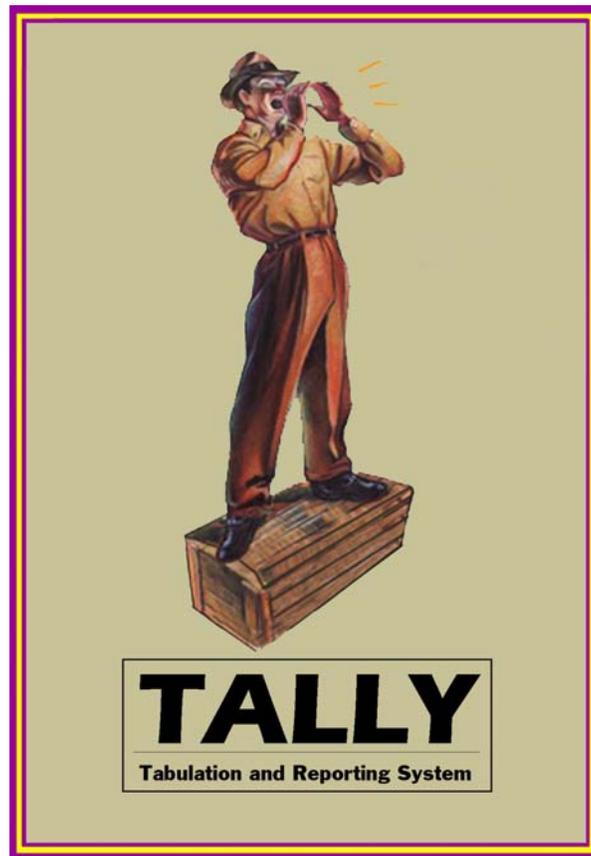

Tally™ Training Manual



Hart Voting System System Version 6.2

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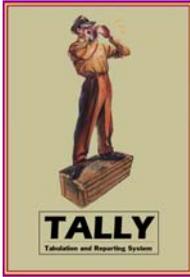
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Chapter 1

Getting Started

Introduction

What is Tally?

Tally is a software application that reads, stores, and tabulates electronic Cast Vote Records (CVRs). More specifically, as part of the Hart Voting System, Tally tabulates CVRs from Mobile Ballot Boxes (MBBs) that have been generated by the Ballot Origination Software System (BOSS). MBBs contain Cast Vote Records from the eSlate, eScan, and/or Ballot Now paper ballots. MBBs also contain audit trail data that allows Tally to authenticate CVRs.

Tally is configured to tabulate specific election and contest data by creating a tabulation database based upon the BOSS database used to create the election. Tally databases may be configured in Test mode (to tabulate Test MBBs only) or in Election mode (to tabulate live election results). Tally counts and integrates vote totals for Absentee Voting (By Mail), Early Voting in person, and Election Day. Once CVRs have been read and tabulated, Tally can produce a variety of official reports and data exports in several formats, including PDF and XML. Tally operator actions are reported in a real-time audit log.

What is Rally?

Rally is a Hart Voting System software application that reads, stores and transfers Cast Vote Records from remote satellite stations to a Tally PC at the central counting station. Rally reads CVRs from voted Mobile Ballot Boxes, and transfers are initiated when the Tally PC contacts Rally stations via local area network (LAN) or modem connection. Although Rally is fully integrated with the Tally tabulation system, Rally does not tabulate; it reads CVR data and does provide for secure transfers, which are verifiable. Rally includes a real-time audit log and MBB processing reports.

This Document

This document is a training manual designed to guide operator training. It is meant for use in conjunction with the *Tally Operations Manual*, the *Rally Training Manual*, and the *Rally Operations Manual*. This training manual is intended for both initial training with Hart InterCivic Training Specialists, and as a reference to supplement the operations manuals once training is complete.

- All steps that refer to a window, field, button, menu, or menu item on the display have the reference in bold (e.g., **Save**, **Close**, **OK**), unless referring to a table or list.
- All steps that refer to a key on the keyboard have the key underlined (e.g., Ctrl, Shift, Enter).
- The word “click” refers to a left click with the mouse unless otherwise stated.
- All report titles are referred to in quotation marks, (e.g., “Ballot Content Proof”), unless referring to a table or list.

See: Refers to a cross-reference for more information regarding the topic.

Note: Refers to a suggestion.

Tip(s): Refers to an advanced user tip.



Refers to a warning or caution.

Tally Operator Course Objectives

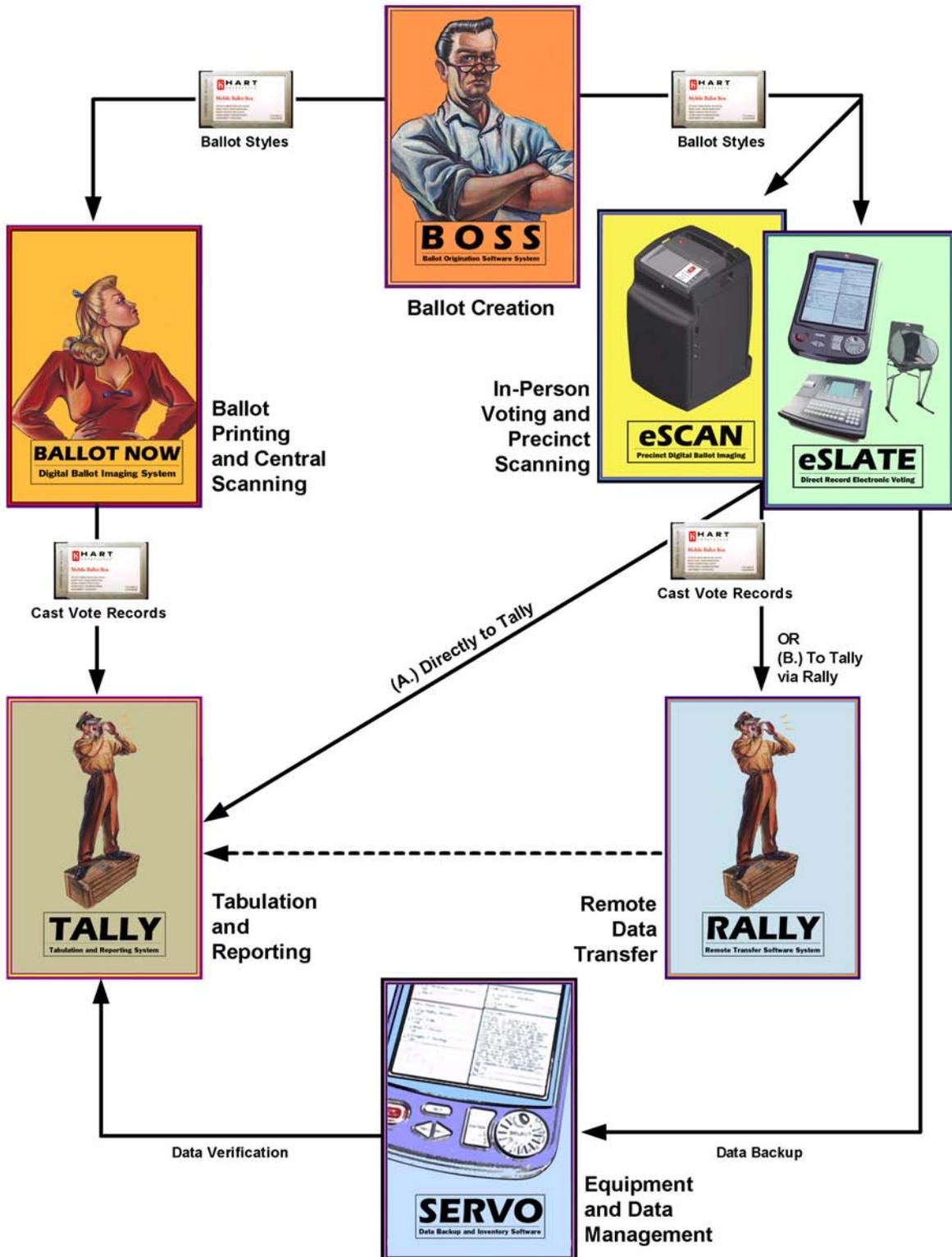
In the course associated with this document, you will:

- Set up Tally databases for tabulation
- Tabulate CVRs recorded on the MBBs directly into Tally
- Conduct a system and embedded Logic and Accuracy Test (LAT)
- Set up Tally and Rally PCs for communication
- Transfer CVRs recorded on the MBBs to Tally via Rally
- Resolve Early Voting retrievable ballots
- Resolve provisional ballots
- Resolve write-in votes for candidates
- Adjust votes as appropriate
- Generate unofficial and official reports
- Finalize databases
- Back up, delete, and restore Tally databases

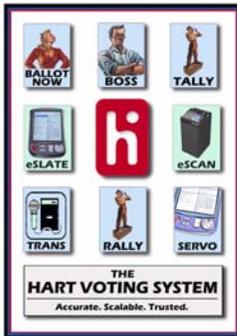
See:

“Hart Voting System Security Features” on page 4.

Hart Voting System Data Flowchart



Hart Voting System Security Features

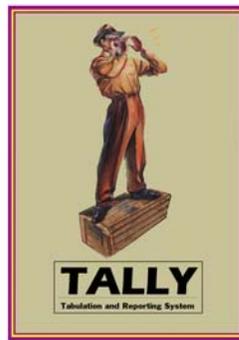


SECURITY FEATURES

- Critical data is encrypted
- An eCM is required for crucial functions
- Two-factor authentication is required
 1. Something you have - an eCM
 2. Something you know - the PIN
- A matching signing key is required
- Secure Sockets Layer (SSL) certificates are applied whenever communications between applications occurs
- User actions are logged in persistent audit trails
- Passwords are never stored "in the clear"
- There are no covert channels of access



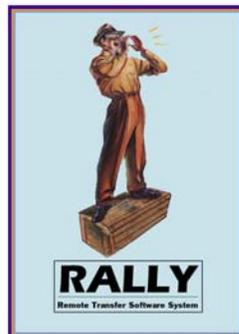
- eCM required to accept generated ballot
- Signing key written to MBB



- eCM required to read first MBB per session
- SSL certificate required to communicate with Rally



- eCM required to read or close MBB
- SSL certificate required for client-server communication



- eCM required to read first MBB per session
- SSL certificate required to communicate with Tally



- Signing key from JBC and eScan must match MBB
- Start-up, Open Polls, Close Polls, and Admin passwords required

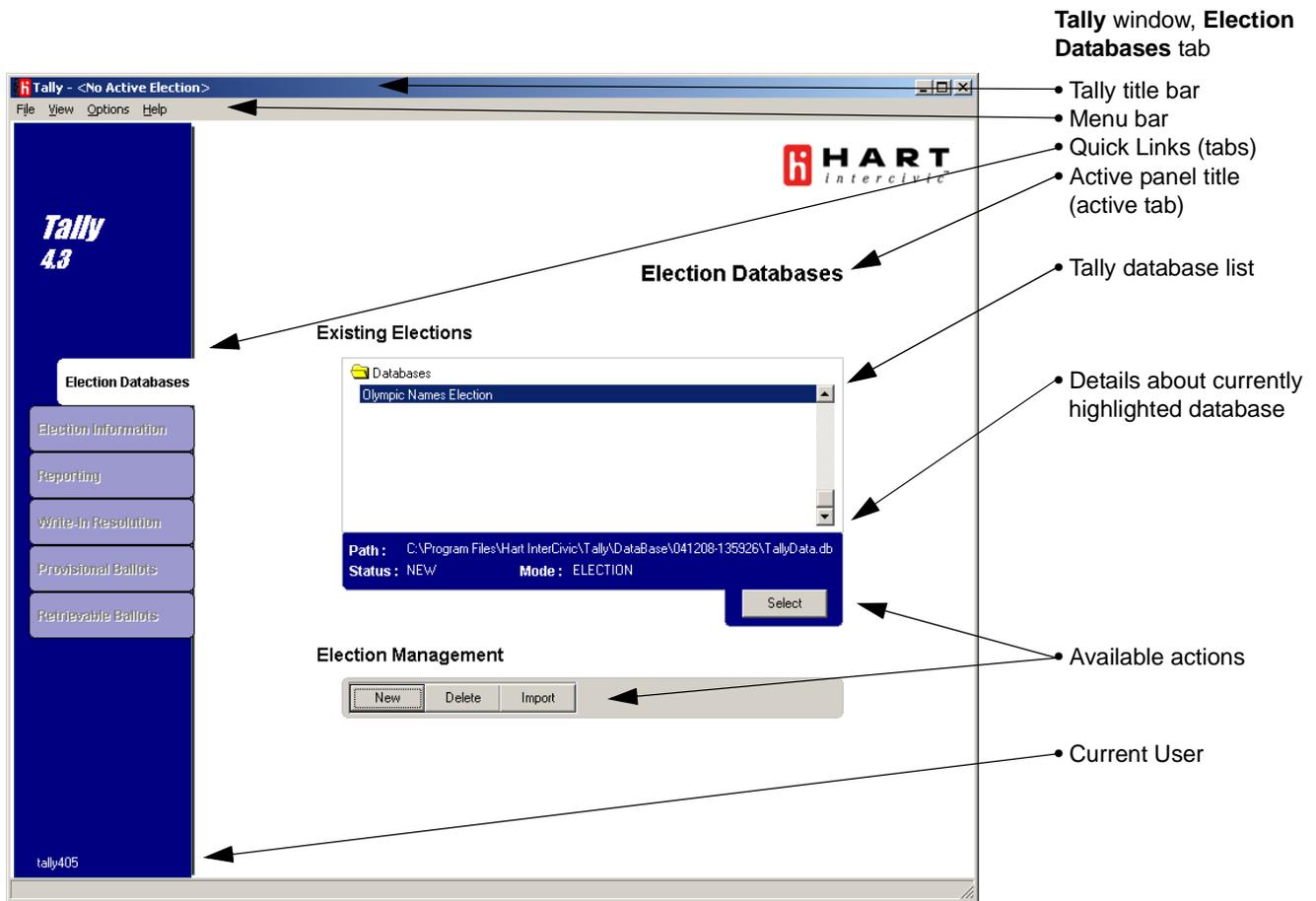


- eCM required to:
 - Transfer signing key to each JBC and eScan
 - Create Event
 - Create Recount MBB
 - Create Recovery MBB

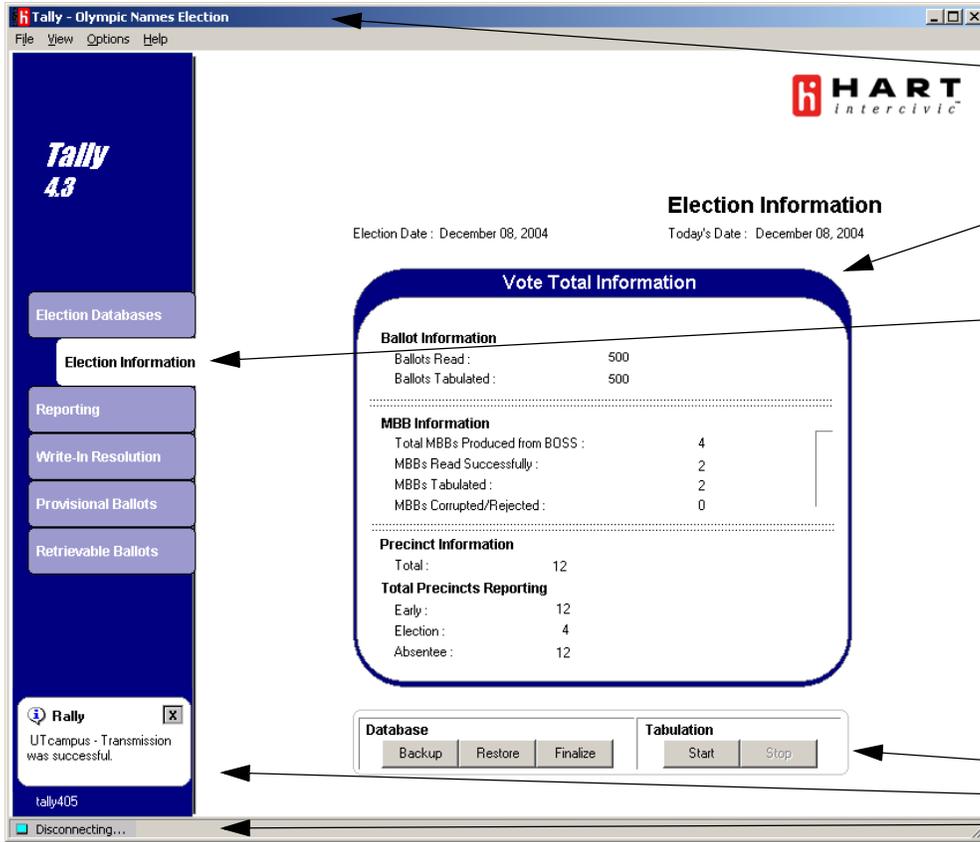
Tally Windows



- **About Tally** window showing the application version information
- If the Release number does not match your state-certified version, contact Hart InterCivic immediately.
- If the words "Not Certified" display, contact Hart InterCivic immediately.



