cb9ceec7acd9376e325a37133ef5e5d4
./bin/audio/electorates/e2/e2g7/e2g7s2c5.wav	695da710798e2ad785a1f1891d287a336323564c6772ad0869c72064dee820f
./bin/audio/letters/a.wav	ea6fe8096cfb671be0dd2010a7ea6d910cb41937e78394c4b19388e41523ff5
./bin/audio/letters/b.wav	99ad03971ed4fad73e7cd21f575516b43590e948cc2049ef8f274a54ce2c9fb8
./bin/audio/letters/c.wav	702ec085c017f6fc35d50098e5d47b3b565d3b56ad64c61e0cf3c1507acc4d54
./bin/audio/letters/d.wav	57cd49d341d322009ac13e039443eb00eef07558a1d62277321a745c702c691d
./bin/audio/letters/e.wav	c74d889b8aa8e7f27827a1c2a2e7e815d2000383889e690e356733b54f16040d
./bin/audio/letters/f.wav	2ce7f6a43407a53569ac934602ca9c80f22600fc04f366a87c24d455ccb23d65
./bin/audio/letters/g.wav	c71ed5dda6970f3a84b1a2e5d07e4501677d59dc795106659011998d54a42d31
./bin/audio/letters/h.wav	3af51bad15eaf46778d0ebf629aa8a7cc9771f955e4f1f5d46e2b1199d05eac3
./bin/audio/letters/i.wav	f2d17c2c7a55bbf953b84c09952523bfd79073a76967ec54930dbb0e86cf2543
./bin/audio/letters/j.wav	6d2534da00de5cf95600c7d750f419388b1c9b07b12512cc5944b07fa127575b
./bin/audio/letters/k.wav	48c166596a4e3be4e06e9ed51cd0a0dae5f21b03ef0dd9f415faa4b7cf08cbad
./bin/audio/letters/l.wav	17b9afc77f4c720d18342a44991aca6731ca2e7f0f0e7ff7dd1eb2f5ecf27e3d
./bin/audio/letters/m.wav	94240d278c15f0d0b91380955170f1c9840ffe5d90d4dcf1f4fdf112472c21d4
./bin/audio/letters/n.wav	1e32c9673ea5111440de62e0b589011729c0acfd33a26fa8728f72a9dcc7752d
./bin/audio/letters/o.wav	46611f5878983db9d6f319369238ce7133b7a32bbb7bf1daad97610ab6352bdd
./bin/audio/letters/p.wav	91f333475afafaadc630567112ae150e14f387240b26d31d0f666906e9e9d441
./bin/audio/letters/q.wav	635cb234618c54cf1a64b20317f515f9f12719353a77ca9b09511b97acc42dad
./bin/audio/letters/r.wav	0f7459ae137c8f0c0ec6d9c70c9c17e304f28c9f2d8125adfba44171ac3293d2
./bin/audio/letters/s.wav	53ff6b40f746b4c06ce467eb522d1698def183c110f8a59adbf7078aa51cea17
./bin/audio/letters/t.wav	6ed00f0e98c62793cc12ad988c6a35f23f788c3cbb5fd01793c73af254f04d
./bin/audio/letters/u.wav	2fca48beb86d0a228a8aa2b9b6a008b65e77844352ad9a6aaf93a6fb3228dbdf
./bin/audio/letters/v.wav	8723e616419dea24d61bc1275a6623422fcafca4ed6fed7656729e04b66f4263e
./bin/audio/letters/w.wav	01374fad0fa17f4d71f7b854552627a85ef548c0eb7c5f09999043b70f522459
./bin/audio/letters/x.wav	b61bd9755e766aeac49cb7b7d1f5357bf3646c471f63838d303f8a8ad3b0d81f
./bin/audio/letters/y.wav	33c795c9945474c96f71e82b7cc8ad2eaf632f14a81553fc88d01241f09fdcc
./bin/audio/letters/z.wav	9d4ac501cc6e6012be91dc7147f6c2aa39856e3cd5659595e811a41921b89660
./bin/audio/messages/ack_tv.wav	abf27fb44808791fc96ee936c27541317cc02eeb4437bb7782880501f90459ae
./bin/audio/messages/ack.wav	ebb6539446067324b44f7880e63561c483b539c53f2c33dc59df10ac3a5a688b
./bin/audio/messages/barcode_error_tv.wav	9c6102f7660936c5bf7a76f7ef3f53d6d9a35401f7b4ff27d626c688848c3f91

File Name	SHA256 File Hash
./bin/audio/messages/barcode_error.wav	523d99b129fbf4fb5eb67e7da9d0a1f21e7571740a522041ce32b0fd03935c49
./bin/audio/messages/column.wav	8f77e96ca5629bed52be4286d1076cc8fc6cc5b7f1b07e683b13591f263486d
./bin/audio/messages/down_key.wav	2c16519b03f1e4afa0ceca88175e4b66a70efc6e9ab4ee6115005fdf37958699
./bin/audio/messages/error.wav	523d99b129fbf4fb5eb67e7da9d0a1f21e7571740a522041ce32b0fd03935c49
./bin/audio/messages/finish_key.wav	f3bd329faf1ec180a2bcb057b32da8ea1098ec404b1b3718749077d2a83dbf71
./bin/audio/messages/formal.wav	68cb1e231c20413f5eb27e3a9d8a5a8d7505a1d936beda0e6d290933be98e0aa
./bin/audio/messages/formal1.wav	4ba7cae4267cd4578426678292fcd4fd68e78965810dc2065a87287223289054
./bin/audio/messages/formal2_tv.wav	4764e55349c3ecd0351d5d12521bd0275d71dc891b3f61d5b17c4b25f64768e8
./bin/audio/messages/formal2.wav	5c3a6a24567c21bc0fbc90667772c0e2eeebfd6dece03b6caff64e10ce36961
./bin/audio/messages/greeting.wav	304a299e836504f87cada450b22def51ed46839486cac40f8190193877ab8c67
./bin/audio/messages/help_zero_tv.wav	f160793bde6fbcf5c1fc7db5b65e5d2a29a29e0a9b4bb1662c15aadbb92621c78
./bin/audio/messages/help_zero.wav	5c6773ab8d40fe9a89ef1ad5c5af0892f8ce39624e7d3c1657198705c436edb2
./bin/audio/messages/hidden_confirm.wav	58d54b0843f40e92c9e4a658a8df31d5822da591815f78e9a8aa75a7b6f22d41
./bin/audio/messages/hidden_main_vote.wav	1e9b72d492bef9f319eb257aa6ee518aff2f31a8a0f669148708393ef2e86c07
./bin/audio/messages/hidden_vote.wav	6c62b9f900d3d74164e4b358f7cf3c70c5d86dabc7a8b05603b282eee759a2a2
./bin/audio/messages/informal_stage_1.wav	bddedda0e8346f2f230b2349e54282c051a1a15e93592b987c9b72dbfe0c7696
./bin/audio/messages/informal_stage_2.wav	3c08678ac4a568874b89753a483aa4fef7a9f9c726dab2834c962aca1f6e0b8e
./bin/audio/messages/informal_tv.wav	720bc417dc41c299f11ed2b359c23b83a434842664df418a3cbad572e22a578b
./bin/audio/messages/informal.wav	66b9a2c1ba351b2c6a9d3d3eac7f89025113285244595bb8191f38fa5f5fb56f
./bin/audio/messages/intro_1_tv.wav	abf0e5ae63c5a8560f88b9188df2130034f22bff1e2369b4e9489e2ef37cb20a
./bin/audio/messages/intro_2_tv.wav	e19fd561153e468ddacdeec720dc2faac9721ec2816995a2a4e2794b6b52556b
./bin/audio/messages/intro.wav	7eb1168a2183f61aadfa0224c867ab87d1a6d7d882ec02ca8f769a0b397531d7
./bin/audio/messages/main_ballot_1_tv.wav	143e50694b67948c900cdfb15fb5928b633d2dee4d1602c9f2f29bbab13b3af1
./bin/audio/messages/main_ballot_1.wav	d0062310f8703a64a53c058a0c0f2cc7d5c6140bfe5b14d22c69f895a5d755f0
./bin/audio/messages/main_ballot_2_tv.wav	22783bece9fffc948656d662e50c5ed631d1b8d8bcce3b2bd8cbb64ec7da5bf6
./bin/audio/messages/main_ballot_2.wav	00f3cca0a1fd5dc9b5e253f5d972753dc59afc6a39632332ac06bce088ca202f
./bin/audio/messages/main_ballot_3.wav	9530a3ec8060792471da82515c0fee13b99763aeb3e367567c63d21c9d3e7e58
./bin/audio/messages/main_ballot_4.wav	53df649f14fe2fe0faaa7ec07fe9d3ca282d1be0f25fc1f6b76feb9dc8b5ac5c
./bin/audio/messages/next_key.wav	9bb14fcd0a700313604f2249a777a6edd3b6640b648c56beefd3210fe91c9e63
./bin/audio/messages/not_started_again.wav	c551c4311b9d2714a8d57d27920d06e4448d5588ad9b103de8e411f870e32467
./bin/audio/messages/preference_number.wav	fd645de9623f21a996f31370722a538fb84b3b0be0b386baf1bacecd383db63d
./bin/audio/messages/previous_key.wav	f0a845bc3b5e1622558acd2783c05999892f6cd588652030d038a86a04c70d73
./bin/audio/messages/select_key.wav	f3f22ac065b2a3cfdba2b6285dc55be378e94ea538c9386bfa5dedf792384e30
./bin/audio/messages/start_again_confirm.wav	e84e45a4e0fa1807761606e138d2d0162a47bc463d4c2e4c454c570c74953ede
./bin/audio/messages/start_again_key.wav	5110ed3c4113d46c2f7f6bb0e250b7f92dc438bf7199c7729cb05a60a00a6f7
./bin/audio/messages/started_again.wav	21aea8b8be490d755065359b53a6828ea88b8e00ba352421d50bcae96b9e3e31
./bin/audio/messages/undo_key.wav	51611adf892bc3508f51fe5053567b4a985b1cd4d0fda31a2a6260ba3148ff8b
./bin/audio/messages/unused_key.wav	2c0b0d48a168afa0c8db9d1cb34ac1d5d9f62791c159fc80c17bcc7803505da7
./bin/audio/messages/up_key.wav	29762aaf14a6c02aeb44f11646c1c2050aafc42a583d02062b31bdb3efedf2ee
./bin/audio/messages/volume_down.wav	30d403a807497d3587d71ba106fa59a15ec64fca4bec2545b331a39b02048c09
./bin/audio/messages/volume_up.wav	215198fec154deb97cddf71401f98f6de70db7a49222aedbbb0b97f4fdb5ac4
./bin/audio/messages/zero_key.wav	f7c2cac2c370a56a0c99d7aada8c92193381a7fcb04baf555c22408d5bb3b0ea
./bin/audio/numbers/1.wav	6d3deeb9e4326c722543af2d47f2255303447ddac1cb913ea5a14513703149e0
./bin/audio/numbers/10.wav	0d701c38914121bbfce4b06b67c23c3ac403133895cd4e9d113df2fb50b5bc04
./bin/audio/numbers/11.wav	40c212071e87ddc41fd8daffa19a7b17ae5dc6eed117fdca6d682bdc53d892e
./bin/audio/numbers/12.wav	4918fe4fd412d922530d1c7848161ba681cbc5081f5bf44da8527198c7adb482
./bin/audio/numbers/13.wav	a2696a051fab742ebb0974a66edc08eb13ff2cb031a423663f85086d5fe0cae8
./bin/audio/numbers/14.wav	c78e314a05db3ce58de950deb59eb8ef3ccf7e7ce3cb4a7f491923dda752e178
./bin/audio/numbers/15.wav	981d81d0a6cb161155bdd74dfbfc3df3e2848f52d3d9497d3cde8fbfc8b2b7e5
./bin/audio/numbers/16.wav	ed23ab8b09b0cc33135cab4b009742a2bab08052804c555ed077fe8a695507cb
./bin/audio/numbers/17.wav	3d4e8b149b9740509bdf8000a9d9d443d687f42acff2f50c37b1028209e0abfd
./bin/audio/numbers/18.wav	c5709917b8b7e7b63384ae08140e35780a2a1c11ca72f2be62109467cb2eefe4
./bin/audio/numbers/19.wav	6f913adbb459fa8db79368bde17ddfd8e4cbb2cedf18a41eb0ec8a3e32951fca
./bin/audio/numbers/2.wav	5bfb29374d43f9d097465a8cfa4ad74d5654d6dc2e8c753de6aa61878187c119

File Name	SHA256 File Hash
./bin/audio/numbers/20.wav	2ea39655d6f0497783488419381d1035540f7b4ab572b27fe6cfe66245156270
./bin/audio/numbers/21.wav	dbb3af653955b7e69d7142fa45a112c50e2ee64bed428ab288be52312075b7c7
./bin/audio/numbers/22.wav	93ede88e6fcd63322aa0b1871f349bdb2ca4829867e2ae52c0dd60b4c3fca91b