- Tally window, Election Databases tab**
- Tally title bar
 - Menu bar
 - Quick Links (tabs)
 - Active panel title (active tab)
 - Election Databases
 - Tally database list
 - Details about currently highlighted database
 - Available actions
 - Current User



Tally window, Election Information tab

• Tally title bar displaying selected database description

• Information on ballots, MBBs, precincts, and totals

• Quick Links are available because tabulation is stopped

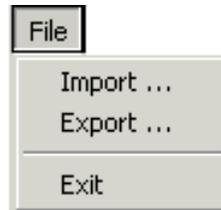
• Available actions

• Rally station status

• Status bar showing Tally connection status (task bar not available)

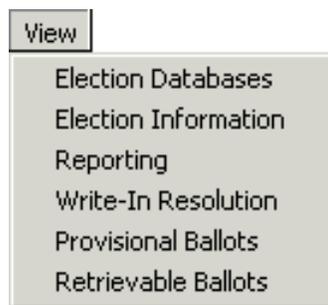
Tally Menus

These menus are available in the Tally Menu Bar. The availability of menu items is dictated by user permission settings. A brief explanation of each menu item follows:



File Menu

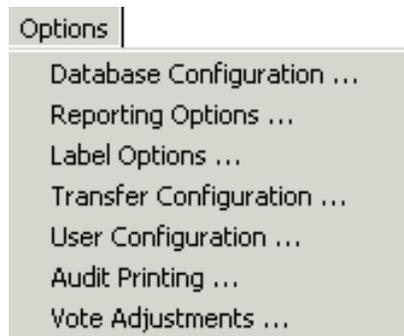
- Import Tally databases
- Export vote totals
- Exit the application



View Menu

Provides alternative access to available Quick Links

- Go to Election Databases
- Go to Election Information
- Go to Reporting
- Go to Write-In Resolution
- Go to Provisional Ballots
- Go to Retrievable Ballots



Options Menu

- Configure processing of provisional ballots and split precincts before processing MBBs
- Mark reports "Official" and select write-in vote Reporting Options
- Change the ballot source labels that appear on reports
- Configure transfer settings for Rally stations
- Configure user permissions
- Configure real-time audit printer settings
- Calculate manual Vote Adjustments



Help Menu

- Access information about the Tally application version

Maximum Number of Characters for Fields in Tally

The following table lists the maximum number of characters allowed in Tally window and tab data entry fields (organized alphabetically by window or tab, then field):

| <i>Window or Tab</i> | <i>Field</i> | <i>Maximum Characters</i> |
|------------------------|------------------------|---------------------------|
| Add Write-In Candidate | Aliases-Add | 100 |
| Add Write-In Candidate | Candidate Name | 100 |
| Certificate | Name | 64 |
| Certificate | Organization | 64 |
| Certificate | City | 100 |
| Certificate | State | 100 |
| Custom Report Wizard | Report Name | 70 |
| Custom Report Wizard | Report Title | 100 |
| Database Wizard | Database Description | 100 |
| Export Wizard | Export File Name | 70 |
| Import Wizard | District Name | 100 |
| Import Wizard | Name of File to Import | 90 |
| Landscape Export | File Name | 50 |
| Rally Configuration | IP Address | 15 |
| Rally Configuration | Phone Number | 14 |
| Rally Configuration | Rally Station Name | 40 |
| Rally Configuration | User ID | 12 (min. 6) |
| Rally Configuration | Password | 12 (min. 6) |
| User Configuration | User ID | 12 (min. 6) |
| User Configuration | Password | 12 (min. 6) |

Tally Database Management

Tally database management includes naming the database with a convention that is user friendly; keeping track of database status and mode; testing; and noting the database file path for CD backup.

Database Naming Conventions

Use a consistent naming convention. Suggested convention:

| <i>Function of the Database</i> | <i>Sequence Number</i> | <i>Election Description</i> |
|---------------------------------|------------------------|-----------------------------|
| TEST TRAINING | 4 | General Election 11.05.02 |
| TEST | 1 | Community Election 5.03.03 |
| ELECTION | 1 | Community Election 5.03.03 |
| RECOUNT | 2 | Community Election 5.03.03 |

Function of the Database

Describe the function of this database. The database may be a test, a live election, a recount, or a Tally database set up for training purposes. “Test” and “Election” are also database modes, but including this in the description name is helpful to the user. The “Function of the Database” wording should be entered in ALL CAPS to help with database identification.

Sequence Number

This signifies the number of times this database, for this function, has been brought into Tally.

Election Description

Describe the election event with, at minimum, the election title or the database description from BOSS and the date (Election Day date). Tally’s Database Wizard autofills the **Enter a description for the Database** field with the **Election Title** field data from BOSS.

Database Status

| <i>Status</i> | <i>Availability</i> |
|---------------|---|
| New | In this state, the database has no votes recorded yet (no MBBs from Test or Election have been tabulated), and it is available to process MBBs. |
| Opened | In this state, the database has votes recorded in it and is available to continue processing MBBs. |
| Finalized | In this state, the database is not available to process MBBs. All MBBs for the election have been read. The database is available for reporting, write-in, retrievable, and provisional ballot resolution, vote adjustments, and exporting, but <i>not</i> for processing MBBs. |

Note:

Only one New or Opened Election mode database, from the same finalized BOSS database, can exist in the same Tally application at one time. After finalizing an Election mode database, another Election mode database may be initialized in Tally.

Database Mode

| Mode: | Availability: |
|--------------|--|
| Test | Tally will only read and tabulate Test mode MBBs. Test mode is employed for Logic and Accuracy testing. Multiple New, Opened, or Finalized Test mode databases, from the same finalized BOSS database, can exist simultaneously. |
| Election | Tally will only read and tabulate Election mode MBBs. Only one New or Opened Election mode database, from the same finalized BOSS database, can exist in the same Tally application at one time. Election mode is employed for “live” election data. |

Note:

Test and Election mode databases from the same finalized BOSS database can exist simultaneously, in any state, in the same Tally application. Test and Election databases from the same finalized BOSS database are completely separate.

Testing

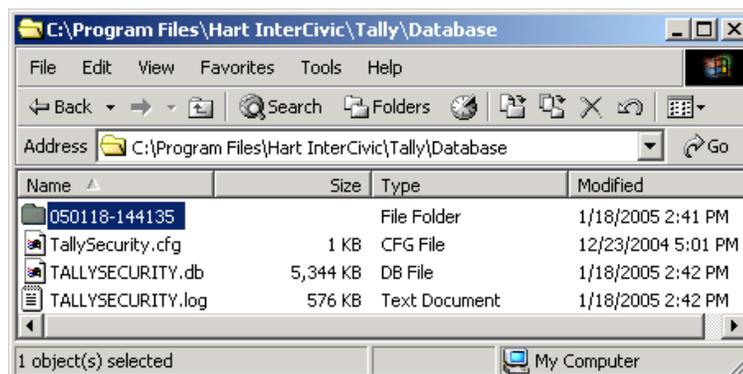
A Logic and Accuracy Test (LAT) is a test of the accuracy of the tabulation system compared to the input on the voting device. Logic and accuracy testing should take place before going live with an election, including Absentee and Early voting in-person. Follow federal, state, and local guidelines for logic and accuracy testing. Logic and accuracy testing is done from the BOSS ELECTION database that will be used for the live election and the Tally TEST database.

See:

“Logic and Accuracy Testing Procedures” on page 37.

Database File Path

The database file path records the directory for the TallyData.db database and TallyData.cfg files. All Tally databases include these files in a numbered folder that is unique to that database. When creating a new Tally database from a finalized BOSS database, the Tally application copies the BossData.db file from the finalized BOSS database and converts that file to a TallyData.db file. For each new Tally Election database created, a new folder for the TallyData.db and TallyData.cfg files is automatically created on the computer hard drive in the path C:\Program Files\HartInterCivic\Tally\Database. The Tally database folder itself is named according to the Year, Month, Day – Hour, Minute, Second (24-hour clock) that the database was created. For example, database folder “050118-144135” was created on January 18, 2005 at 2:41:35 p.m.



Backing up a Tally Database

Back up by navigating to the Tally database folder and copying the entire folder to CD, or by using the **Backup** function in Tally. The **Backup** function saves the original Tally database file (TallyData.db) and configuration file (TallyData.cfg) to a new location. Hart InterCivic recommends that Tally databases be backed up frequently during live election tabulation. For advanced users, a backed-up database can also be restored to a previous condition and/or state.

Back up the numbered Tally database folder (or use the **Backup** function in Tally):

- After each instance of creating printed and exported reports for public use (e.g., media outlets)
- After processing absentee by-mail MBBs on Election Day
- After processing Early Voting MBBs
- After each instance of creating printed and exported reports for public use (e.g., media outlets) on Election Day
- After processing absentee by-mail late mail MBBs after Election Day
- Before resolving write-in votes
- Before resolving provisional ballots
- Before finalizing
- After finalizing
- Immediately after Canvassing

See:

“Appendix D: Backing Up Election Databases” on page 115.

“Appendix H: Restoring a Tally Database to a Previous State” on page 153.

Deleting a Tally Database

Once an election is completed, the appropriate (federally or locally mandated) waiting period has passed, and the Tally database has been backed up, you may delete election databases in order to save hard drive space on the PC. You may also delete Tally databases that were used for practice purposes.

To delete a Tally database, take note of the database file path in the **Election Databases** panel of the **Tally** window, and click the **Delete** button to delete the database from the window. If deleting Tally databases with the “New” status, Tally may direct you to exit Tally, navigate to the folder indicated in the database file path, and delete the database folder.

Rally Database Management

Each Rally PC has one Rally database folder located at “C:\Program Files\Hart InterCivic\Rally\Database”. All data run on each Rally PC saves to this folder. There is one Rally database named “Mbbtrans.db”. Rally saves all data to this database. Back up the Rally database folder to CD in a folder named and dated for the election after each election in which Rally is used.

After the database folder is backed up, reset the database in the “Rally\Database” folder to a blank state. In Rally, go to the **Database** menu and click **Reset**. Resetting the database folder also resets the Rally station name to prepare for the next election.

Back up each Rally station “Database” folder (or use the **Archive** function in Rally):

- After processing all MBBs, and printing and exporting final reports
- Before resetting the Rally database (including before resetting the Rally database as an emergency procedure)

See:

“Appendix D: Backing Up Election Databases” on page 115.

Tally Overview

Tally Install Settings

When Tally is installed the following settings must be established as appropriate for adherence to federal, state, and local guidelines. These settings will be selected by Hart InterCivic, based on client choices.¹

1. Select **Retrievable Ballot Interface** if Early Voting ballots will be retrievable by Ballot Code.
2. Select **Provisional Ballot Parsing Interface** if provisional ballots may be reassigned in order to report only contests available in provisional voters' actual precinct (the precinct of residence).

See:

"Provisional Parsing" on page 106.

3. If the **Provisional Ballot Parsing** option was selected, the next InstallShield Wizard window prompts the installer for the destination of parsed provisional ballots for reporting purposes. Parsed provisionals can report to either the precinct of origination or to the reassigned precinct (the precinct of residence).



1. Some Tally application operations described in this document and the *Tally Operations Manual* are affected by these settings.

Pre-Tally Activities

Before copying the BOSS database into Tally:

1. Create the ballot in BOSS.
2. Write all MBB and DAU cards.
3. Back up the BOSS database.
4. Finalize the BOSS database for Tally.
5. Back up the BOSS database.
6. With MBBs created in BOSS:
 - a. Conduct a Test and/or Election mode election with eSlates and/or eScans.
 - b. Scan and save cast vote records for voted Ballot Now paper ballots in Test and/or Election mode, if applicable.

Pre-Election Day Activities

Before Election Day, perform the following tasks with the Test and/or Election mode Tally databases that have the NEW or OPENED status:

1. Define Tally options for reporting and consolidating split precincts in both the Test and Election mode databases.
2. Define Tally options for reporting unresolved write-in votes. If the eScan is being used, and the ballot includes write-in candidates, unresolved write-ins should be set to report as a separate category.
3. If write-in candidates and aliases are known, define eligible write-in candidate names in both the Test and Election mode databases.
4. Set ballot source labels for reporting, if the ballot sources are named something different from Early, Absentee, and Election.
5. Print a Tally Zero Report for a Test mode database.
6. Vote the Test MBBs.
7. Read the Test MBBs into a Test mode database as part of a logic and accuracy test.
8. Finalize a Test mode database.
9. View and print Test Tally reports.
10. Define Tally's **Rally Configuration**, if applicable.
11. (Optional) Set up Rally stations and test data transmission from Rally stations into a New Test mode Tally database.
12. Reset Rally station databases after testing, and verify Rally station names by clicking the **Options** Quick Link and clicking **Station** tab, if applicable.

Election Day Activities

On Election Day perform the following tasks with the Tally Election mode database that has the NEW or OPENED status:

1. Print a Tally Zero Report.
2. Read election MBBs from:
 - 2.1 Absentee ballots recorded with the Ballot Now application
 - 2.2 Early Voting ballots
 - 2.3 Election Day ballots
 - 2.4 Rally stations
 - 2.5 Spare MBBs not used in the election
3. Manage Early Voting retrievable ballots, if applicable.
4. Manage provisional ballots.
5. Add write-in candidates and aliases and assign write-in votes.
6. View and print unofficial and official Tally reports.
7. Adjust votes manually.²
8. Export vote totals.
9. Back up the Tally database often.

Post-Election Day Activities

After all MBBs for the election have been read, perform the following tasks with the Tally Election database:

1. Back up the Tally database.
2. Finalize the database.
3. Manage Early Voting retrievable ballots, if applicable.
4. Manage provisional ballots.
5. Add write-in candidates and aliases and assign write-in votes.
6. View and print unofficial and official Tally reports.
7. Adjust votes manually.
8. Export vote totals.
9. Back up the Tally database.

See:

“Appendix D: Backing Up Election Databases” on page 115 for recommendations on database archiving.

2. The Tally application allows the user to manually adjust the vote totals for a contest. This feature is used to record votes from another vendor's equipment, or to adjust vote totals for abnormal conditions (e.g., late mail that was not processed with Ballot Now).
The user must select the precinct/split and ballot source (Absentee/Early/Election) that is to be adjusted. The change in ballot count will be displayed to the user. The ballot count for the precinct/split will be adjusted to be equal to the largest ballot count for any contest contained in that precinct/split; **therefore, undervotes and overvotes, if applicable, must also be accounted for.** If vote adjustment causes a change in ballot count in a precinct, this change will be reflected on total ballots reported for the election.

Tally User Permissions and Certificate

First Login After Installation of Tally

Complete the following steps at the first startup of Tally after installation. If Hart InterCivic has already completed them during installation and testing, then create local users and permissions and delete those users added during installation and testing.

1. Start Tally from either the desktop shortcut or the **Start** button on the Windows taskbar.
2. In the **User ID** field, enter a User ID for a user who will have Administrator permissions in Tally. The field limit is 6-12 characters.
3. In the **Password** and **Confirm Password** fields, enter the password for the administrator-level user. The field limit is 6-12 characters, case sensitive.
4. Click **OK** and the **Certificate** window appears.
5. Complete the certificate and click **OK**. The certificate is used to verify a trusted connection (as with a Tally-Rally connection). Enter a unique password or an administrator-level User ID in the certificate **Name** field. Log certificate information.



Welcome to Tally!

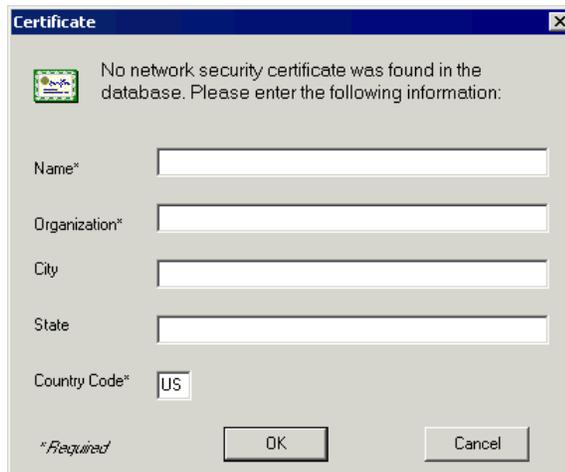
Because this is the first time that Tally is being launched, a new ADMINISTRATIVE user ID and Password must be defined.

Administrative User

User ID

Password

Confirm Password



Certificate

No network security certificate was found in the database. Please enter the following information:

Name*

Organization*

City

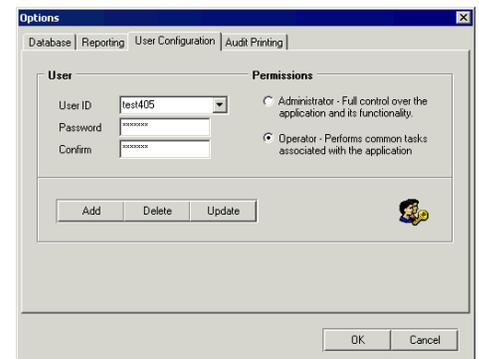
State

Country Code*

* Required

Creating Additional Users

1. Go to the **Options** menu and click **User Configuration**.
2. Enter User ID, password, and password confirmation. Select the user permission setting and click **Add**. The User ID field limit is 6-12 characters. The password field limit is 6-12 characters. The password field is case sensitive.



Options

Database | Reporting | User Configuration | Audit Printing

User

User ID

Password

Confirm

Permissions

Administrator - Full control over the application and its functionality.