./bin/audio/numbers/23.wav	272d8f787d656dabdb88e211fc62b313691a77f3ae6966f2e006c0b5c98043b7
./bin/audio/numbers/24.wav	778c208d257bbb4c3a36d00ef801b8e5a6e004953a68436773e25d4d29e6e1a2
./bin/audio/numbers/25.wav	6c6f8b3f7c525f07fe3b0a9061f3d8b315a25071e202065d4df3cf6f7f9321e2
./bin/audio/numbers/26.wav	1dd7c984d2f2cef12049edafef377a5be20d10a933b404ff7494b6d8c259ba1e
./bin/audio/numbers/27.wav	f7e539e50fb0ad6b5ea0a8785f0296671fbaec74a1a6d0b3e1ffc0e8a8926dfb
./bin/audio/numbers/28.wav	b0a2c406ae220d2dc2a2df07152d7aadba57cb04b0fc15220a1b186821b74db3
./bin/audio/numbers/29.wav	1a11962b96b71a0b1bcd63735fe40658279ae043cd05297807275be3f4644800
./bin/audio/numbers/3.wav	311daadd173418bac7bbad9ec7f837617ff29408b5c63d7c81d8a10acb1337f8
./bin/audio/numbers/30.wav	d0c471d3107c399a5c786c7a700e31cc90ff249eb62e2d5a2b2f90e880ba81a6
./bin/audio/numbers/31.wav	2b7852f6d34235bc270c4a4de4d53f7ed0c2dcd821c08762575760715813e688
./bin/audio/numbers/32.wav	40a327b358bc2e7c63e777cf6dae1915d706e94ba0cd0c89a93b03042f5fec65
./bin/audio/numbers/33.wav	47856fcffec7cfa2abd8ca25b7daf51d12aff861ad728e02566d4ed45d7c3be1
./bin/audio/numbers/34.wav	0181e9d5180a06aa105f41764848a4830e4bed2f775a465f212a7e2e9931f738
./bin/audio/numbers/35.wav	30817cda4164da06d27d95564f887924275adb4aa08a430bba43ac94ea5a4352
./bin/audio/numbers/36.wav	2a39624369eb981f1d969b349f2393a9d87b29cce5157f8337ae720fdab0746b
./bin/audio/numbers/37.wav	a36993a10572ff8d047af6b6982bb5e67532d4b7b8caf3038e6b9873493d723b
./bin/audio/numbers/38.wav	00068ff3995057fb319d4adeddece7b405658f1dd692f002f642c469b24caa88
./bin/audio/numbers/39.wav	a1a046c63966ddbf3550921dc641b5ae9f616935c11cfd5d74b3dcb9af57737
./bin/audio/numbers/4.wav	1f94a62c57d9898e3204584c0b530a996402ce4da81a033698b2aaf61b41dd06
./bin/audio/numbers/40.wav	3de9b0fd33b6cea2676b36b3842c7e70e8a09a8ae2b23d9b0f399483ea0e580f
./bin/audio/numbers/41.wav	e41fcd134a986c88b8efec539bddb61b98662221e9379df36a23c510c2b9f89
./bin/audio/numbers/42.wav	dfe69ba088c432e5760e7d17c07f4d7eb7fa8848a6156130ead27c5366cdb5ce
./bin/audio/numbers/43.wav	0a0ae7c16a9614606ff7968c7d5c09e780735cd5c08ab3f0025d1e4e3fa50871
./bin/audio/numbers/44.wav	e0482049046c202155893762bf7d64898d30fc38c9741572c9ea2d32f77baf7b
./bin/audio/numbers/45.wav	a26fc69e8e1451b3d86b8870388d33f038bdb43ec614631fc6b57f809fd4afdf
./bin/audio/numbers/46.wav	daa664a91a50075d7bddbae4b9bc4054d0f9d45a8bd1f2fc3291cd379b7d0e8e
./bin/audio/numbers/47.wav	fe4e797e4161a9260cd41b9bb8610e1e1166a7adb146f9f532cf8ef14b25192e
./bin/audio/numbers/48.wav	65b0c29e2e217d9c52bca2f8f6fff749c756913dd4b47204f14c26a93f98ef5e1
./bin/audio/numbers/49.wav	825737cc927bc06d1ba4b5dde778a8e4057b509eeb794c097681b7d4a20099db
./bin/audio/numbers/5.wav	e64684b36c5675b8b5134d777d9bc3da9876512a42f01f6986fd9c27df515bc1
./bin/audio/numbers/50.wav	6c1bb26b859a84e85ce4f424590c847bf38b15c3e1bcf8b26c999b7acfba24fa
./bin/audio/numbers/51.wav	09f271efb60c15932ba34a4847c9b37d7cdc3d16c913fe0974cc9fbb8c339b26
./bin/audio/numbers/52.wav	6e1b517ff771466f70a965248ed1ecd55d5af310854840098d474b7b2638ab6
./bin/audio/numbers/53.wav	b17b73665faec7ab4c0e9dcdc809041178b0629d7805dda713b2066cc0d73231
./bin/audio/numbers/54.wav	1136f7d2a9d0fe20efb0def6db0bae8fd451ef302142a2e29477a28bcf84dfb4
./bin/audio/numbers/55.wav	114407da6066b3b7b504fc9eea7ec9e2e189a0cc8b08ed5ae7a8b7c1307d3c93
./bin/audio/numbers/56.wav	a05fc72fdeb19e8befbc50729850ca595048a20d4472b0dff7cf0ea0fae8224f
./bin/audio/numbers/57.wav	7c52d86763a8b1cc3785a5ae2b5a1840a028acf5b2a2f456574316c67b14cda0
./bin/audio/numbers/58.wav	34395b1f1d537f36d14651186316ce4c6e53edd0b333eebb5f6721edb59ff0cb
./bin/audio/numbers/59.wav	5ff31fe4b08ec576c34dbd1c6aa61149556f1df2f629be0b8a4838357bcc2662
./bin/audio/numbers/6.wav	d30b5ab662ad62c74bbc23e8c2a01db0f7e4021b66324b162105b38ef2adb65e
./bin/audio/numbers/60.wav	398df1e352514bcc21e8b90bed16a49dbb01e7462d000f6400d50e3cd70669cb
./bin/audio/numbers/61.wav	c8f41589cc1327c576d4b2a40adf0e64e67c6c66ab8f48308c0197fbd69d9e1
./bin/audio/numbers/62.wav	288411face5aae83a031f527531f27a72152d1531747cfdc5741ce3783698c8d
./bin/audio/numbers/63.wav	f6bee2598fcbfcc61a6e29b1dd6dad62d045eaf66db94a43e6b2a493ffff75fe
./bin/audio/numbers/64.wav	3874a81ea06d814f219d823c738bf253d3639e5dcd85cf0adbec0b67c993ffad