Operator - Performs common tasks associated with the application.

Updating Certificate Information

1. Go to the **Options** menu and click **Transfer Configuration**.
2. On the **Basic Setup** tab of the **Rally Configuration** window, click the **Certificate** button.
3. In the **Certificate** window, update the target fields and click **OK**.



Tally User Permissions

| Tally Function: | Administrator: | Operator: | Database State: |
|-------------------------------|-----------------------|------------------|------------------------|
| Database Management | | | |
| Create Database | Yes | No | |
| Delete Database | Yes | No | New, Open, Finalized |
| Import Database | Yes | No | |
| Select Database | Yes | Yes | New, Open, Finalized |
| Back up Database | Yes | Yes | New, Open, Finalized |
| Restore Database | Yes | Yes | New, Open, Finalized |
| Finalize Database | Yes | No | New, Open |
| MBB Processing | | | |
| Read MBB | Yes | Yes | New, Open |
| Tabulate MBB | Yes | Yes | Open |
| Rally Station | | | |
| Rally Configuration | Yes | Yes | New, Open |
| Rally Communications | Yes | Yes | New, Open |
| Reports | | | |
| Execute Reports | Yes | Yes | New, Open, Finalized |
| Create Custom Reports | Yes | No | New, Open, Finalized |
| Delete Custom Reports | Yes | No | New, Open, Finalized |
| Write-in Features | | | |
| Write-in Resolution | Yes | No | New, Open, Finalized |
| Write-in Option Configuration | Yes | No | New, Open, Finalized |
| Other Functions | | | |
| Manual Vote Adjustment | Yes | No | Open, Finalized |
| Provisional Ballot Resolution | Yes | No | Open, Finalized |
| Tally Import | Yes | No | Open, Finalized |
| Tally Export | Yes | Yes | New, Open, Finalized |
| User Configuration | Yes | No | New, Open, Finalized |
| Application Configuration | Yes | No | New, Open, Finalized |
| Certificate | Yes | Yes | New, Open, Finalized |

Setting Up Tally's Real-Time Audit Log

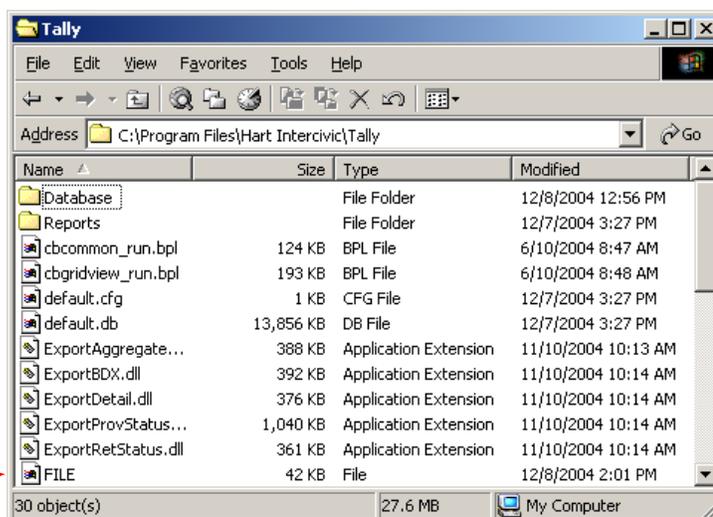
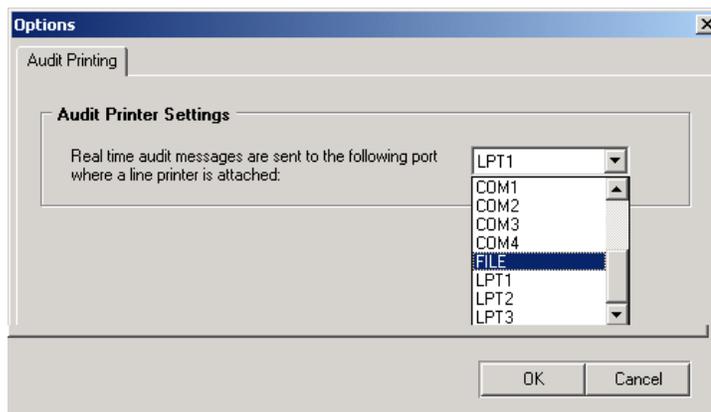
The Tally real-time audit log lists all auditable events performed in Tally since the Tally installation. There is no header, title, column heading, or footer information in the real-time audit log.

To view the real-time Tally log, first establish the correct audit printer settings. Go to the **Options** menu and click **Audit Printing**. View the real-time audit logs in one of two ways:

1. Connect a line printer to an LPT port on the PC. Do not install printer drivers. Start Tally. Go to the **Options** menu, click **Audit Printing**, and select the LPT port to which the printer is connected. Exit Tally. Log in to Tally. The line printer will print a record of each action taken in a Tally session. Printer errors, or not powering on the printer, will cause an error message to display and **ONLY** access to the line printer settings will be allowed in Tally.



2. *OR* Start Tally. Go to the **Options** menu, click **Audit Printing**, and select the audit printer setting **FILE**. A real-time audit printer file, named "FILE", will be saved to the directory C:\Program Files\Hart InterCivic\Tally. This file will contain a record of each action taken in a Tally session. To view this file, copy it to an election-specific folder and add the extension ".txt" to it. If using this option, make certain to retain this file as a part of the election records.



Tally Tasks Requiring the eSlate Cryptographic Module (eCM)



What is the eCM?

The eCM is a physical USB security device provided by Hart InterCivic. It is required for access to secure functions in the BOSS, Ballot Now, Tally, Rally, and SERVO applications. The eCM must be generated using the eCM Manager application.

When is the eCM Used?

In a given election, the signing key on the eCM is used by the BOSS application to accept the ballot formats for the election, and a matching signing key must also be present in the eCM(s) used in the Ballot Now, Tally, Rally, and SERVO applications.

The simplest way to use an eCM is to keep the device handy (e.g., on a lanyard on your person) and to insert the eCM token into a USB port on an election PC each time that PC is being used, removing the eCM when finished. In Tally, the eCM is inserted into a USB port on the tabulation PC.

When the eCM is accessed, Tally requires the operator to enter the eCM PIN (a password selected by a jurisdiction administrator before any signing keys are generated).

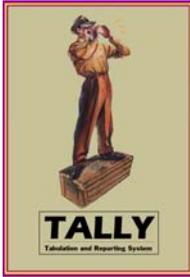
In Tally, the eCM is used to read the first MBB during a Tally session. If you log out of Tally, the session is over. When you log in to Tally again, you must re-enter the eCM PIN with the eCM token inserted in order to continue reading MBBs.

eCM Management

The eCMs should be closely managed. The number of eCMs being used for an election and their PIN(s) should be logged in a secure location. eCMs should be labeled with the election name or similar information, but *not* with the eCM Key ID or PIN. eCMs should be stored in a secure location, separate from election MBBs.

Notes:

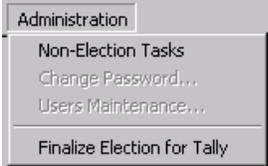
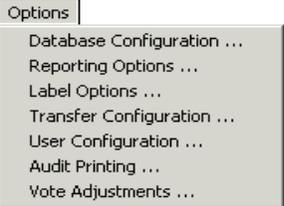
Notes:

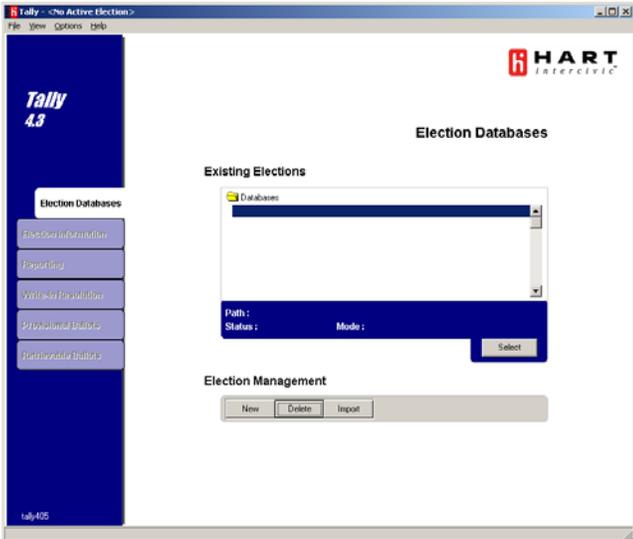
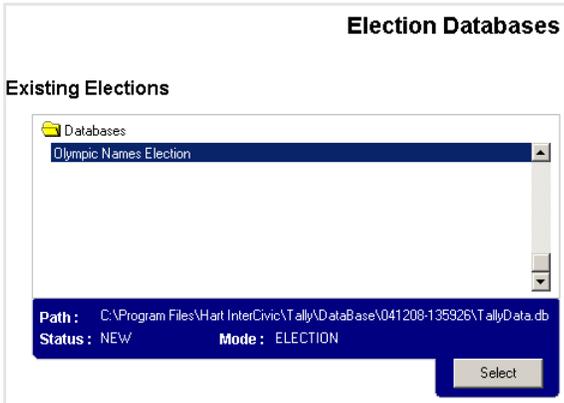


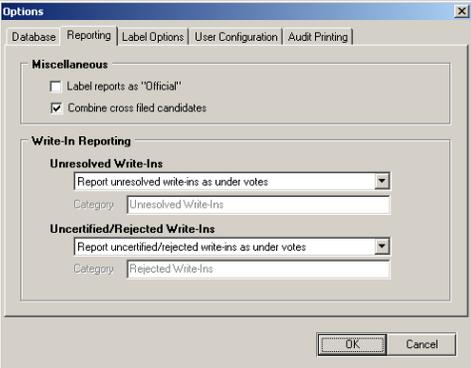
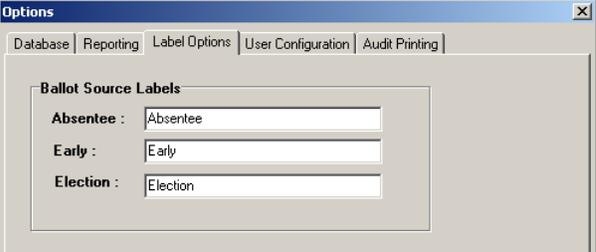
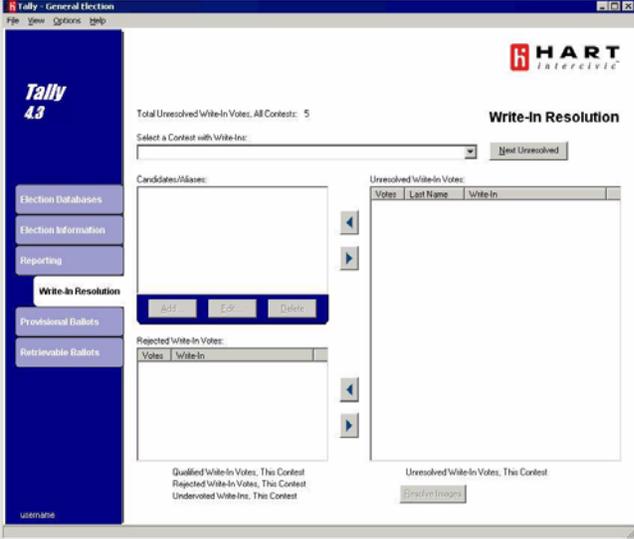
Chapter 2

Using Tally to Count Voted MBBs

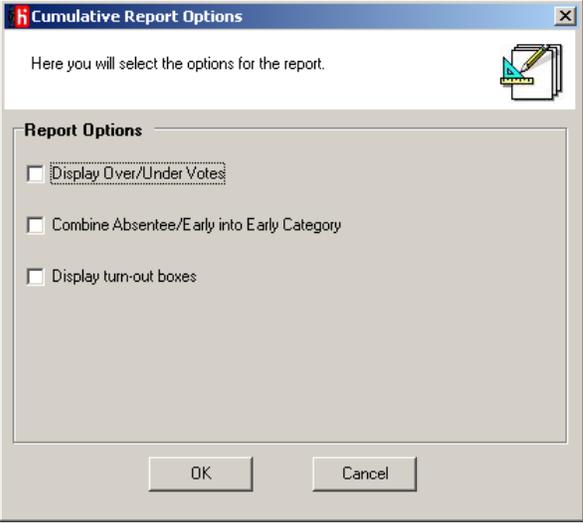
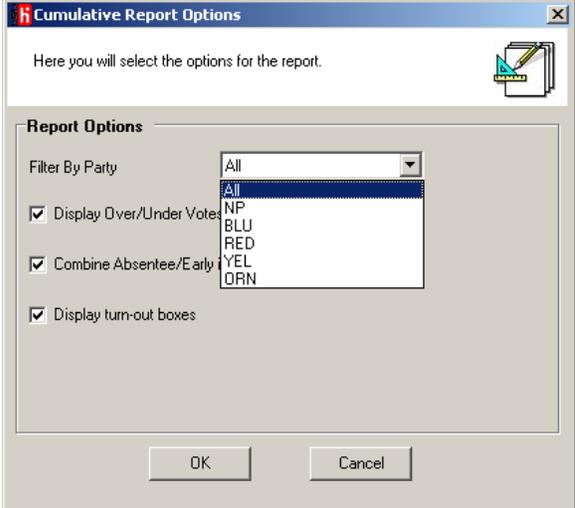
These procedures outline the steps for tabulating an election with the Tally application alone (i.e., without Tally-Rally communications).

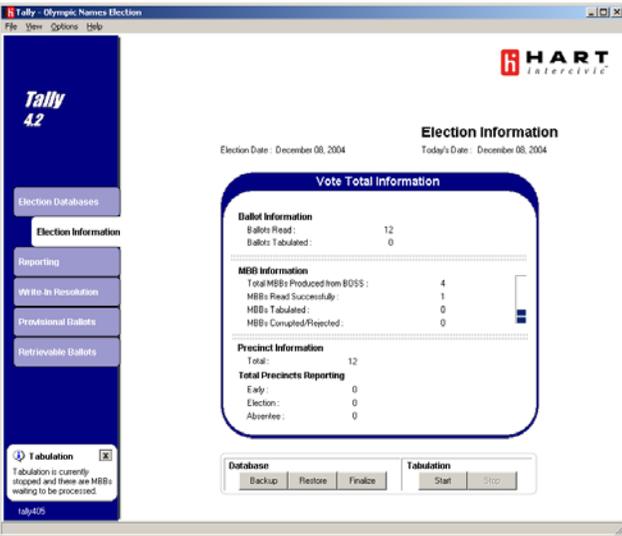
| Steps: | Details: |
|---|--|
| <p>1. In the BOSS program, finalize the BOSS database for Tally.</p>  | <p><input type="checkbox"/> Make sure you have written all MBBs and DAU cards before finalizing the BOSS database.</p> <p> After finalizing, you cannot write additional cards.</p> |
| <p>2. Double-click the Tally desktop shortcut to open the application.</p>  | |
| <p>3. Log in to Tally as a user with Administrator permissions.</p> | |
| <p>4. If you haven't already done so, set up Tally users and permission levels.</p>  | <p>Go to the Options menu and click User Configuration.</p> <p>See: “Tally User Permissions and Certificate” on page 15.</p> |

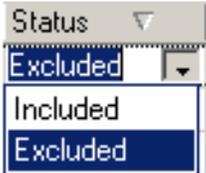
| Steps: | Details: |
|--|---|
| <p>5. Create and name/describe a new Test or Election mode database in Tally by copying the finalized BOSS database or importing an existing Tally database from file.</p>  | <ul style="list-style-type: none"> <input type="checkbox"/> Click the Election Databases Quick Link and click New to bring in a finalized BOSS database, or click Import to import an existing Tally database from file. <input type="checkbox"/> With the Database Wizard, set the Tally database configurations for split precincts, reporting display, and tabulation processing. <input type="checkbox"/> Set Database Configuration when creating the database, or after opening the database and before reading MBBs by going to the Options menu and clicking Database Configuration. <input type="checkbox"/> Test mode and Election mode databases are created in Tally separately. <input type="checkbox"/> Each Tally database must have a unique name/description. <input type="checkbox"/> Only one Tally Election mode database for a specific BOSS database may exist in a NEW or OPENED state at a time. <p>See: Suggested naming conventions in “Tally Database Management” on page 9.</p> |
| <p>6. Highlight the target database and click Select to open it.</p>  | |

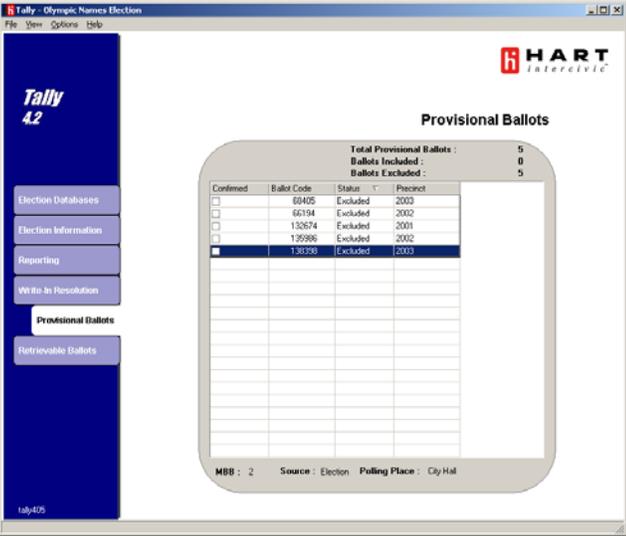
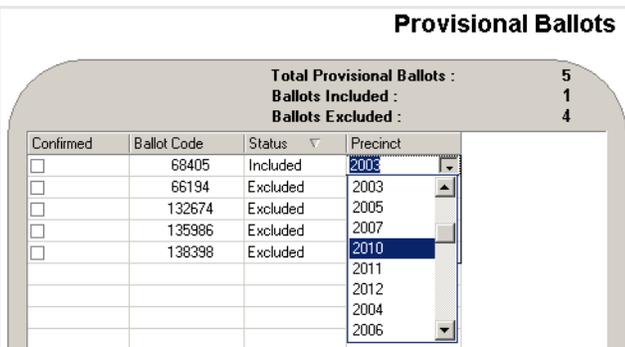
| Steps: | Details: |
|--|---|
| <p>7. Set the Tally reporting options for report labeling, candidate cross-filing, and write-in reporting.</p>  | <p><input type="checkbox"/> Go to the Options menu and click Reporting Options.</p> |
| <p>8. (Optional) Change the ballot source labels that appear on reports.</p>  | <p><input type="checkbox"/> Go to the Options menu and click Label Options.</p> |
| <p>9. (Optional) Define qualified write-in candidates and aliases, if applicable.</p>  | <p><input type="checkbox"/> To define write-in candidates before reading MBBs, click the Write-In Resolution Quick Link.</p> <p>Note: Write-in candidates and aliases can be defined before and/or after MBBs are read. Write-in votes matching a candidate or alias name will automatically assign to that candidate.</p> <p>Tip(s): Defining candidates AFTER reading MBBs may be a more efficient process unless all write-in candidates and aliases are known before tabulation.</p> |

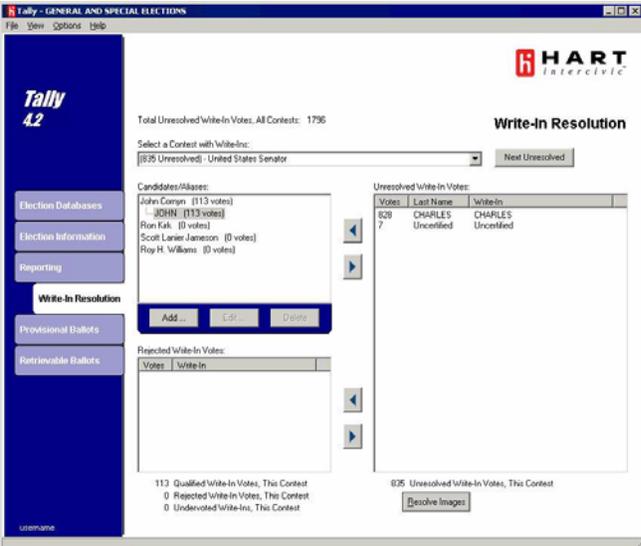
| Steps: | Details: |
|--|---|
| <p>10. Create a Tally “Zero Report”.</p>  | <p>Click the Reporting Quick Link and select the “Cumulative Report” before reading any MBBs into Tally.</p> |

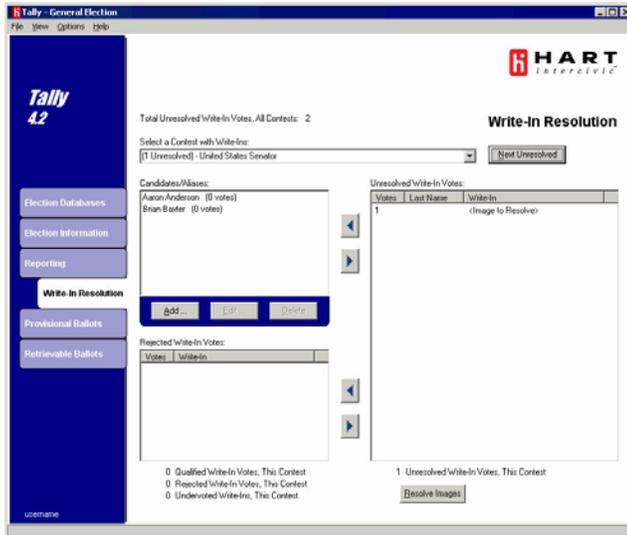
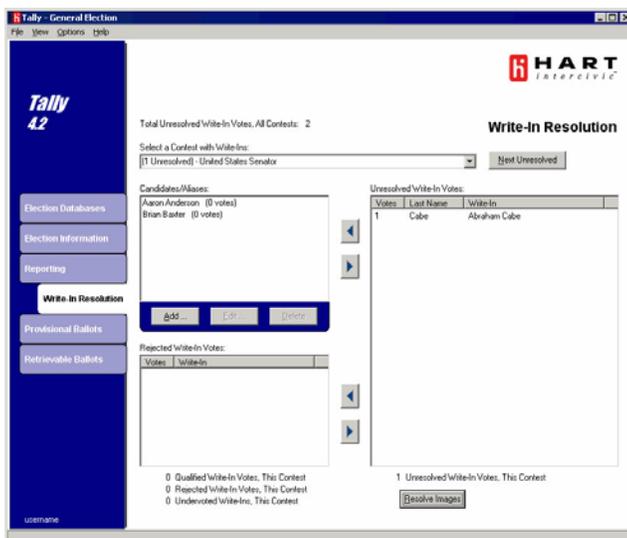
| Steps: | Details: |
|---|--|
| <p>10.1 Select report options available, click OK, and view the report.</p>   | <ul style="list-style-type: none"> <input type="checkbox"/> Print hard copy. <input type="checkbox"/> Export to file in an available soft copy format via the report export tool.  <p>Note:</p> <p>Report options available will vary per report type and election type. The graphics at left show the “Cumulative Report” options for a general election (top) and primary election (bottom).</p> |
| <p>11. If you haven't already done so, insert the eCM into a USB port.</p>  | <ul style="list-style-type: none"> <input type="checkbox"/> The eCM can be removed from the USB port after the first MBB for the session has been read into Tally. <input type="checkbox"/> Store the eCM in a secure location. <input type="checkbox"/> The simplest way to use an eCM is to keep the device handy (e.g., on a lanyard on your person) and to insert the eCM into a USB port on an election PC each time that PC is being used, removing the eCM when finished. |

| Steps: | Details: |
|---|--|
| <p>12. Process MBBs.</p>  | <ul style="list-style-type: none"> <input type="checkbox"/> Click the Election Information Quick Link. <input type="checkbox"/> After the first MBB for the session is inserted into the card reader, the Tally application will prompt the operator to enter the eCM PIN.  <ul style="list-style-type: none"> <input type="checkbox"/> Tally automatically reads subsequent MBBs after they are inserted into the card reader. <input type="checkbox"/> To tabulate, select the Start button in the Election Information panel of the Tally window. The Start button may be selected while reading MBBs. <input type="checkbox"/> For a Logic & Accuracy Test (LAT), process Test mode MBBs in a Test mode Tally database. <p>See: “Logic and Accuracy Testing Procedures” on page 37.</p> <p>Note: You must stop tabulation in order to use the other Quick Links.</p> |
| <p>13. Print reports.</p>  | <ul style="list-style-type: none"> <input type="checkbox"/> Stop tabulation. <input type="checkbox"/> Click the Reporting Quick Link. <input type="checkbox"/> Print hard copies of desired reports. <input type="checkbox"/> Export soft copies of desired reports in available formats via the report export tool.  |

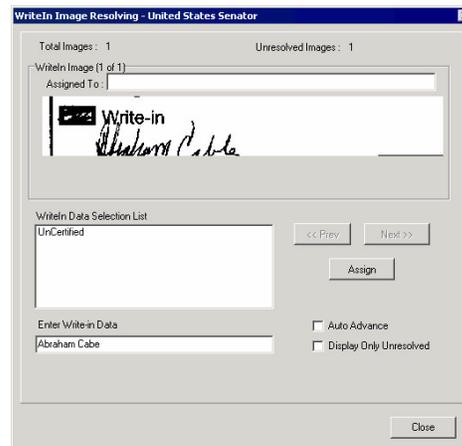
| Steps: | Details: |
|--|---|
| <p>14. For risk-reduction and archival purposes, back up the Tally database to a time-stamped folder.</p> <div data-bbox="337 338 717 415" style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>Database</p> <p style="text-align: center;"> <input type="button" value="Backup"/> <input type="button" value="Restore"/> <input type="button" value="Finalize"/> </p> </div> | <ul style="list-style-type: none"> <input type="checkbox"/> Click the Election Information Quick Link. <input type="checkbox"/> The Backup button in the Election Information window will back up the original TallyData.db and TallyData.cfg files to another location on the PC hard drive. <input type="checkbox"/> The file path to the Tally database folder (identified in the Election Databases panel of the Tally window) is: C:\Program Files\Hart InterCivic\Tally\Database\YearMonthDay-HourMinuteSecond (YYMMDD-HHMMSS). <p>See: “Appendix D: Backing Up Election Databases” on page 115.</p> |
| <p>15. Process Early Voting Retrievable ballots, if applicable.</p> <div data-bbox="207 825 849 1367" style="border: 1px solid gray; padding: 5px; margin: 10px 0;"> </div> <p style="text-align: center;">OR Import retrievable data.</p> <p>See: “Tally Install Settings” on page 12. “Appendix I: Importing Data” on page 155.</p> | <ul style="list-style-type: none"> <input type="checkbox"/> Click the Retrievable Ballots Quick Link. <ul style="list-style-type: none"> • Select a column heading to sort on that column.  • Right-click a Status cell in order to change a single ballot’s status.  • OR Use <u>Ctrl</u>-click or <u>Shift</u>-click to select several rows, then right-click to change the status of multiple ballots.  • Select the Confirm box for each ballot for which the status has been verified and print the “Retrievable Ballot” report. <p><input type="checkbox"/> Early Voting Retrievable resolution is also available after finalizing the database.</p> |

| Steps: | Details: |
|---|--|
| <p>16. Include or confirm exclusion of provisional ballots, if applicable.</p>  <p>OR Import provisional data.</p> <p>See: "Tally Install Settings" on page 12. "Appendix I: Importing Data" on page 155.</p> | <ul style="list-style-type: none"> <input type="checkbox"/> Click the Provisional Ballots Quick Link. <ul style="list-style-type: none"> • Select a column heading to sort on that column.  • Click a Status cell in order to change a single ballot's status.  • OR Use <u>Ctrl</u>-click or <u>Shift</u>-click to select several rows, then right-click to change the status of multiple ballots.  • Select the Confirm box for each ballot for which the status has been verified. <p><input type="checkbox"/> Provisional ballot resolution is also available after finalizing the database.</p> |
| <p>17. Parse provisional ballots, if applicable.</p>  <p>OR Import provisional data.</p> <p>See: "Tally Install Settings" on page 12. "Appendix I: Importing Data" on page 155.</p> | <ul style="list-style-type: none"> <input type="checkbox"/> Provisional parsing modifies the tabulation of the provisional ballot so that only those contests on the voter's true voting precinct ballot will be reported. <input type="checkbox"/> During Tally installation, settings are selected enabling parsed ballots to report to either the original (voted) precinct or the reassigned (true) precinct. <p>See: "Tally Install Settings" on page 12.</p> <ul style="list-style-type: none"> <input type="checkbox"/> To parse a ballot: <ul style="list-style-type: none"> • Select the precinct cell for the target ballot. • Click the drop-down arrow to select the target precinct to reassign the ballot to. • Select the Confirm box for each ballot for which the status has been finalized. <p><input type="checkbox"/> Provisional parsing is also available after finalizing the database.</p> |
| <p>18. Print the "Ballot Status" report for provisional ballots, if applicable.</p> | <ul style="list-style-type: none"> <input type="checkbox"/> Click the Reporting tab and double-click Ballot Status in the list of reports. <input type="checkbox"/> In the Ballot Status field, select Included. <input type="checkbox"/> In the Ballot Type field, select Provisional. <input type="checkbox"/> Click OK and print the report. |

| Steps: | Details: |
|---|---|
| <p>19. Resolve votes for write-in candidates, if applicable.</p> <p>19.1 Resolve write-in votes from the eSlate and Ballot Now.</p>  | <ul style="list-style-type: none"> ❑ Click the Write-In Resolution Quick Link. <ul style="list-style-type: none"> • Add qualified write-in candidates and aliases. <ul style="list-style-type: none"> > To add candidates after reading cards, highlight and click the full and correct spelling of the candidate name in the Unresolved Write-in Votes panel. In the Add Write-In Candidate window, click the Add button, and then click the Save button to move the candidate over to the Candidates/ Aliases panel. > If there is a blank entry in the Unresolved Write-In Votes panel, then a voter has selected a write-in option, but entered no data.  <ul style="list-style-type: none"> • To assign unresolved votes to candidates, select the target candidate in the Candidates/Aliases panel, select the target alias name in the Unresolved Write-in Votes panel, and select the uppermost left-pointing arrow. • To reject unresolved votes, select the target name in the Unresolved Write-in Votes panel and select the lower left-pointing arrow to assign these to the Rejected Write-in Votes panel. <ul style="list-style-type: none"> > Use <u>C</u>trl-click and <u>S</u>hift-click to make multiple selections. <ul style="list-style-type: none"> ❑ You can also resolve write-in candidates after finalizing the database. |

Steps:**19.2 Resolve write-in images and votes from the eScan.****Before Write-In Resolution****After Write-In Resolution****Details:**

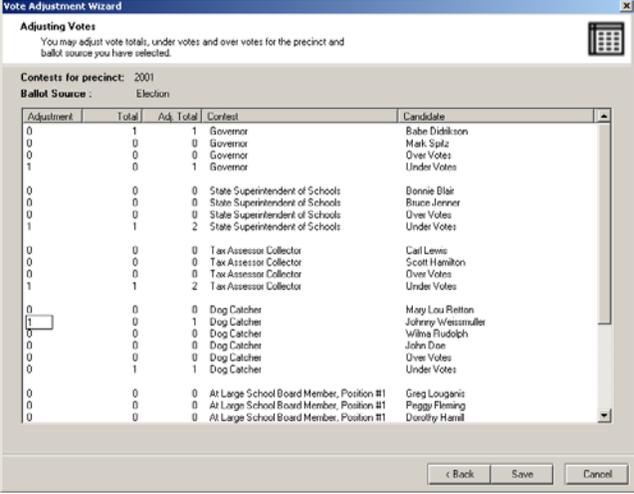
- Click the **Write-In Resolution** Quick Link.
 - Resolve write-in images so Tally can recognize them.
 - > Select a contest with write-ins and select the **Resolve Images** button.
 - > Enter the name of the write-in candidate in the **Enter Write-in Data** field of the **WriteIn Image Resolving - <contest name>** window and select the **Assign** button.
 - > *OR* Select the name from the **WriteIn Data Selection List**.



- > Select the **Close** button in the **WriteIn Image Resolving - <contest name>** window. The name is added to the contest's **Unresolved Write-In Votes** list.
- Resolve write-in votes using the same resolution process as eSlate and Ballot Now.
 - > Add qualified write-in candidates and aliases.
 - > Assign unresolved votes to candidates.
 - > Reject unresolved votes.