./bin/audio/numbers/65.wav	bf152e79bd8a1a61cf903a6d31517bbfc99ee23413c4baffbe26b42e774d16c4
./bin/audio/numbers/66.wav	2d4162ac584cbb5d8a0b50f82a3b3bb85492f826b7d3ce5fab0dc5903ea0f71d
./bin/audio/numbers/67.wav	b707fbb9370e18cb3fec79b4e04c4df1f571fcd88bb626d6b8d83079dda2cf2c
./bin/audio/numbers/68.wav	52ba70996a047ef695f4735b337706bf81fc72914517deb0cc117d5114df4233
./bin/audio/numbers/69.wav	cb3530cf3e22528abc869675e608c44672bd347bcde4a7f8e841429fa555461

File Name	SHA256 File Hash
./bin/audio/numbers/7.wav	92d3fe0a6841a30032c7d38b5b122683a9aac7ce1f163b7b6ad197499eb33925
./bin/audio/numbers/70.wav	8d126db51f4421e78d6789582f0433891eea792fa57d42aae8bda32b87dafcfc
./bin/audio/numbers/71.wav	248ba49bbca32ba00352341ecad43918d96d26f493bf747589e1da46a9f46428
./bin/audio/numbers/72.wav	737679a33091a7239955b2c47d18242c7d28388ef7d50eb8c5ee987bd33cc8f8
./bin/audio/numbers/73.wav	30b6d2895b2a3a13b118aa5026eadbae1e487978701dd64c0ab1b585b5eb236c
./bin/audio/numbers/74.wav	c7bd01c5f7d1ee1a6aa7712f4f88816185c3694ae4f16e291de8dbd8a886d364
./bin/audio/numbers/75.wav	6db03a341e1263b1078201c17704ce2c0959bc34acddbf542f98abba29041c49
./bin/audio/numbers/76.wav	2e643a0ee007def8be467a040d573e8e52b58f4e1ebd5530fc3b25495e9c1153
./bin/audio/numbers/77.wav	08338defacfb72ca78138f43f3d7d5f850fd36f7d43f51506374eec9886c9d3c0
./bin/audio/numbers/78.wav	90430e1c11a7f9f1e82cb388b743d51e07847ff9316c491d636b844965975540
./bin/audio/numbers/79.wav	936e816c933b94aa91cf3725a74e0586149c88439ad8ee0eb67517c42786500c
./bin/audio/numbers/8.wav	ad0820d500c6e5f612f835f458a3b212dcecf242abf00b63a430c51531770bef
./bin/audio/numbers/80.wav	1779c60268852f5ab7e50d53ff6890f748c75e65f4332e608caac9929a67ba8e
./bin/audio/numbers/81.wav	1ad8d6971fcd46313171efac59f858566f5d8fd8a46913ae2a3bb89e6f5e73
./bin/audio/numbers/82.wav	193c02a812cb43ee1d169e97c3a476a0ade97d67d80492fa8347aed856ee0690
./bin/audio/numbers/83.wav	9a9249f912e03ab593a62e6cfe4652a52a5d955d52ae524aeaacb0797c071fc7
./bin/audio/numbers/84.wav	392be431871322ff3b81805c17b2037ed848230622e2612bd276e199ef5b3396
./bin/audio/numbers/85.wav	c240159326b88f1215575a12d113b12ce0211ff114a5ca98123c014afbc2ffeb
./bin/audio/numbers/86.wav	c840ea368a222a30bbe35a25417e97d3ef841bc640d097227dc46d2af6af11d3
./bin/audio/numbers/87.wav	dfc6a578f4ce2039055a1acb9b54a31badf067876220408606c279fe859d49af
./bin/audio/numbers/88.wav	f9a2aae113f26029fa868b8ec63e4488cb7dc00e5448bf3599ba5272c9e16606
./bin/audio/numbers/89.wav	ada7ece8bd741acc10d2571ea6319eb62c1f9ec2b9c38100dfe13528cd0c29a6
./bin/audio/numbers/9.wav	3cb21423fbf746b28203cbbadecddc84a68e16876463eb8c9b9cce1b25cb8963
./bin/audio/numbers/90.wav	9332e25aea477be396ba9f73a6f66641f784bef6a6f2907b854781a5fcad6811
./bin/audio/numbers/91.wav	ebe0200367b45a79d8cf117b88f4b56ca8c53aebb00bf51d2709fd002114fc94
./bin/audio/numbers/92.wav	981c6b82e42c76410f2cd16758ddc001f69e471c67f7650a4a258212afbaa298
./bin/audio/numbers/93.wav	bd1a15277c3efb28f831d376bffd26d486ccf4e57b8e53aa0c8ae1a67925b96
./bin/audio/numbers/94.wav	82dbcdcb4eaea98428c02acd0040a0b12476ee3416b49409ffce8093e68a7327
./bin/audio/numbers/95.wav	9c1b36d5a6caf908c5bce561d83f3ce51b7e62c41fa7ca5ca7dbe07c85ffe61
./bin/audio/numbers/96.wav	d637b7133e26ddc465801772e526070eb6153f5cb1ef7f1a298fa14852e40ff3
./bin/audio/numbers/97.wav	f27813b6893e8e96d997cf1bec0d6797c68c466a38e979da171a0834035bfa79
./bin/audio/numbers/98.wav	c30b15875144b291038e54f42598ddc39635ed35fbbd52b7b0e8a80a8cb4e4a7
./bin/audio/numbers/99.wav	86017c8bf0b415da0f516a7553b0a441c03a8b8286865e18e2bdfdb8d71355313
./bin/ballot_box.png	a8674379d1d6d03b9ccf6a9018986d3eca60a85796ac617507158cbe81d2ad02
./bin/elections_act_logo.png	9d0ed1c40ac106b9a7fb7f9c7aa5d8a418e508b61bd815499a560dabb518465f
./bin/evacs_act.glade	90bcd5963322c445300f84f219e708bb1ca15ae4542d90608f8be4a9c7e4143c1
./bin/progress_1.png	bec18ca8bd14863327b30c4fea70c18486528c7fe3a69e602fdce988aae7e953
./bin/progress_2.png	45ab4af4de8f2d559a4ca2b39c8b98f7fe0b9bceb0910feacca7d4d7de8c469b
./bin/progress_3.png	8f6731919f1a656884ab53311bc8d5b0fcf497d64ea60173a87ba04aeb311899
./bin/progress_4.png	34188d79cf8f787c0c7b4bb39e47631e3e34aecb503941682e6ff4c7d1185615
./bin/scan_qr.gif	a77acb6e7e838e5ebda3f1b938427dca28f3ca2b969673304aa1ca595c331ca5