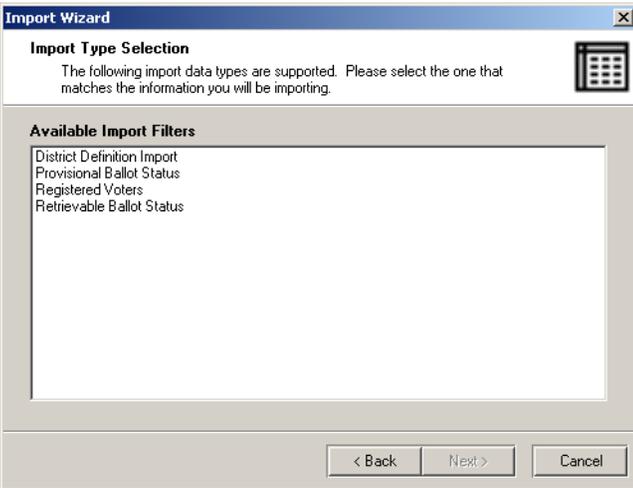
See:

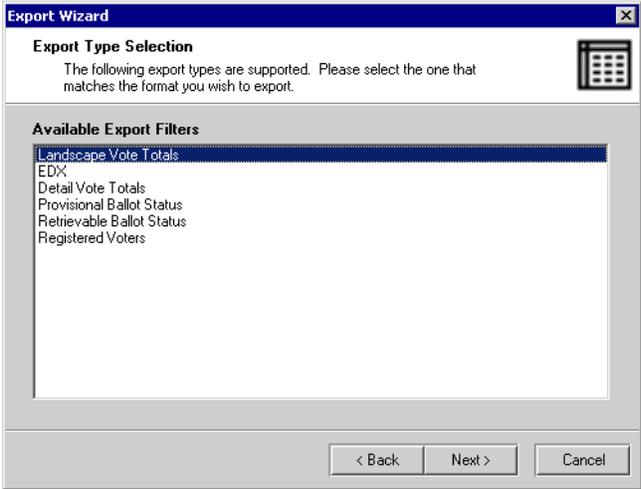
See step 19.1 on page 29 for more detailed instructions on resolving write-in votes.

| Steps: | Details: |
|---|---|
| <p>20. Calculate vote adjustments, if applicable.</p>  | <p><input type="checkbox"/> Go to the Options menu and click Vote Adjustments.</p> <ul style="list-style-type: none"> • Select the precinct (and split, if applicable). • If adjusting votes for a primary election, select the party. • Select the ballot source (Early Voting, Absentee, or Election Day). • For each contest on a ballot, enter the adjustment to the appropriate option by selecting the corresponding item in the Adjustment column. <ul style="list-style-type: none"> > Enter adjustments for overvoted and undervoted contests, in addition to properly marked ones. <p>Tip(s):</p> <p>Think of manual vote adjustments as being made <i>per ballot</i>.</p> <p>The number of ballots voted is calculated based on the maximum number of votes for any one contest in a precinct/split. For this reason, it is important that overvotes (e.g., for paper ballot adjustments) and undervotes be accurately registered.</p> <p><input type="checkbox"/> You can also adjust votes after finalizing the database.</p> |
| <p>21. For risk-reduction and archival purposes, back up the Tally database to a time-stamped folder before finalizing.</p>  | <p><input type="checkbox"/> Click the Election Information Quick Link.</p> <p><input type="checkbox"/> The Backup button in the Election Information window will back up the original TallyData.db and TallyData.cfg files to another location on the PC hard drive.</p> <p><input type="checkbox"/> The file path to the Tally database folder (identified in the Election Databases panel of the Tally window) is: C:\Program Files\Hart InterCivic\Tally \Database\YearMonthDay- HourMinuteSecond (YYMMDD-HHMMSS).</p> <p>See:</p> <p>“Appendix D: Backing Up Election Databases” on page 115.</p> |

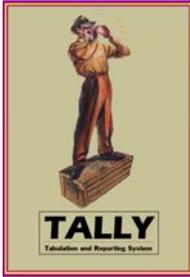
| Steps: | Details: |
|---|--|
| <p>22. After all MBBs have been processed, finalize the election in Tally.</p> <div data-bbox="240 302 621 380" style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p>Database</p> <div style="display: flex; gap: 10px;"> Backup Restore Finalize </div> </div> | <ul style="list-style-type: none"> <input type="checkbox"/> Before finalizing, read spare MBBs that were not used in the election in order to account for all MBBs. <input type="checkbox"/> You can finalize the database before processing Early Voting retrievable ballots, provisional ballots, write-ins, or vote adjustments. <input type="checkbox"/> To finalize, click the Election Information Quick Link and click the Finalize button. |
| <p>23. Print standard reports.</p> <div data-bbox="121 600 740 1125" style="border: 1px solid gray; padding: 5px;"> </div> | <ul style="list-style-type: none"> <input type="checkbox"/> After finalizing, report labels default to “Official”. To change labeling to “Unofficial”, go to the Options menu and select Reporting Options. <input type="checkbox"/> Print hard copies of desired reports. <input type="checkbox"/> Export soft copies of desired reports in available formats via the report export tool. <div data-bbox="1057 808 1133 873" style="text-align: center; margin-top: 10px;"> </div> |

| Steps: | Details: |
|---|---|
| <p>24. Create and print Custom Reports by clicking the Tally Report Wizard button in the Reporting window.</p> <div data-bbox="316 336 734 462" style="border: 1px solid gray; padding: 5px; margin-bottom: 10px;"> <p style="text-align: center;">Report Management</p> <div style="display: flex; justify-content: center; gap: 20px;"> Report Wizard Delete </div> </div> <div data-bbox="203 529 841 1018" style="border: 1px solid gray; padding: 5px;"> <p>Custom Report Wizard</p> <p>Report Definition When defining your custom report, you may select an existing report as your foundation or import a report into the system.</p> <p>Report Name - Enter the name you want to call the report for future reference. Key Precincts Report Form</p> <p>Base Report - Select the report you want to use as the basis of your custom report. Cumulative.rpt Browse ...</p> <p>Report Title - Enter the title you want to appear on the top of the report. Key Precincts Report</p> <div style="text-align: right; margin-top: 10px;"> < Back Next > Cancel </div> </div> | <p><input type="checkbox"/> Create and print district reports with the Custom Report Wizard.</p> <ol style="list-style-type: none"> A. Enter a unique Report Name that will appear in the Tally reports list. B. Select a Base Report using the drop-down arrow. C. Enter a unique Report Title to appear at the top of the report. D. Select Next and follow prompts. <ul style="list-style-type: none"> > In the Precinct Filter step, choose the desired district from the drop-down list and all associated precincts will be selected for the report, or create a new set of precincts. <div data-bbox="922 718 1474 1138" style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p>Custom Report Wizard</p> <p>Precinct Selection Here you will select the precincts that will appear on your report. Your selections will be saved so that you can use them on future reports.</p> <p>Precinct Filters Select an existing filter, or type the name of a new one and select the desired precincts.</p> <p>Key Precincts</p> <div style="border: 1px solid gray; padding: 2px;"> 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 </div> <div style="text-align: right; margin-top: 10px;"> < Back Next > Cancel </div> </div> <p><input type="checkbox"/> If a previously undefined district is needed for reports, go to the File menu and click Import to import a .csv or .txt district definition file.</p> <p>See: "Appendix I: Importing Data" on page 155.</p> |
| <p>25. For risk-reduction and archival purposes, back up the Tally database to a time-stamped folder.</p> <div data-bbox="337 1486 717 1564" style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p style="text-align: center;">Database</p> <div style="display: flex; justify-content: center; gap: 10px;"> Backup Restore Finalize </div> </div> | <p><input type="checkbox"/> Click the Election Information Quick Link.</p> <p><input type="checkbox"/> The Backup button in the Election Information window will back up the original TallyData.db and TallyData.cfg files to another location on the PC hard drive.</p> <p><input type="checkbox"/> The file path to the Tally database folder (identified in the Election Databases panel of the Tally window) is: C:\Program Files\Hart InterCivic\Tally\Database\YearMonthDay-HourMinuteSecond (YYMMDD-HHMMSS).</p> <p>See: "Appendix D: Backing Up Election Databases" on page 115.</p> |

| Steps: | Details: |
|--|---|
| <p>26. Import data, if necessary.</p>  | <ul style="list-style-type: none"> <input type="checkbox"/> Go to the File menu and click Import to import files via the Tally Import Wizard. <input type="checkbox"/> Importing data may be performed at any time. <input type="checkbox"/> Import types include: <ul style="list-style-type: none"> • District Definition - to update precinct/district associations • Provisional Ballot Status - to update include/exclude status and parsing of provisional ballots • Registered Voters - to update the number of registered voters per precinct as defined in BOSS • Retrievable Ballot Status - to update include/exclude status of retrievable ballots. <p>Tip(s): Import files may originate from a Voter Registration system.</p> <p>See: “Appendix I: Importing Data” on page 155.</p> |
| <p>27. If data was imported, repeat reporting and database backup steps.</p>  | <p>See: “Appendix D: Backing Up Election Databases” on page 115.</p> |

| Steps: | Details: |
|---|--|
| <p>28. Export data, if necessary.</p>  | <ul style="list-style-type: none"> <input type="checkbox"/> Go to the File menu and click Export to export files via the Tally Export Wizard. <input type="checkbox"/> Exporting data may be performed at any time. <input type="checkbox"/> Export types include: <ul style="list-style-type: none"> • Landscape Vote Totals - aggregated vote totals in a landscape .txt format • EDX - Election Data eXchange XML format for integration with other systems • Detail Vote Totals - filtered for Absentee, Early Voting, and/or Election Day results in .txt format • Provisional Ballot Status - codes included/accepted and excluded/rejected in .txt format • Retrievable Ballot Status - codes included/accepted and excluded/rejected in .txt format • Registered Voters - registered voter data in .csv format <p>Note: When creating Registered Voters export files for primary elections, select the Export By Party checkbox so the vote totals can be re-imported.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Also export reports with the Export tool available in each Tally report toolbar. <p>See: “Appendix J: Exporting Data” on page 163.</p> |
| <p>29. Exit Tally.</p>  | <p>Go to the File menu and click Exit.</p> |

Notes:



Chapter 3

Logic and Accuracy Testing Procedures

A Logic and Accuracy test (LAT) is a test of the current election database on the Hart Voting System. It is a test of the logic of tabulation; a vote for any option must tabulate to that option. It is *not* a functionality test.

The timeframe for performing LATs is dictated by state and local guidelines. These tests cannot be performed until the BOSS database is finalized. You should perform system LATs before issuing live Election mode ballots.

This chapter describes two forms of LATs:

1. A system LAT, testing the logic of the tabulation system-wide. This LAT includes voting on devices, running device reports, tabulating the vote count in Tally, and comparing device records, Tally application reports, and expected outcomes.
 - > The complete LAT should be performed with Test mode MBBs.
 - > Only Test mode ballots can be used when performing the complete LAT.
 - > The complete LAT is run identically to a live election, from the same BOSS database; however, Ballot Now and Tally Test mode databases are segregated from Election mode databases.
 - > The LAT is usually performed in Early Voting mode on the voting devices. This allows for all precincts/ballot styles to be available for testing using a minimal amount of equipment.
2. An embedded LAT on the eScan devices. This LAT includes voting on devices and running device reports, and then comparing device records to expected outcomes.
 - > The embedded LAT can be performed with Test or Election mode MBBs.
 - > Only Test mode ballots can be used when performing the eScan embedded LAT.
 - > The embedded LAT *does not* save Cast Vote Records and cannot be taken to Tally.
 - > The embedded LAT *does* print a device results report, which can be compared to expected outcomes.
 - > The embedded LAT functionality is available from the following eScan screens: **Print Zero Tape, Ready to Open Polls, Poll Worker Password** (access by pressing the **Poll Worker Button** from the **Ready to Scan** screen), and **Polls Closed/Suspended**.

Note:

Logic and Accuracy testing should be performed using *only Test mode MBBs* written from the “live” BOSS election database.



Do not use Election mode MBBs for Logic and Accuracy testing, unless performing the eScan embedded LAT.

Logic and Accuracy Test Prerequisites

1. The election is written in BOSS.
2. All MBBs are written:

| Test Mode MBBs | Election Mode MBBs^a |
|--|---|
| • 1 MBB for each JBC included in LAT | • 1 MBB for each JBC included in Early Voting in person |
| • 1 MBB for each eScan included in LAT | • 1 MBB for each JBC included in Election Day voting |
| • 1 MBB for each Ballot Now PC included in LAT | • 1 MBB for each eScan included in Absentee Voting (by mail) |
| • 1 MBB for warehouse testing (optional) | • 1 MBB for each eScan included in Early Voting in person |
| • 1 MBB for each voting system in use at the Help Desk | • 1 MBB for each eScan included in Election Day voting |
| Audio Cards | • 1 MBB per election source (i.e., Absentee, Early Voting, Election Day) for each Ballot Now (Server) PC utilized for voting |
| • 1 Audio Card per DAU eSlate included in the election | • 1 MBB per election source for incremental Cast Vote Record (CVR) processing (e.g., late mail) for each Ballot Now (Server) PC utilized for voting |
| • 1 Audio Card for warehouse testing (optional) | • 1 MBB to enable SERVO to add election Event(s) for backup (This MBB can be re-used as one of the JBC or eSlate recount MBBs) |
| • 1 Audio Card for the DAU eSlate in use at the Help Desk | • 1 MBB (128 MB) per 65,000 CVRs for JBC CVR recount MBBs, using SERVO, for Early Voting in person |
| • 10% of total as spare Audio Cards • Hart InterCivic recommends writing at least 10% above the number actually needed in the field as spare Audio Cards. | • 1 MBB (128 MB) per 65,000 CVRs for JBC CVR recount MBBs, using SERVO, for Election Day in person |
| | • 1 MBB (128 MB) per 65,000 CVRs for eSlate CVR recount MBBs, using SERVO, for Early Voting in person |
| | • 1 MBB (128 MB) per 65,000 CVRs for eSlate CVR recount MBBs, using SERVO, for Election Day in person |
| | • 1 MBB (128 MB) per 65,000 CVRs for eScan CVR recount MBBs, using SERVO, for Absentee (by mail) |
| | • 1 MBB (128 MB) per 65,000 CVRs for eScan CVR recount MBBs, using SERVO, for Early Voting in person |
| | • 1 MBB (128 MB) per 65,000 CVRs for eScan CVR recount MBBs, using SERVO, for Election Day in person |
| | • 10% of total as spare Election mode MBBs • Hart InterCivic recommends writing at least 10% above the number actually needed for the JBC, eScan, and/or Ballot Now units included in Absentee, Early, or Election Day voting. |

a. Number of Cast Vote Records (CVRs) per MBB is a conservative estimate and will vary depending on the size and complexity of the election data.

3. The BOSS database is copied to a CD or other media.
4. The BOSS database is finalized for Tally.
5. The BOSS database is copied into Tally.

Materials

To conduct a LAT, you will need the following:

- One of the following options:
 - **Option 1:** A spreadsheet including the ballot styles and options necessary to record one vote for each candidate/position included in the test, including straight party and undervote, including totals, and including any other vote option that is required by current federal, state, and/or local guidelines (e.g., straight party crossover), *OR*
 - **Option 2:** A test deck of paper ballots reflecting all ballot styles and options necessary to record one vote for each candidate/position included in the test, including straight party and undervote, and including any other vote option that is required by current federal, state, and/or local guidelines (e.g., straight party crossover) for the current election. You must produce Test mode paper ballots in Ballot Now if performing the LAT with Ballot Now and/or the eScan.
- (Option 2 only) A form for recording the hand tabulation
- An eCM for use with Hart Voting System applications, and that eCM's signing key programmed, via SERVO, to the JBC(s) and/or eScan(s) used in the LAT
- An eSlate polling place setup, including at least one JBC and one eSlate, with or without optional Verifiable Ballot Option (VBO), per LAT Test Team
- One eScan device setup per LAT Test Team
- A Ballot Now system setup, including the PC, printer, and scanner, if applicable
- Test mode MBBs for the current election; one MBB for each JBC in the LAT, one for each eScan in the LAT, and one for Ballot Now, if applicable
- Computer workstation(s) with the BOSS and Tally applications
- The finalized BOSS database, including at least one Early Voting polling place with all precincts assigned
- The BOSS "Polling Place List Early Voting Summary" report
- The election name and database filename in Tally
- An envelope for filing LAT documentation for archive

See:

The Logic and Accuracy Test Documentation form at the end of this chapter.

- A LAT group that is made up of Test Teams:
 - One member of the LAT group has the primary responsibility to manage the LAT. This manager operates the JBC, and/or distributes paper ballots, and oversees the process.
 - Each Test Team is made up of two members.
 - Each Test Team is assigned to cast ballots at a specific eSlate, eScan, or Ballot Now device that is being used in the test.
 - Teams should be numbered according to the number of the eSlate, eScan, or Ballot Now devices on which the team is assigned to vote.
 - One member of each team enters the ballot options into the eSlate or onto the paper ballot, and the other checks for accuracy and verifies options on the eSlate Summary Page (and Paper Verification Page, if applicable). If testing the eScan or Ballot Now, follow a similar process.

eSlate System Logic and Accuracy Test Procedure

The eSlate System Logic and Accuracy Test (LAT) procedure consists of seven major steps:

- Vote Test Deck Paper Ballots
- Tally Zero Report
- JBC Zero Report
- Cast Matching Votes on the eSlate
- Scan Test Deck in Ballot Now
- Tabulate MBBs and Print Tally Reports
- Document LAT

The LAT procedure described herein assumes that the test is being performed in Early Voting mode and that there is an Early Voting polling place with all precincts assigned in the BOSS database.

Step 1: Vote Test Deck Paper Ballots

| Steps for Option 1: Spreadsheet | Steps for Option 2: Paper Ballots |
|--|---|
| <p>Create a ballot options spreadsheet to reflect paper ballot voting.</p> <ul style="list-style-type: none"> <input type="checkbox"/> One vote for each candidate/option tested should be represented. <input type="checkbox"/> A straight party vote is a “candidate.” <input type="checkbox"/> Record one blank ballot to test undervotes. <input type="checkbox"/> Include any other vote option that is required by current federal, state, and/or local guidelines (e.g., straight party crossover, overvotes, pattern of votes). <input type="checkbox"/> The ballot options spreadsheet should include indicators, per ballot, for ballot options, and it should include tabulation totals. | <ul style="list-style-type: none"> <input type="checkbox"/> Print Test mode Ballot Now paper ballots for the precincts needed to test each option in the election. Print these ballots from the same source as those that will be used in the election. <input type="checkbox"/> Distribute paper ballots to each “Test Team”. |
| <ul style="list-style-type: none"> <input type="checkbox"/> Print Test mode Ballot Now paper ballots for the precincts needed to test each option in the election, if including Ballot Now in the LAT. Print these ballots from the same source as those that will be used in the election. | <ul style="list-style-type: none"> <input type="checkbox"/> One Test Team member records one vote for each candidate on the paper ballots while the other Test Team member checks for accuracy. <input type="checkbox"/> One vote for each candidate/position tested should be represented. <input type="checkbox"/> A straight party vote is a “candidate.” <input type="checkbox"/> Cast one blank ballot to test undervotes. <input type="checkbox"/> Include any other vote option that is required by current federal, state, and/or local guidelines (e.g., straight party crossover). |
| <ul style="list-style-type: none"> <input type="checkbox"/> File the ballot options spreadsheet for comparison to the Tally test tabulation reports. | <ul style="list-style-type: none"> <input type="checkbox"/> Hand-tabulate the paper ballots. <input type="checkbox"/> File this for comparison to the Tally test tabulation reports. |

Step 2: Tally Zero Report

| Steps: | Details: |
|--|---|
| 1. Log in to Tally as an Administrator-level user and create the current election's database in Test mode. | <input type="checkbox"/> Use the Database Wizard to define database options for provisional ballots, split precincts, and reporting. <ul style="list-style-type: none"> • Provisional Ballots can automatically be included in totals or not included. • Split Precincts can be consolidated or not consolidated. |
| 2. Select the database and define "certified" write-ins, if write-ins are on the ballot and part of the LAT. | |
| 3. Click the Reporting Quick Link. | |
| 4. Print a "Cumulative Report." This is the Tally Zero Report. | <input type="checkbox"/> Select the applicable values for the following parameters: <ul style="list-style-type: none"> • Over Under • Display Absentee • Show/Hide Turn Out Boxes. |
| 5. Exit Tally. | |

Step 3: JBC Zero Report

| Steps: | Details: |
|--|--|
| 1. Insert a Test MBB into the JBC. | <p> Before the MBB is inserted, the JBC must have the correct signing key programmed through SERVO.</p>  |
| 2. Power on the JBC. | Leave the “JBC Initialized” report and other reports that print out on the JBC to file with the “Zero Tape” report in an LAT records envelope. |
| 3. Enter the Start-up password. | |
| 4. Enter an Early Voting Polling Place I.D. that has all ballot styles available. | Refer to the BOSS “Polling Place List Early Voting Summary” report. |
| 5. Press the ◀ next to Accept . | |
| 6. Press the ◀ next to Yes for “Are you performing Early Voting today?” | <ul style="list-style-type: none"> <input type="checkbox"/> The LAT can also be performed in Election Day mode, but the ballot styles available are limited to those precincts available at that polling place. (The standard is for all precincts, and thus all ballot styles, to be available at each Early Voting location.) <input type="checkbox"/> If testing in Election Day mode, you may need to use multiple JBC/eSlate daisy chains in order to make sure that all ballot styles are available. |
| 7. Press the ▶ next to Yes to confirm the Polling Place location. | If the Polling Place location is incorrect, press the ▶ next to NO and try again. |
| 8. Proceed to eSlate booths, and assign booth numbers to the eSlates. | |
| 9. When you have assigned the last eSlate, press the ◀ next to Done on the JBC. | |
| 10. Press the ▶ next to Next . | |
| 11. Press the ◀ next to Print Zero Tape . | Verify that the JBC “Zero Tape” report indicates zero votes cast. |
| 12. Compare the “Zero Tape” report from the JBC to the Zero Report from the Tally application. | <ul style="list-style-type: none"> <input type="checkbox"/> Reconcile any variances. <input type="checkbox"/> File the JBC “Zero Tape” report and the Tally Zero Report in the LAT records envelope. |

Step 4: Cast Matching Votes on the eSlate

| Steps: | Details: |
|---|--|
| 1. Review Assignments. | <input type="checkbox"/> The LAT manager should operate the JBC. <ul style="list-style-type: none"> Teams should be assigned team numbers that correspond to their eSlate booth number. Each test team should have one member who votes the eSlate, and one member who checks each option choice as well as verifies those choices on the eSlate Summary Page. |
| 2. Distribute assignments documented on the LAT ballot options spreadsheet to Test Team members or distribute voted paper ballots. | |
| 3. On the JBC, press the ► next to Open Polls . | <input type="checkbox"/> If the device was turned off, plug it in, enter the start-up password, and press the ENTER key. <input type="checkbox"/> Do <i>not</i> tear off reports yet. |
| 4. Enter the Open Polls Password. | |
| 5. Press the ► next to Add Voter . | Repeat steps 5 through 11 for each paper test ballot or ballot options spreadsheet assignment. |
| 6. Use the JBC keypad to enter the Test Team's ballot precinct number, and press the ► corresponding to that number. | |
| 7. Press the ► next to Print to print an access code. | <div style="border: 1px solid black; padding: 2px; display: inline-block;">Tip(s):</div> <p>Do not tear off the access codes as they print. Run the codes in a continuous string. Tear off and distribute per precinct assignment. This becomes another record of the number of ballots cast during the test.</p> |
| 8. Each Test Team votes on the eSlate system to match exactly with the paper ballot or ballot options spreadsheet assignment that team holds. | |
| 9. One Test Team member verifies the accuracy of that team's eSlate ballot with the Summary Page before pressing CAST BALLOT . | If the Summary Page does not match the test deck ballot or spreadsheet, the Test Team member voting presses the ◀ PREV button and corrects the incorrectly voted contest(s). |

| | |
|---|---|
| <p>10.</p> <p>10.1 If the VBO is included, one Test Team member verifies that the Paper Verification Page matches exactly <i>both</i> the printed paper trail <i>and</i> the paper ballot or ballot options spreadsheet assignment that team holds.</p> <p>10.2 The voting Test Team member presses the CAST BALLOT button, confirms that he or she wants to cast the ballot as is, presses the CAST BALLOT button again, the printer prints a bar code and the “Ballot Accepted” message, and the printed ballot scrolls out of view.</p> | <p>If the Paper Verification Page and printed paper trail do not match the test deck ballot or spreadsheet, the Test Team member voting presses the ◀ PREV button, the printer prints “Ballot Rejected”, and the voting Test Team member corrects the incorrectly voted contest(s).</p> |
| <p>11. The waving American flag displays on the eSlate screen for each ballot cast.</p> | |
| <p>12. After all matching eSlate ballots have been voted, press the Close Polls button on the JBC.</p> | |
| <p>13. Enter the Close Polls Password.</p> | |
| <p>14. Print the JBC “Daily Detail” report.</p> | <p>Or, print the JBC “Tally” report if performing the Logic & Accuracy Test in Election Day mode.</p> |
| <p>15. Confirm that the JBC Public Count has recorded the number of eSlate ballots cast by test team members, and that the JBC “Summary” report reflects this.</p> | <p><input type="checkbox"/> The JBC Public Count is printed on the “Summary” report, and it is displayed in the lower right-hand corner of the JBC screen.</p> <ul style="list-style-type: none"> • The Public Count is the number of ballots cast for this election on this JBC. • If the Public Count does not match the number of ballots test team members think they have cast, reconcile this difference using the “Daily Detail” report (or JBC “Tally” report). |
| <p>16. File the JBC reports with the paper ballot tabulation/ballot options spreadsheet and Zero Reports.</p> | |
| <p>17. Power off the JBC and remove the Test MBB.</p> | |
| <p>18. If the VBO is included, remove the VBO box from the eSlate booths, remove their printouts, and file these with the other LAT documentation.</p> | |

See:

“eScan System Logic and Accuracy Test Procedure” on page 48 if you are performing an LAT with the eScan system also.

Step 5: Scan Test Deck in Ballot Now

If you are performing LAT procedures for Ballot Now also (e.g., the absentee/by-mail system), follow these steps:

| Steps: | Details: |
|--|--|
| 1. Log in to Ballot Now as an administrator-level user. | <input type="checkbox"/> Insert both the Test MBB and the eCM. Remove both when finished with the Ballot Now session.  <input type="checkbox"/> Always work in teams in order to assure that the proper steps were followed during the LAT. <input type="checkbox"/> This user is responsible for the integrity of the process. |
| 2. If you haven't already done so, print Test mode ballots for each ballot style needed. | |
| 3. Print the "Printed Ballots by Precinct" and "Election" reports. | The "Election" report, printed at the beginning of the Ballot Now LAT process, serves as a Ballot Now Zero Report. |
| 4. Teams vote the TEST ballots according to the spreadsheet or test deck. | Each test team should have one member who votes the ballot, and one member who checks each ballot upon completion of voting. |
| 5. Scan the TEST ballots in the proper mode. | |
| 6. Print the "Scan Batch" report. | |
| 7. Resolve overvotes, undervotes, and write-ins according to state and local guidelines. | |
| 8. Save Cast Vote Records to the MBB. | |
| 9. Close the Election. | |
| 10. Print "Scanned Ballots by Batch", "Audit Log", and "Election" reports. | The "Election" report, printed at the end of the Ballot Now LAT process, serves as a summary of Cast Vote Records. |
| 11. Exit Ballot Now. Remove the Test MBB and eCM from the Ballot Now PC. | |

Step 6: Tabulate MBBs and Print Tally Reports

| Steps: | Details: |
|--|---|
| 1. Insert the Test MBB(s) into the card device on a PC running the Tally program. | |
| 2. Log in to the Tally application as an Administrator-level user, highlight and click Select for the current election's database in Test mode. | |
| 3. Insert the eCM into a USB port on the PC and enter in the PIN when prompted before reading first MBB. |  |
| 4. Read the Test mode MBB(s) into Tally. | The eCM can be removed once the first MBB is read into Tally. |
| 5. Click the Start button in the Tabulation box at the bottom of the screen to tabulate each MBB's CVRs. | |
| 6. Click the Stop button in the Tabulation box to stop tabulating for that MBB. | After reading and tabulating all Test MBBs, click the Reporting Quick Link and select the "MBB Status" report. This report shows the number of cast votes on each MBB. Use this report to confirm that the target Test MBBs for LAT have been processed. |
| 7. After reading all Test MBB(s), from the Election Information panel, click the Finalize button to finalize the election in Tally. | This finalizes (closes) the Test election Tally database. |
| 8. Click the Reporting Quick Link. Select and print the official "Cumulative Report." | Compare this report to the device summary report(s). |
| 9. Print the official Tally "Precinct" report. | This report shows precinct totals and the origin of votes: Election Day, Early Voting, and Absentee. Select applicable values for the report parameters. |
| 10. Print the official Tally "Canvass" report. | <input type="checkbox"/> This report shows totals, the origin of votes, and the breakdown per precinct. Compare this report to the LAT spreadsheet assignments per precinct/ballot style. <input type="checkbox"/> Review reports and file with other LAT documents. |

Step 7: Document Logic and Accuracy Test

| Steps: | Details: |
|---|--|
| 1. Compare the JBC “Summary” report (and the Ballot Now reports, if applicable) and the Tally application reports to the spreadsheet or the hand counted paper ballot tabulation. | <input type="checkbox"/> The number of voters and precinct assignments should match. <input type="checkbox"/> The options voted should match. <input type="checkbox"/> Reconcile any variances and document. |
| 2. Place Tally application reports, Tally application audit log, JBC reports, paper Test Ballots, Ballot Now reports (if applicable) and MBBs into the LAT envelope. | <input type="checkbox"/> Have Test Team members sign and date an LAT Documentation Form and add this to the LAT records envelope. <input type="checkbox"/> Seal the envelope. See: LAT documentation at the end of this chapter. |
| 3. Back up the eSlate system audit logs and CVR logs, if necessary. | See: The <i>SERVO Operations Manual</i> . |
| 4. Disconnect and reset the eSlate system used for the Logic and Accuracy Test using the SERVO application. | See: The <i>SERVO Operations Manual</i> . |
| 5. Power off and pack the eSlate system. | |
| 6. Give the sealed LAT records envelope to an election official for secure storage. | Follow state statutes and local guidelines for archiving these records. |

eScan System Logic and Accuracy Test Procedure

The eScan System Logic and Accuracy Test (LAT) procedure consists of seven major steps:

- Vote Test Deck Paper Ballots
- Tally Zero Report
- eScan Zero Report
- Scan Test Deck on the eScan
- Scan Test Deck in Ballot Now
- Tabulate MBBs and Print Tally Reports
- Document LAT

The LAT procedure described herein assumes that the test is being performed in Early Voting mode and that there is an Early Voting polling place with all precincts assigned in the BOSS database.

Step 1: Print and Vote Test Deck Paper Ballots

| Steps for Option 1: Spreadsheet | Steps for Option 2: Paper Ballots |
|--|---|
| <p>Create a ballot options spreadsheet to reflect paper ballot voting.</p> <ul style="list-style-type: none"> <input type="checkbox"/> One vote for each candidate/option tested should be represented. <input type="checkbox"/> A straight party vote is a “candidate”. <input type="checkbox"/> Record one blank ballot to test undervotes. <input type="checkbox"/> Include any other vote option that is required by current federal, state, and/or local guidelines (e.g., straight party crossover, overvotes, pattern of votes). <input type="checkbox"/> The ballot options spreadsheet should include indicators, per ballot, for ballot options, and it should include tabulation totals. | <ul style="list-style-type: none"> <input type="checkbox"/> Print Test mode Ballot Now paper ballots for the precincts needed to test each option in the election. Print these ballots from the same source as those that will be used in the election. <input type="checkbox"/> Print two test decks, if testing both Ballot Now scanners and eScan devices. <input type="checkbox"/> Distribute Test mode Ballot Now paper ballots to each “Test Team”. |
| <ul style="list-style-type: none"> <input type="checkbox"/> Print Test mode Ballot Now paper ballots for the precincts needed to test each option in the election. Print these ballots from the same source as those that will be used in the election. <input type="checkbox"/> Print two test decks, if testing both Ballot Now scanners and eScan devices. <input type="checkbox"/> Mark Test mode Ballot-Now-produced paper ballots to match the ballot options spreadsheet. One team member marks a ballot; the other confirms that the ballot matches that row (for example) of the spreadsheet. | <ul style="list-style-type: none"> <input type="checkbox"/> One Test Team member records one vote for each candidate on the paper ballots while the other Test Team member checks for accuracy. <input type="checkbox"/> One vote for each candidate/position tested should be represented. <input type="checkbox"/> A straight party vote is a “candidate”. <input type="checkbox"/> Cast one blank ballot to test undervotes. <input type="checkbox"/> Include any other vote option that is required by current federal, state, and/or local guidelines (e.g., straight party crossover). |
| <ul style="list-style-type: none"> <input type="checkbox"/> File the ballot options spreadsheet for comparison to the Tally test tabulation reports. | <ul style="list-style-type: none"> <input type="checkbox"/> Hand-tabulate the paper ballots. <input type="checkbox"/> File this for comparison to the Tally test tabulation reports. |
| <ul style="list-style-type: none"> <input type="checkbox"/> Scan the paper ballots. | <ul style="list-style-type: none"> <input type="checkbox"/> Scan the paper ballots. |

Step 2: Tally Zero Report

| Steps: | Details: |
|--|---|
| 1. Log in to Tally as an Administrator-level user and create the current election's database in Test mode. | <input type="checkbox"/> Use the Database Wizard to define database options for provisional ballots, split precincts, and reporting. <ul style="list-style-type: none"> • Provisional Ballots can automatically be included in totals or not included. • Split Precincts can be consolidated or not consolidated. |
| 2. Select the database and define "certified" write-ins, if write-ins are on the ballot and part of the LAT. | |
| 3. Click the Reporting Quick Link. | |
| 4. Print a "Cumulative Report." This is the Tally Zero Report. | <input type="checkbox"/> Select the applicable values for the following parameters: <ul style="list-style-type: none"> • Over Under • Display Absentee • Show/Hide Turn Out Boxes. |
| 5. Exit Tally. | |

Step 3: eScan Zero Report

| Steps: | Details: |
|---|---|
| 1. Insert a Test MBB into the eScan. |  Before the MBB is inserted, the eScan must have the correct signing key programmed through SERVO.  |
| 2. Power on the eScan. | Leave the eScan "Initialized" report and other reports that print out on the eScan to file with the "Zero Tape" report in an LAT records envelope. |
| 3. Enter the Start-up password and press the button next to ACCEPT . | |
| 4. Enter an Early Voting or Absentee Polling Place I.D. that has all ballot styles available and press the button next to ACCEPT . | Refer to the BOSS "Polling Place List Early Voting Summary" report. |

| | |
|--|--|
| <p>5. If applicable, respond to the eScan prompt to select your polling place type by pressing the button next to Early Voting.</p> | <ul style="list-style-type: none"> <input type="checkbox"/> The LAT can also be performed in Election Day mode, but the ballot styles available are limited to those precincts available at that polling place. (The standard is for all precincts, and thus all ballot styles, to be available at each Early Voting location.) <input type="checkbox"/> If testing in Election Day mode, you may need to use multiple eScan devices in order to make sure that all ballot styles are available. |
| <p>6. Press the button next to YES to confirm the Polling Place location.</p> | <p>If the Polling Place location is incorrect, press the button next to NO and try again.</p> |
| <p>7. Press the button next to PRINT ZERO.</p> | <p>Verify that the eScan “Zero Tape” report indicates zero votes cast.</p> |
| <p>8. Compare the “Zero Tape” report from the eScan to the Zero Report from the Tally application.</p> | <ul style="list-style-type: none"> <input type="checkbox"/> Reconcile any variances. <input type="checkbox"/> File the eScan “Zero Tape” report and the Tally Zero Report in the LAT records envelope. |