./bin/style.css	82f0f0f716d101829b097ea224a6ea8999328655f7eb73860727f1d8b9015bd2
./bin/teal_tick.png	3e7fcddc1206a8b5746076ce548ebf4079c452cc2aedc64d6af716c0fbf27ee96
./bin/voting_client_xinit.sh	45f2a2572164993f0bbdd82c6974e1962323ec2c8dc928d7c8e026a149a769b4
./bin/zoom_minus.png	feaec4aac84e2a57c8a4ddb684e823385274b6f8e21a143bc70e1b8e2ff2adcf
./bin/zoom_plus.png	dee15eb155c22d86999afd9afdca6280fa657682fb4e886829f2ee709118e500
./bin/zoom_slider.png	597feadb736be5c1f350c7782aba0ec09ace3b2c95b78ca4a517ee2ccd7dccb7
./system/gen/sys_main.adb	c5f4ffd17bdec5487e1d54eed5af819f0a628088d6b3a3660fcbcabbd4ba0ea
./system/gen/voting_client-dom-bridges.adb	1125d10f2a2a5cbbacc5e06390452ece49ffb94276e3d6e586d0b7dc1b64389e
./system/gen/voting_client-dom-bridges.ads	cfafd862493b10905754183afebbf6c82c75cd3ddad360771b47f5d58c116ff9
./system/gen/voting_client-dom-enums.ads	13f6e56c6d172b303cca100f6d594b3ca996847710554f226fdd1b77f901124b
./system/gen/voting_client-dom.ads	646a67087b81a4fe519e713eba5d9267dfeddade94f625b6c72362e112a1e2fc
./system/gen/voting_client.ads	1846030c3b9521aa4deb02009c1f8ceacdefeb1ff33b6905e5bfbbaa42c9a33a4
./system/gui/vc_accepted_screen.adb	536d7fa9cc2ad1b7cc80e664a952d88e7f826427b61b7e67a04fae0372bd3722

File Name	SHA256 File Hash
./system/gui/vc_accepted_screen.ads	72ee2b026230cf9bd758f02df1b2c6b77daa7afbe7ff9b344f925b04526b6857
./system/gui/vc_admin_screen.adb	7ae64acae8b70f048428af0fd7ef5ef7b1e4ffba8cd8f818e4b39e33c0e076
./system/gui/vc_admin_screen.ads	1dd32e4582b3a2b268a433b25b5e009f5a7fcd87370e8000face04d724c4cf1
./system/gui/vc_builder.adb	18d5313a65d4bb4e1522c6671bec17f51f23f676f9e8e6daf84375c482ba91c1
./system/gui/vc_builder.ads	d97398495f9ef890bbdb033e37fdc5271e841f45bec83e3e640f354f58faf53e
./system/gui/vc_confirm_informal_screen.adb	3b4dc0ff354ce1220d6935dc6f079c798aa75450ce15000d9783ebd4a3f8b52a
./system/gui/vc_confirm_informal_screen.ads	736cdb9602666efc6becd11c7664b49784991475284318441dc338e5ef67f41b
./system/gui/vc_confirm_screen.adb	Odd7c704eb65b30ccc65f429dd1968e0f52a0ce5afe00fb1c16e2b9efe525745
./system/gui/vc_confirm_screen.ads	5883093bfcc29e26e96e6f0fd85d5bc13fc70f69a81925427ac51e0602a731f1
./system/gui/vc_error_screen.adb	cfedc93b959543194cfbeb07d2268662592ddcd3ac977c30b856ee836c36c89a
./system/gui/vc_error_screen.ads	bfebe9f648621b85bc6b0576d612495eb381135f8f508fe86604f5cce5de5294
./system/gui/vc_hidden_vote_screen.adb	a31061ce558467ea7707450661c9055893a9b54c8ba41f70beb755caab936d72
./system/gui/vc_hidden_vote_screen.ads	29414dbbbe05e25937a2c11bd679037443d5d6a86473bfe1cc5d72a576f2aa3e
./system/gui/vc_informal_vote_screen.adb	9a0a0e459e9f54bf4b5cb8be0e67678754ca76062d9df32f2b438ba0dfe3b5de
./system/gui/vc_informal_vote_screen.ads	4be42156553605b4f126d512b1fb9dacc4f95905825e925b360ddfa369b2813
./system/gui/vc_language_screen.adb	91480852164b2b4315f9b6da0924c1bc68c2e933b1a227df1f3ac815bd79b01b
./system/gui/vc_language_screen.ads	06e360418252f69d26d85c67cca38e78a22a21ca8303737c377153a75ac42c71
./system/gui/vc_main_voting_screen.adb	08ae3392b8d04631bae115703bf61ab9cb52aa9c254ddb5e44ffb4eda924f8b9
./system/gui/vc_main_voting_screen.ads	9a5b4e0b589d42429f65f734ad723a61084373e2150d92102c83a73580e0ec2d
./system/gui/vc_start_again_screen.adb	96296f04cbfb57562f313b1dd5a35555e0bd0f5828a10019179196513483a3b
./system/gui/vc_start_again_screen.ads	5ec923beb22b8791faaf72494310fdbf8d39130415e3b1fd257d451470992dd8
./system/gui/vc_voting_screen.adb	1638be8d6fa38e7293a24a8f4dccef1e39bf62048bb03b11a6b3a7a238f8f07c
./system/gui/vc_voting_screen.ads	6dd163044de4ebed5c6f0368bd41a1bfe75a539a2f71332ef541d5a4b28438c3
./system/gui/vc_welcome_screen.adb	f1481c9eda91f5a0e1cec0a3df3e28f67273dc024f0bdd7e5e52e7107df689cc
./system/gui/vc_welcome_screen.ads	7eb1c8e1f29d33d8d90297b856b569899b0570cd7016f358995f1d8155d6a433
./system/user/bridge-voting_client_view.adb	8eab7096371591f1e1fae0cc845cfc73f28df6031c6ba301c57f99338572588
./system/user/bridge-voting_client_view.ads	b0acbbaf2ab17e6ac2313e246ca5123a4a379c6b382d80b6904895fca8a7a2a9
./system/user/bridge-voting_server_messaging.adb	084434d9c51a7b7b937ca8c4fd41f8736d0c002017cd72cdfac36139a64c1fde
./system/user/bridge-voting_server_messaging.ads	0364c310997f126e55af7a72bfac07714c5c8c9fb81be2d3215c9b6185011cc