Step 4: Scan Test Deck on the eScan

| Steps: | Details: |
|---|---|
| <p>1. Review Assignments.</p> | <ul style="list-style-type: none"> <input type="checkbox"/> The LAT manager should oversee all operations. <ul style="list-style-type: none"> • Teams should be assigned team numbers that correspond to their eSlate booth number. • Each test team should have one member who double checks the scanned ballot against the spreadsheet or hand count and scans the ballot, and one member who performs poll worker functions, as necessary, on the eScan. |
| <p>2. Distribute assignments documented on the LAT ballot options spreadsheet to Test Team members AND distribute voted paper ballots.</p> | |
| <p>3. On the eScan, press the button next to OPEN POLLS.</p> | <ul style="list-style-type: none"> <input type="checkbox"/> If the device was turned off, switch it on, enter the start-up password, and press the button next to ACCEPT. <input type="checkbox"/> Do <i>not</i> tear off reports yet. |
| <p>4. Enter the Open Polls password and press the button next to ACCEPT.</p> | |

| | |
|--|---|
| 5. Scan paper ballots and respond to eScan screen prompts. | <input type="checkbox"/> One Test Team member should verify the accuracy of each ballot against the spreadsheet before scanning. <input type="checkbox"/> One Test Team member should operate the eScan as a poll worker, accepting ballots with overvotes, undervotes, or blank ballots by pressing the Poll Worker Button as necessary. |
| 6. After all ballots have been voted, press the Poll Worker Button on the back of the eScan. | |
| 7. Enter the Poll Worker Password and press the button next to ACCEPT . | |
| 8. Press the button next to SUSPEND POLLS . | |
| 9. Press the button next to YES to confirm that you want to suspend polls. | |
| 10. Enter the Close Polls password and press the button next to ACCEPT . | |
| 11. Print the eScan “Daily Detail” report. | OR, print the eScan “Tally” report if performing the Logic & Accuracy Test in Election Day mode. |
| 12. Confirm that the eScan Public Count has recorded the number of ballots cast by test team members, and that the eScan reports reflect this. | <input type="checkbox"/> The eScan Public Count is printed on the suspend reports, and it is displayed on the eScan screen. <ul style="list-style-type: none"> • The Public Count is the number of ballots cast for this election on this eScan. • <i>If</i> the Public Count does not match the number of ballots test team members think they have cast, reconcile this difference using the “Daily Detail” report (or eScan “Tally” report). |
| 13. File the eScan reports with the paper ballot tabulation/ballot options spreadsheet and Zero Reports. | |
| 14. Power off the eScan and remove the Test MBB. | |

Step 5: Scan Test Deck in Ballot Now

If you are performing LAT procedures for Ballot Now also (e.g., LAT for the absentee/by-mail system), follow these steps:

| Steps: | Details: |
|--|--|
| 1. Log in to Ballot Now as an administrator-level user. | <input type="checkbox"/> Insert both the Test MBB and the eCM. Remove both when finished with the Ballot Now session.  <input type="checkbox"/> Always work in teams in order to assure that the proper steps were followed during the LAT. <input type="checkbox"/> This user is responsible for the integrity of the process. |
| 2. If you haven't already done so, print Test mode ballots for each ballot style needed. | |
| 3. Print the "Printed Ballots by Precinct" and "Election" reports. | The "Election" report, printed at the beginning of the Ballot Now LAT process, serves as a Ballot Now Zero Report. |
| 4. Teams vote the TEST ballots according to the spreadsheet or test deck. | |
| 5. Scan the TEST ballots in the proper mode. | |
| 6. Print the "Scan Batch" report. | |
| 7. Resolve overvotes, undervotes, and write-ins according to state and local guidelines. | |
| 8. Save Cast Vote Records to the MBB. | |
| 9. Close the Election. | |
| 10. Print "Scanned Ballots by Batch", "Audit Log", and "Election" reports. | The "Election" report, printed at the end of the Ballot Now LAT process, serves as a summary of Cast Vote Records. |
| 11. Exit Ballot Now. Remove the Test MBB and eCM from the Ballot Now PC. | |

Step 6: Tabulate MBBs and Print Tally Reports

| Steps: | Details: |
|--|---|
| 1. Insert the Test MBB(s) into the card device on a PC running the Tally program. | |
| 2. Log in to the Tally application as an Administrator-level user, highlight and click Select for the current election's database in Test mode. | |
| 3. Insert the eCM into a USB port on the PC and enter in the PIN, when prompted, before reading the first MBB. |  |
| 4. Read the Test mode MBB(s) into Tally. | The eCM can be removed once the first MBB is read into Tally. |
| 5. Click the Start button in the Tabulation box at the bottom of the screen to tabulate each MBB's CVRs. | |
| 6. Click the Stop button in the Tabulation box to stop tabulating for that MBB. | After reading and tabulating all Test MBBs, click the Reporting Quick Link and select the "MBB Status" report. This report shows the number of cast votes on each MBB. Use this report to confirm that the target Test MBBs for LAT have been processed. |
| 7. After reading all Test MBB(s), from the Election Information panel, click the Finalize button to finalize the election in Tally. | This finalizes (closes) the Test election Tally database. |
| 8. Click the Reporting Quick Link. Select and print the official "Cumulative Report." | Compare this report to the device summary report(s). |
| 9. Print the official Tally "Precinct" Report. | This report shows precinct totals and the origin of votes: Election Day, Early Voting, and Absentee. Select applicable values for the report parameters. |
| 10. Print the official Tally "Canvass" Report. | <input type="checkbox"/> This report shows totals, the origin of votes, and the breakdown per precinct. Compare this report to the LAT spreadsheet assignments per precinct/ballot style. <input type="checkbox"/> Review reports and file with other LAT documents. |

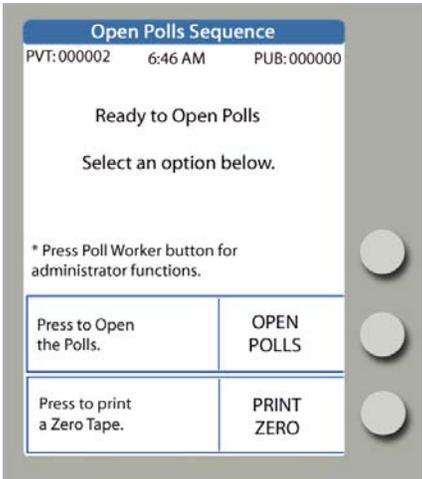
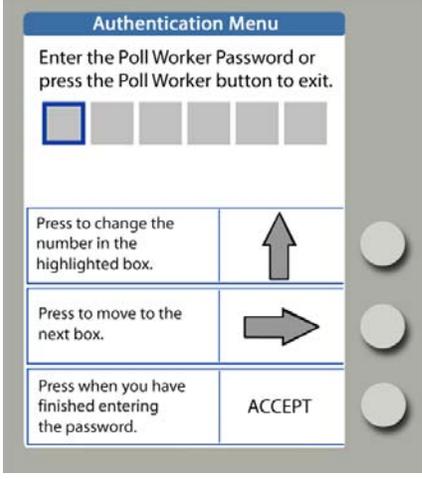
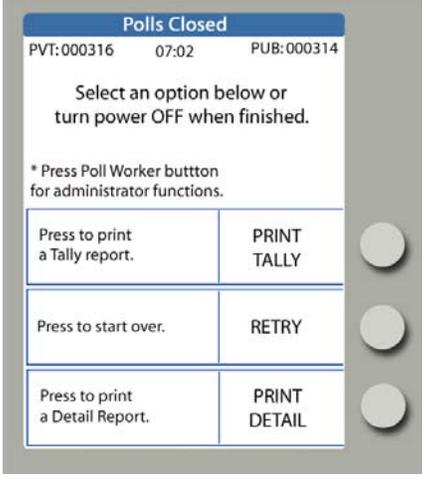
Step 7: Document Logic and Accuracy Test

| Steps: | Details: |
|---|--|
| 1. Compare the eScan reports (and the Ballot Now reports, if applicable) and the Tally application reports to the spreadsheet or the hand counted paper ballot tabulation. | <input type="checkbox"/> The number of voters and precinct assignments should match. <input type="checkbox"/> The options voted should match. <input type="checkbox"/> Reconcile any variances and document. |
| 2. Place Tally application reports, the Tally audit log, eScan reports, eScan and Ballot Now scanned Test Ballots, Ballot Now reports (if applicable) and MBBs into the LAT envelope. | <input type="checkbox"/> Have Test Team members sign and date an LAT Documentation Form and add this to the LAT records envelope. <input type="checkbox"/> Seal the envelope. See: The LAT documentation at the end of this chapter. |
| 3. Back up the eScan system audit logs and CVR logs, if necessary. | See: <i>The Support Procedures Training Manual.</i> |
| 4. Using the SERVO application, reset the eScan system used for the Logic and Accuracy Test. | See: <i>The SERVO Operations Manual.</i> |
| 5. Power off, disconnect, and pack the eScan system. | |
| 6. Give the sealed LAT records envelope to an election official for secure storage. | Follow state statutes and local guidelines for archiving these records. |

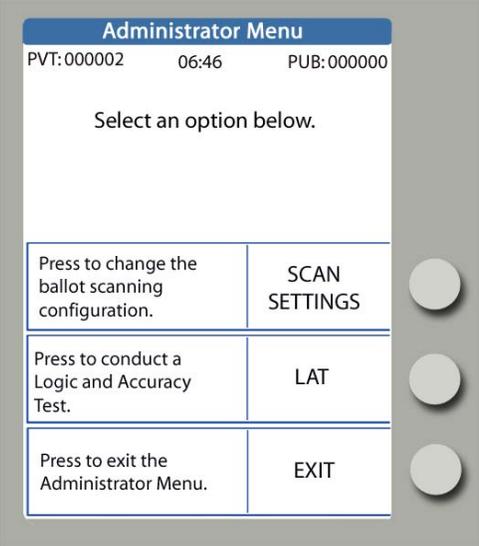
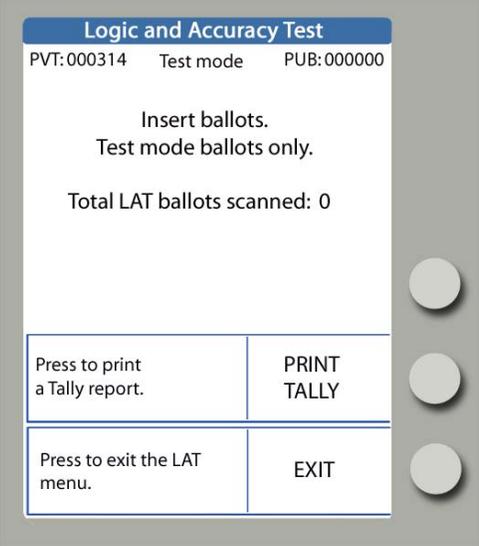
eScan Embedded Logic and Accuracy Test Procedure

The eScan device includes the functionality to perform an embedded Logic and Accuracy Test (LAT). This embedded LAT functionality is available to test the device before, during, and/or after voting events when the device MBB is present and configured. The embedded LAT function works with Test or Election mode MBBs, *but only with Test mode ballots*. No LAT Cast Vote Record data is saved to the MBB or eScan memory (only audit trail data indicating that the test was performed), but the eScan “Tally” report can be printed at the end of the embedded LAT. The embedded LAT functionality is available from each of these screens when you push the **Poll Worker Button**:

- Print Zero Tape
- Ready to Open Polls
- Poll Worker Password** (press the **Poll Worker Button** from the **Ready to Scan** screen)
- Polls Closed/Suspended

| | | | | | | | | | | | | | |
|---|--|------------|---|--------------------------|---|-----------------------------|---|--------------------------------|-------------|----------------------|-------|---------------------------------|--------------|
|  <p>Configuration Sequence PVT: 000002 6:45 AM PUB: 000000</p> <p>Print Zero Tape</p> <p>* Press Poll Worker button for administrator functions.</p> <table border="1"> <tr> <td>Press to print a Zero Tape.</td> <td>PRINT ZERO</td> </tr> </table> | Press to print a Zero Tape. | PRINT ZERO |  <p>Open Polls Sequence PVT: 000002 6:46 AM PUB: 000000</p> <p>Ready to Open Polls</p> <p>Select an option below.</p> <p>* Press Poll Worker button for administrator functions.</p> <table border="1"> <tr> <td>Press to Open the Polls.</td> <td>OPEN POLLS</td> </tr> <tr> <td>Press to print a Zero Tape.</td> <td>PRINT ZERO</td> </tr> </table> | Press to Open the Polls. | OPEN POLLS | Press to print a Zero Tape. | PRINT ZERO | | | | | | |
| Press to print a Zero Tape. | PRINT ZERO | | | | | | | | | | | | |
| Press to Open the Polls. | OPEN POLLS | | | | | | | | | | | | |
| Press to print a Zero Tape. | PRINT ZERO | | | | | | | | | | | | |
|  <p>Authentication Menu</p> <p>Enter the Poll Worker Password or press the Poll Worker button to exit.</p> <p><input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p> <table border="1"> <tr> <td>Press to change the number in the highlighted box.</td> <td>↑</td> </tr> <tr> <td>Press to move to the next box.</td> <td>→</td> </tr> <tr> <td>Press when you have finished entering the password.</td> <td>ACCEPT</td> </tr> </table> | Press to change the number in the highlighted box. | ↑ | Press to move to the next box. | → | Press when you have finished entering the password. | ACCEPT |  <p>Polls Closed PVT: 000316 07:02 PUB: 000314</p> <p>Select an option below or turn power OFF when finished.</p> <p>* Press Poll Worker button for administrator functions.</p> <table border="1"> <tr> <td>Press to print a Tally report.</td> <td>PRINT TALLY</td> </tr> <tr> <td>Press to start over.</td> <td>RETRY</td> </tr> <tr> <td>Press to print a Detail Report.</td> <td>PRINT DETAIL</td> </tr> </table> | Press to print a Tally report. | PRINT TALLY | Press to start over. | RETRY | Press to print a Detail Report. | PRINT DETAIL |
| Press to change the number in the highlighted box. | ↑ | | | | | | | | | | | | |
| Press to move to the next box. | → | | | | | | | | | | | | |
| Press when you have finished entering the password. | ACCEPT | | | | | | | | | | | | |
| Press to print a Tally report. | PRINT TALLY | | | | | | | | | | | | |
| Press to start over. | RETRY | | | | | | | | | | | | |
| Press to print a Detail Report. | PRINT DETAIL | | | | | | | | | | | | |

On each screen, a note (*) indicates the availability of administrator functions, including the embedded LAT.

| Steps: | Details: |
|---|---|
| <ol style="list-style-type: none"> 1. After the eScan is powered on, from the Print Zero Tape, Ready to Open Polls, Poll Worker Password, or Polls Closed/Suspended screen, press the Poll Worker Button in order to access the Administrator Menu. | <p>The Poll Worker Button is the red button located on the back of the eScan device.</p> |
| <ol style="list-style-type: none"> 2. Enter the Administrator Password and press the button next to ACCEPT. | |
| <ol style="list-style-type: none"> 3. Press the button next to LAT. |  <p style="text-align: center;">Administrator Menu Screen</p> |
| <ol style="list-style-type: none"> 4. The Logic and Accuracy Test screen appears. |  <p style="text-align: center;">Logic and Accuracy Test Screen</p> |

| | |
|--|---|
| <p>5. Follow the prompts to insert Test mode ballots for the LAT.</p> | <ul style="list-style-type: none"> <input type="checkbox"/> Only Test mode ballots may be scanned. <input type="checkbox"/> As LAT ballots are scanned, only the Private Count increases; the Public Count does not. <input type="checkbox"/> Cast Vote Records from LAT ballots are <i>not</i> stored in eScan memory or to the MBB. <p>Note: When you conduct an embedded LAT, the eScan will accept any test ballot the first time you scan it, regardless of the BOSS database settings. Ensure that you have marked the test ballots correctly (i.e., without overvotes) before inserting them into the eScan.</p> |
| <p>6. After all LAT ballots have been scanned, press the button next to Print Tally.</p> | |
| <p>7. Compare the eScan “Tally” report to a hand count (or spreadsheet) of the voted paper ballots.</p> | <ul style="list-style-type: none"> <input type="checkbox"/> The number of ballots voted should match. <input type="checkbox"/> The precinct(s) voted should match. <input type="checkbox"/> The options voted should match. |
| <p>8. Sign the eScan “Tally” report, indicating that the LAT was accurate.</p> | <p><i>OR</i> Indicate discrepancies (e.g., errors on the hand count or spreadsheet).</p> |
| <p>9. File the eScan “Tally” report in a marked envelope.</p> | <p>Follow state and local guidelines to complete and file LAT documentation.</p> |
| <p>10. Press the eScan power switch to the OFF position.</p> <p><i>OR</i> Follow screen prompts to exit LAT mode.</p> | |

Logic and Accuracy Test Documentation

Follow Hart Voting System LAT procedures. Complete and sign the following form as documentation of the LAT.