./system/user/voting_client_audio.adb	5e684e6ae792f368fec85dff90c6be6b02604928b6c970ca0c2e304f5dd93ee6
./system/user/voting_client_audio.ads	8259f89cc41e0453ee9c24ea7ab7862cad3528c3c11f60eab912e8f467391fe4
./system/user/voting_client_interface.adb	abe1a1a25f2a3c5a7b24c6b0e64cdb47c3d24e3e9ac8a6a0f976aa0cf2affa98
./system/user/voting_client_interface.ads	8615da7e9a1c2350f85b7df70a0cc6fedf1edf8708b1c655fcb5dbc0de3974ce
./system/user/voting_client_view.adb	be619ff72e2334502969c70a93ce92283003d74f688c37dbb1d73987b8242cf5
./system/user/voting_client_view.ads	28693ad1c59f7db597ba059ebf031d5a82d185b7736a51203a14a030fe1f78c6
./system/user/voting_client-dom-functions.adb	594c8d33df878af09ac1b6768c26c5f86ead2966c1f3b7d8ae1552622a38755
./system/user/voting_client-dom-functions.ads	7ec02df6c4a5e0aea96ee14b997ac75b4be138174410595de0f0b15fe5c11b32
./system/user/voting_client-heartbeat.adb	941b272d18b26ac30e516e14c64954f3a367aa1f36cc6ca7d20cef83b76be414
./system/user/voting_client-heartbeat.ads	3ca94b4777ae41848f81fc00fd69f98c9dbda16755c9124b0aa5826c794a7d96
./system/user/voting_client-key_event.adb	c317f8f4949ff41f15ae84506068bf3f7e70f7255c58ed92ca55123c8ab7f9f6
./system/user/voting_client-key_event.ads	20de206c91587e294ede3f22e6f6960e294a783279151466e126bb280f786001
./system/user/voting_client-language.adb	df20f18554bc1a09ba02201fcd6b16454656c042a2df4238a0ab96a5510c791
./system/user/voting_client-language.ads	72891eb5a3bc21190da185aadffacc7432a70b9db0035b06297f024af077128
./system/user/voting_client-session.adb	613b7d9861a67e38a471e0b4236451d081c4b4000e9e92711e13e74704cf3684
./system/user/voting_client-session.ads	39e5cd1f2ac5a6807901b1bcd35216638783d4e40ec2dd503447d50cf0768b35
./voting_client.gpr	ee963a0cf060700a609c4c5550025494b82c8b53f33d2d64f6b7f826e54cced2

13.2.2. Voting Server Project

File Name	SHA256 File Hash
./bin/aws.pem	955b410fc3b860401c75633e65f9434528bc67ac7f1b3a6c9a7b898ab90994df
./ssl/aws-server.cert	56f1b16621ed23ddef35d31449939b03decd8f35b70433497619f09497289c16
./ssl/aws-server.key	981cb5ba55562a3157ac1e857bbd373a2905a3b089d45066d91ef62095b3c2da
./ssl/aws.pem	fa0b4dbc9c55434ae5f6d14f2450856d386fe0c39f02ecb86fd8b5dc7c2ca43b
./ssl/evacs.rand	4eb84efe420193dae39aa55d4006c7d14c350981fc616781989f868256041abf
./ssl/ssl-readme.txt	ef4692d06a02dd37b93188108defd03f003659531181b45e202089953d342a86
./system/gen/.directory	3a153a3916d9aad94afbcfcca53d7820541b2c9ecb7ec3f20e1128658fc346b8
./system/gen/sys_persist.ads	2bc898371565811c39473019b5009663a83ff159b0a2e2745e4317221790e48e
./system/gen/voting_server-dom-bridges.adb	7ae5bb0d414ac24ee9ad147a37e8b55500b2d2bb4c3efb52ff8d4a4230c93823
./system/gen/voting_server-dom-bridges.ads	719399595247e3f1f6e76b0300163ecb06a56f7574c1b5a8a90e88d5ca9ed2a9
./system/gen/voting_server-dom-dispatchers.adb	6c61662f7efb8fb05156165c59509719162bdc164f68a630a94b3189518ea2af
./system/gen/voting_server-dom-dispatchers.ads	6d8d609610a6054edfe7883893ff1e554388ee04ebb1d479097a94f58e295405
./system/gen/voting_server-dom-enums.adb	137532d5f1ec7a76be467cfdc4479189485a6d3fd03a2923b790fa94fe84033b
./system/gen/voting_server-dom-enums.ads	aafc5c4234b3d5521d06cb83352a40b6e52286d8b64f163d97e4d11c0f96b9c0
./system/gen/voting_server-dom.ads	87461173ff4fc5f2f3aa3cb6048eadb3c43ab43c33e74d19fa1549e01d260f7
./system/gen/voting_server-main.adb	3617cfc51138d04a978d796254ca26aec9a21727664897ac3e50839c1881834e
./system/gen/voting_server.ads	f4530da99ad5fccc2c1a89b2888e2ee8bc17f4fc8f937cadd6662e756ed6b72
./system/orm/.directory	585b2560ef14e6e8390e82bef129d53d5ca6c3e2a3e63047688730d6a3a6be15
./system/orm/evacs_act-2020_dbschema.txt	8afb9d4676df2a8d8e3bfa833df7a99e72a0a13a071fc64d839057fb7524df84
./system/orm/evacs_act-2020.sql	b665a35dceff8f775333561012e3859c21848d3eb2280cc3c29bb11f3ed67f3
./system/orm/evacs_db_names.ads	25758cc1352e89a0cf8aee0060ac243224d2443d9e1ee2e96065eff3cbacef0c
./system/orm/evacs_db.adb	9ad440d5fc87398ec832223b632bedfc4115967d5ec12b8cf9ed23b977505313
./system/orm/evacs_db.ads	c798cec774dee49bfcf786a66f513c5fa0a739d64070442dbca2784a5742c2ee
./system/orm/evacs_orm.adb	3c75ca4127c86feb930d6050e9f1f18a60316ee926e223f8400686837262e72c
./system/orm/evacs_orm.ads	de4406849ebfb202594e88f5dcd88b2b7edbfd0586a707ad7aff5b5605ec39cb
./system/orm/evacs-persist-sql-system.adb	43da30caa1fd55db4d654f887983bd0aa653832a0d373645aee9be64aaea8637
./system/orm/evacs-persist-sql-system.ads	deb7e8e5e76c350c7b680358bdfc27d1545514d2f73ec8e8ee33439369d8335b
./system/orm/evacs-persist-sql.adb	ddeeab02c0632fb1ddfb0d11cf367e6a21af363da803b8188010f9d6a59cbfef
./system/orm/evacs-persist-sql.ads	d3326d0e1931386fc87fc19398b2b376c3fed49cb290fcd6f6b649e3db281f0
./system/orm/evacs-persist.adb	bcfac75fc50e9f71bb52f7234bb72b2dea5181b8a3f97210421ec3526bde57a8
./system/orm/evacs-persist.ads	bd6c64374913218d934c1697c2061296b9fc8ba07a878995168cfcbdae127fcc
./system/orm/generate_orm.txt	8de409d03abef63b44649ba86c322f4e97a9830a59d2829bf32626660aa6a939
./system/user/.directory	5a0903ad02076105bcb7b276ec8a6779e852fb0bf608cf7ac830e0bfabc3a732
./system/user/voting_server-dom-functions.adb	84ada930ead898f435968f367fa3f9d549243bef039e4be7fdeb72cd2d2b3c9d
./system/user/voting_server-dom-functions.ads	fc20ffb644a0cd859b45d5d0f9b833a3a3c67a6e27b135cf6d1c69507d377874
./system/user/voting_server-json_message.adb	19c275d728969ce73eeced14ee155f37c4d438b7828d26fd3bf8a715df4d3f2a
./system/user/voting_server-json_message.ads	cf1f46a4d25ac37d5d66325a000bc95fdc28a604bf42bd16b3baefc357806af6
./system/user/voting_server-log.adb	0c25e2858e1d869b6782a28db70406f968a3877c252728a6c34957bfe3486fa9
./system/user/voting_server-log.ads	2376647b7665fd3d3b76d95eadba7908516502fac949b4587bc5d8ee5093558e
./system/user/voting_server-model-authenticate.adb	4731a4bdd632bdde580f3bca50a376b04a66423b96276b0325ffdfec5e3a9f
./system/user/voting_server-model-authenticate.ads	3165a431ce1f08c146c68a34dd26921cf499385959abfed44bd1e004f748980f
./system/user/voting_server-model-ballot.adb	47b9baf0e4b7f32a30e24b47b0ca6eb2d27262c456a7ba6ed185ad06b1f66699
./system/user/voting_server-model-ballot.ads	637cbe970a1bd5a651558abd77bf77a11f66bead2c25223cfb46e0dc0d58353f
./system/user/voting_server-model-electorate.adb	adc6e9def24e7135b2fec3f9352d68f19aa85cf507ba7d68b4da47b111349435
./system/user/voting_server-model-electorate.ads	c93893074ccd50e34b83172c3e4ab0816deb8f5f330c96dc6f79a50333874230
./system/user/voting_server-model-language.adb	ef69dedd18dd2318cd6733882b3ce689027598b7b274711a4eb1eb2f1470915
./system/user/voting_server-model-language.ads	e761d26c858c0146f7b032af9e09bac47ecfd9b044118ac6b3fc0f884c60b103
./system/user/voting_server-model-session.adb	cada917c5d8b83fad74c10fa298e6de2d3ca6fff06a8fb3dfdf304a4ff27edff
./system/user/voting_server-model-session.ads	ad6c7087457a311119fbc7b595e8df45e5658b9792e47ecff83b85c2d61438a2
./system/user/voting_server-model-vote.adb	e8752886136e18b0985e7c08ad42ab34db1f7c6fe9b915b1191b929caa20d80f
./system/user/voting_server-model-vote.ads	6577308ac21ea6ad45553438fe6a6a65cc9838ba2cfe5f872d89e28a6e237818
./system/user/voting_server-model.ads	146cf9f8f7634f09b182812eaf0349b3d191db35f5adabb43768d6ada0e36de

File Name	SHA256 File Hash
./system/user/voting_server-random.adb	d861317af4d09bc11db324cf82e110ae44b502ee5d1148172ec7e70e3a4363f2
./system/user/voting_server-random.ads	7dafb4789a7773f4558bd023c524067f0e0e198f95eea18afa387f386575b2a0
./system/user/voting_server-vote_review.adb	772a1a8a71b22ef2c4fec37b6fe08e65b5a8ee7dd47a76bc7508e6cda250175b
./system/user/voting_server-vote_review.ads	c9ba788b6a19227fca9b23e2c86cf4a234b03815f301fbbc3cd02c34f1e8252f
./system/user/voting_server-vote_session.adb	e5cf3ab37cbe4639c8c045aa87251bdd470961ab51b0a279d4fd2ca3ec3edc95
./system/user/voting_server-vote_session.ads	48f949d986dc5c806ad1ae1d7cb40cedc8f803cfd62f20ce06cad7fa6059d092
./system/user/voting_server-vote_sessions_manager.adb	ca0f0235cab64fada9dbf9eb4b76701c131f50e81823431e1756466d833189fd
./system/user/voting_server-vote_sessions_manager.ads	ada7db8d838d8695cfcf0620dc54fac2743ebf12339ce6612fbbb0abea567fc7
./voting_server.gpr	cd9ddf283af871d8884e5bbbad4cd96770ce953344ad7048126574389c1dcf92

13.3. Counting Module File Identification

SQL File Name	SHA256 File Hash
count_add_candidate_states.sql	e09f0c6a85d1646bea4fde6249d6a341db1389282b4d39b33f64466347821f0d
count_add_death.sql	c8994c6cdc11324f0d9f0d5f440f9c208e9536bd42010b92ef58c0005d0c76bc
count_array_reset.sql	9614edcf98dc9a0a11bcc8f6ff31266571f6fb4fc8a53c5c0e785ea0723c840a
count_coin_toss_cand.sql	7b005e13a3bbbcbcbfb63a523d4724b9415f851af41fca0f324a23d6d7764bf
count_create_deaths_table.sql	6bc3d474f84218da4331c988340b8b5adfbe658aced3d885a9eef00f22c8e53f
count_create_pref_scrutiny_sheets.sql	8fa411d70d00fb75e9e5c9c7b3a43053eac28dbcb5f5d2cfb9c20a8f459b627
count_create_tie_break_table.sql	26b3214722d785df42cacb90f76816eb4580eaf9ab1d4e5a57d72b0dfebc2c85
count_deal_with_deaths.sql	a98571f3ee870a10f31b06c6d6154a3e4ab6fe07136be6404c4958941bb798d3
count_elected_at_count.sql	d1028d9bc2e7dd5d3bfc1666fa555ecaec9953fc358f6f50a96fa20fdde637c2
count_electorate_votes.sql	1f594d8257daa1bbb9bf8c93c0abe7f80b7a1a9e4024c8f55c2f0b6a49c67a6e
count_empty_votes.sql	26370a4f97fe16f0c37acdd57ad2e5b0f91ebd7724e157518d6f2df136c924be
count_exclude_candidate_with_fraction.sql	ff867b449054a688065620901d2241381a5a6bd6add4ee877ec9fccb05863baf
count_exclude_zero_vote_candidates.sql	d1b4a17d97e47933e28a890876a8dc0887ba841eb13dde59d6defdebaa6ca9f
count_excluded_at_count.sql	187c5b3ccb427df1b86b9a587b20c395f59f761f2c95037dfc3656095efe3db9
count_exhaust_elected_cand_votes_hc.sql	5039776e097b95da3c8000f6aa135754500a219f415976b4d9576d0516f13720
count_first_preferences.sql	b17e11f1a3104a852f7f2aeec2df2209598cdd4cca91bce3a19dc685c1ad3816
count_get_cand_to_exclude.sql	a6e1321de8d3c3d2e6aa1e3be74588938a456e7911ff74f9c5de203cd197c391
count_get_highest_cand_id_in_over_quota_group.sql	6a92a5c260bafa8b0d4b414ad0e782027164f5e39a07028c89b1570feb32d042
count_get_highest_cand_ids_in_group.sql	e98db85eadab94f7a520f04e2ba5ad63599f55cfd436aabfa6787bab92019838
count_get_highest_cand_ids.sql	edee110d45911485a6f2363b3c855309a246317fb7905dddebbf7736463dbbc3
count_get_lowest_cand_ids_in_group.sql	0d5a098fea50fa802ff6d691a916e9b626b7f935c85ec7f6324fc8c8cfd9c436
count_get_lowest_cand_ids.sql	ff34ce618b18b6110389620dd9ccbdf6f5c5d056fce74b62b502805e3e6514e7
count_get_lowest_value.sql	807ea1f7f2e88fd307f1ec1a85f6cfba2fb73624994fbc908ec15bc152ddc23
count_get_quota.sql	772c200ba1937ea4b169690134c86c6953aac2cac095028c3818d8ec1313e559
count_hare_clark_at_quota_part_1.sql	beeacb44f0dc0cc55a6843d5b555b01da66169b918e3957633f166298969efce
count_hare_clark_exclude_part_1_1.sql	2838907ae010bf5d6236f9b6cf326c74f2cfef0a61d0f1d0be0c1aa7bf78eee8
count_hare_clark_exclude_part_1.sql	42ea8d513a605126099e811e9602019551c56c9f81afd81ed3a2337c7f36c091
count_hare_clark_exclude_part_2.sql	30fb91cec702ee3ac376236b2607830f7039235f4cefa9299b0c456f507a2596
count_hare_clark_over_quota_part_1.sql	61767b4c25865826aa1d168584d113a6e69284d915fd3b340bf813797442f997
count_hare_clark_over_quota_part_2.sql	bf9d5a4148840f168644472b6dfb9bf02457b1b8e53d6c32e2bab36f876ac6d5
count_hare_clark_setup.sql	9ab8d328ef7e3e238adef30b572c9f173a0f02783734862954cc3bac06996505
count_hare_clark.sql	203cd8d0f57007ae0f3a8bffa04348af8856c459c36a5da92095576216f6beb7
count_highest_total_cand_1.sql	9151a125721489ed536ec953944fa0e6294f55aa1560daee9b539a3d2cdb2d2d
count_highest_total_cand.sql	b50f4d8785717c2999cc860908b3bdb36077672a08d5edf58b31c68b57f91fde
count_number_of_candidates.sql	433fc037b16fa8321864a972ca66bbcfedef722b0cc7428f76cf0a4c7c1a675c
count_number_of_electorates.sql	991e27d4984441b2039e3df3e06cbb5849e339bcae631e6309d9ff863c496328
count_number_of_non_ongoing_votes_for_cand.sql	5f5882c9cb9a6db08868f3b93ba09be291367e99401faebf176f09f72c48546c
count_number_of_votes.sql	bb003106050a1bb6c905071a75644cd70a379ca71f1a104a283bbe51001b600a
count_set_nac_for_count.sql	e30178625e478250ecd76df4b9b95f0054363ea60c825cfb362c180b697c4d92
count_set_null_to_excluded_cand.sql	e258b1acadfc8e3d4f8007b583560ff5118b5b5af1a54766d884e1a6ed62148f
count_setup_coin_toss_table.sql	abde4e5bfdd54c407b13faa1f5b65cc4cb621249eae44806cd530c11e189d69c
count_setup_elected_cands_table.sql	9586d51c2388b20eac1779a235213ea2ce6ae9ae210617c850c0176c0fdc5381
count_setup_exhausted_votes_table.sql	77a987704f1ad531d26671ce156ecb6a95ea2ffeac29957aaf7b6f82ffb55b6d
count_setup_fractions_table.sql	38a0c972ffa366c768eaada1bab74ca59817624f018579e7d03684ccfe0d4741
count_setup_prefs_table.sql	693e5405573e2e34005b20ef58b9d034e2da7b2e1cb868458e0027ed9f45d85f
count_update_pref_scrutiny_sheet_hc1.sql	221118e1fcd27c47f32eea9024789d5d31b377d1866d16596f1b094d71f51cee
count_update_pref_scrutiny_sheet_hc2.sql	303dad27b0121317228ad27457ba474a9a291a71a16c0df43245a58ce388b1a0

--- End of Appendix C ---