| | |
|--|--|
| <input type="checkbox"/> Tally Zero Report <input type="checkbox"/> JBC Open Polls diagnostic <input type="checkbox"/> JBC Zero Report <input type="checkbox"/> JBC Summary Report from suspending polls <input type="checkbox"/> Full Verifiable Ballot Option printout <input type="checkbox"/> eScan Open Polls diagnostic <input type="checkbox"/> eScan Zero Report | <input type="checkbox"/> eScan Summary Report from suspending polls <input type="checkbox"/> Ballot Now Printed Ballots, Scanned Ballots, Election and Audit Trail reports <input type="checkbox"/> Official reports from Tally <input type="checkbox"/> Test MBBs <input type="checkbox"/> Tally Audit Log printout |
|--|--|

| | | |
|---------------------------------|-----------------------|------------------|
| Election Title: | | |
| | | |
| BOSS folder (file path): | MBB ID Number: | LAT Date: |
| | | |

Testing group agrees: Logic and Accuracy Test is complete and accurate.

| Title | Printed Name and Initials |
|----------------|---------------------------|
| LAT Manager | |
| Team 1 member | |
| Team 1 member | |
| Team 2 member | |
| Team 2 member | |
| Team 3 member | |
| Team 3 member | |
| Team 4 member | |
| Team 4 member | |
| Team 5 member | |
| Team 5 member | |
| Team 6 member | |
| Team 6 member | |
| Team 7 member | |
| Team 7 member | |
| Team 8 member | |
| Team 8 member | |
| Team 9 member | |
| Team 9 member | |
| Team 10 member | |
| Team 10 member | |
| Team 11 member | |
| Team 11 member | |
| Team 12 member | |
| Team 12 member | |

Logic and Accuracy Test Envelope

Election Title: _____

Election Date: _____

LAT Date: _____

Comments:

LAT Manager Signature:

Logic and Accuracy Test Envelope

Election Title: _____

Election Date: _____

LAT Date: _____

Comments:

LAT Manager Signature:

Logic and Accuracy Test Envelope

Election Title: _____

Election Date: _____

LAT Date: _____

Comments:

LAT Manager Signature:

Logic and Accuracy Test Envelope

Election Title: _____

Election Date: _____

LAT Date: _____

Comments:

LAT Manager Signature:

Logic and Accuracy Test Envelope

Election Title: _____

Election Date: _____

LAT Date: _____

Comments:

LAT Manager Signature:

Logic and Accuracy Test Envelope

Election Title: _____

Election Date: _____

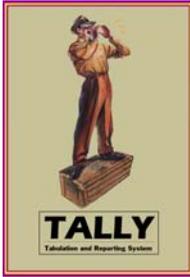
LAT Date: _____

Comments:

LAT Manager Signature:

Notes:

Notes:



Chapter 4

Coordinating Definitions in Tally and Rally

The purpose of this chapter is to clarify the manner in which Tally and Rally must be coordinated in order to communicate successfully. An understanding of Tally-Rally configuration requirements is essential before embarking on the detailed steps required to use Tally-Rally in a live election. Accordingly, it is not the purpose of this introductory chapter to explain those steps, which are reserved for the following chapter.

To ensure successful Tally-Rally communications, the following settings must be configured in both Tally and Rally in a coordinated manner:

1. **Establish User IDs and Permissions:** The election event Tally operator must exist at each Rally station as a user with MBB processing/transferring permissions.
2. **Update Certificates:** Complete and/or update Tally and Rally certificates, and make certain that software application operators are aware of valid certificate contents so that they can verify and accept certificates. If certificates are verified and accepted during Tally-Rally testing, then they should not need to be verified again during normal Election Day Tally-Rally communications. This verification and acceptance during Tally-Rally testing is the recommended procedure.
3. **Set Up Rally Station Information:** A record of each Rally station must exist in Tally with a unique station name and IP address. The information entered in Tally for each station must match the information from each Rally station's PC.
4. **Configure Dial-In Access, if applicable:** At Rally stations using a dial-in modem connection to transfer data, the User ID and password of the election event Tally operator must be entered as the "modem name" and "modem password."

The remaining sections of this chapter explain how administrator-level users must complete these coordinated settings.

Note:

Tally and Rally PC hardware must also be configured for LAN and/or modem communication.

See:

"Appendix E: Windows Tally and Rally LAN Setup" on page 117.

"Appendix F: Windows Tally and Rally Modem Setup" on page 121.

"Appendix M: Best Practices for Tally-Rally Setup" on page 177.

Tip(s):

Test Tally-Rally communications before every live election event.

Part 1: Establish User IDs and Permissions

Add the election event Tally operator as a user in Rally.

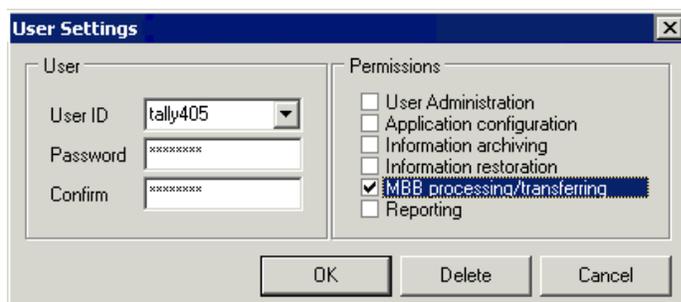
Tally Settings

The election event Tally operator must have at least operator-level permissions in Tally.



Rally Settings

In Rally's **User Settings** window, the election event Tally operator must be configured with at least **MBB processing/transferring** permissions.



See:

“Tally User Permissions and Certificate” on page 15.

Part 2: Update Certificates

Complete and/or update Tally and Rally certificates, and make certain that software application operators are aware of valid certificate contents so that they can verify and accept certificates. If certificates are verified and accepted during Tally-Rally testing, then they should not need to be re-verified during normal Election Day Tally-Rally communications. This verification and acceptance during Tally-Rally testing is the recommended procedure.

Tally Settings

1. As a Tally user with operator or administrator permissions, go to the **Options** menu and click **Transfer Configuration** to access the **Rally Configuration** window.
2. On the **Basic Setup** tab, click the **Certificate** button.
3. If necessary, update certificate information in the **Certificate** window and click **OK**.



 A screenshot of the "Certificate" dialog box in the Tally software. The title bar says "Certificate". The main text reads "Network security certificate information:". Below this are five text input fields: "Name*" (Trusted Tally User), "Organization*" (Sample County), "City" (Sample City), "State" (SC), and "Country Code*" (US). At the bottom left, there is a note "* Required". At the bottom right, there are two buttons: "OK" and "Cancel".

Rally Settings

1. As a Rally user with operator or administrator permissions, go to the **Tools** menu and click **Certificate**, or click the **Certificate** icon in the toolbar.
2. If necessary, update certificate information and click **OK**.



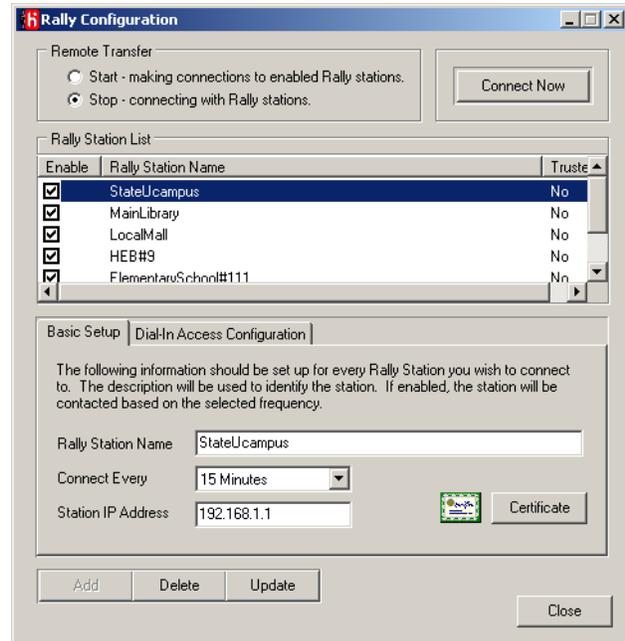
 A screenshot of the "Certificate" dialog box in the Rally software. The title bar says "Certificate". The main text reads "Please enter the following information:". Below this are five text input fields: "Name*" (Trusted Rally User), "Organization*" (Sample County), "City" (Sample City), "State" (SC), and "Country Code*" (US). At the bottom left, there is a note "* Required". At the bottom right, there are two buttons: "OK" and "Cancel".

Part 3: Set Up Rally Station Information

Add basic station information to match in Tally and Rally.

Tally Settings

1. As a Tally user with operator or administrator permissions, go to the **Options** menu and click **Transfer Configuration** to access the **Rally Configuration** window.
2. In the **Rally Station Name** field of the **Basic Setup** tab, enter the name of a Rally station.
3. Go to the **Connect Every** drop-down menu and click the time interval for Tally connections to Rally.
4. In the **Station IP Address** field, enter the IP address of the Rally station PC.
 - > For Rally stations using modem connections, this should be the “From” TCP/IP address.
5. Click the **Add** button.
6. Repeat the steps for basic setup to create additional Rally stations (highlight fields, enter new station data, and click **Add**).

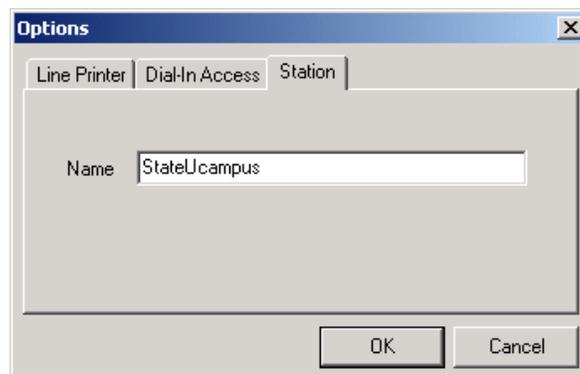


Rally Settings

At each Rally station, in the **Options** window, the **Station Name** field should match the Rally station name in Tally’s **Rally Configuration** window, **Rally Station Name** field.



Station names should be unique from other Rally stations and Rally PC names.

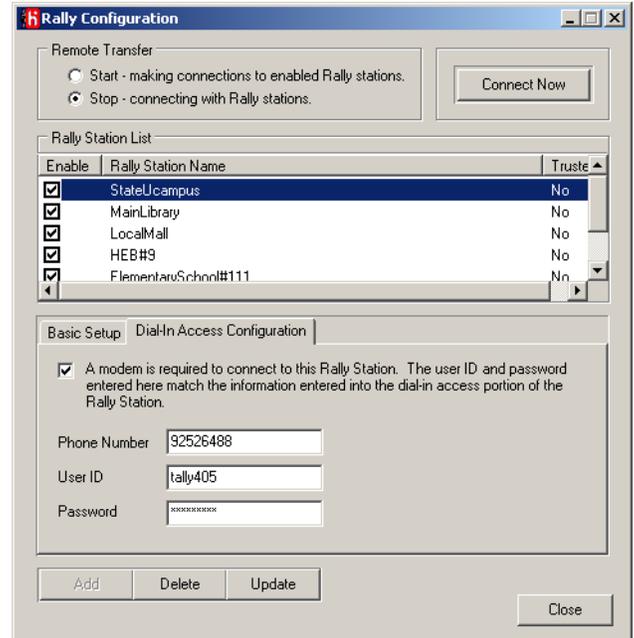


Part 4: Configure Dial-In Access (if applicable)

Enable dial-in access and associate the election event Tally operator with each Rally station's modem name.

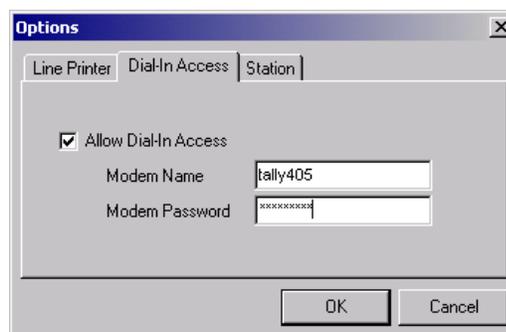
Tally Settings

1. If Tally will use a dial-in modem to communicate with a Rally station, highlight the Rally station name in the **Rally Station List** panel.
2. Select the **Dial-in Access Configuration** tab.
3. Select the **A modem is required...** checkbox.
4. In the **Phone Number** field, enter the Rally station PC modem's phone number.
5. In the **User ID** and **Password** fields, enter the **User ID** and **Password** of the election event Tally operator (or another unique user name and password that will match the Rally **Dial-In Access** tab information).
6. Select the **Update** button to update the basic setup information with dial-in access configuration details for this Rally station.



Rally Settings

At Rally stations using a modem connection to transfer data, complete the **Dial-In Access** tab in the **Options** window.

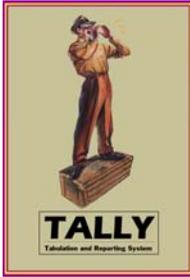


The Rally **Modem Name** and **Modem Password** fields **MUST** match the **User ID** and **Password** fields entered in Tally's **Rally Configuration** window, **Dial-In Access Configuration** tab.



All Rally stations using modem connections will use the same **Modem Name** and **Modem Password** for an election.

Notes:



Chapter 5

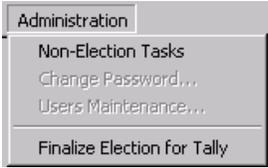
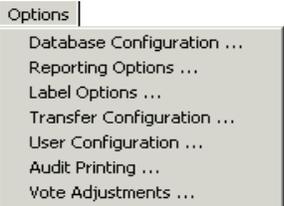
Using Tally-Rally to Count Voted MBBs

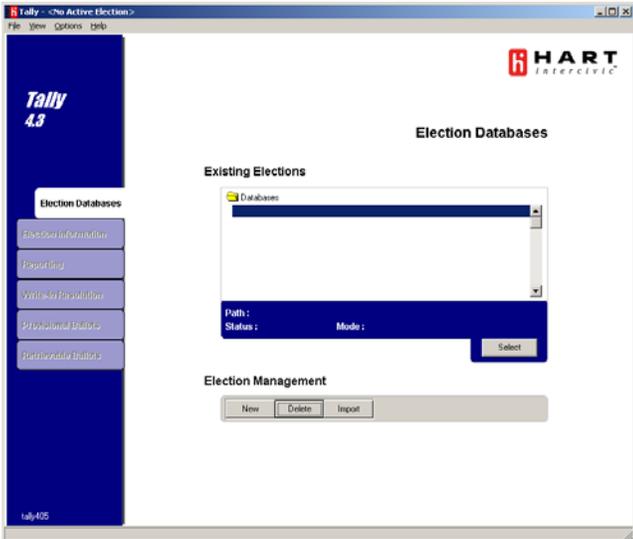
The following procedures outline the steps for tabulating an election with the Tally and Rally applications.

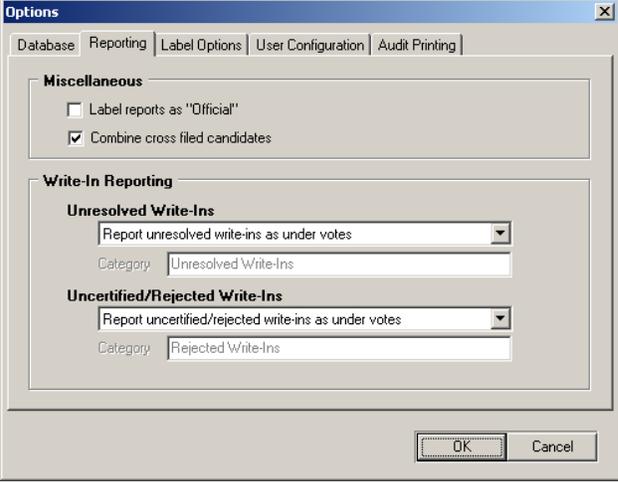
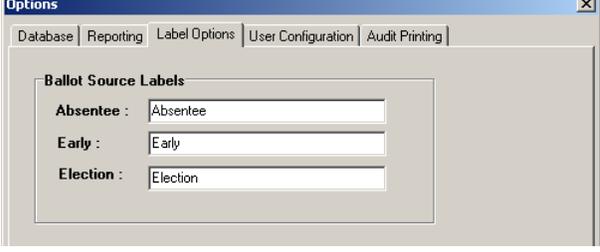
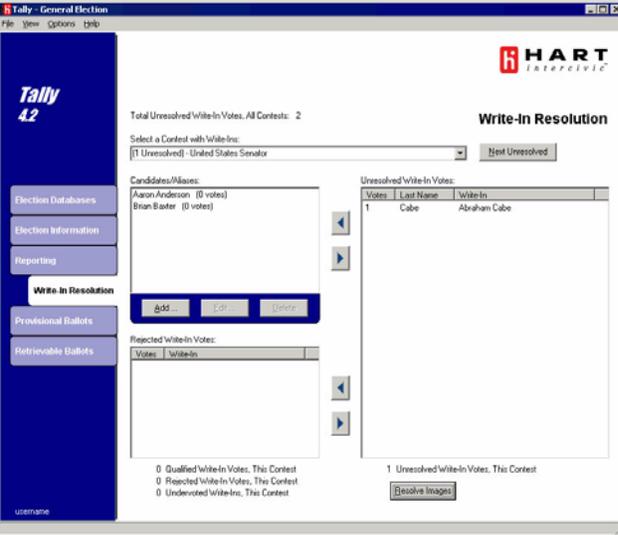
See:

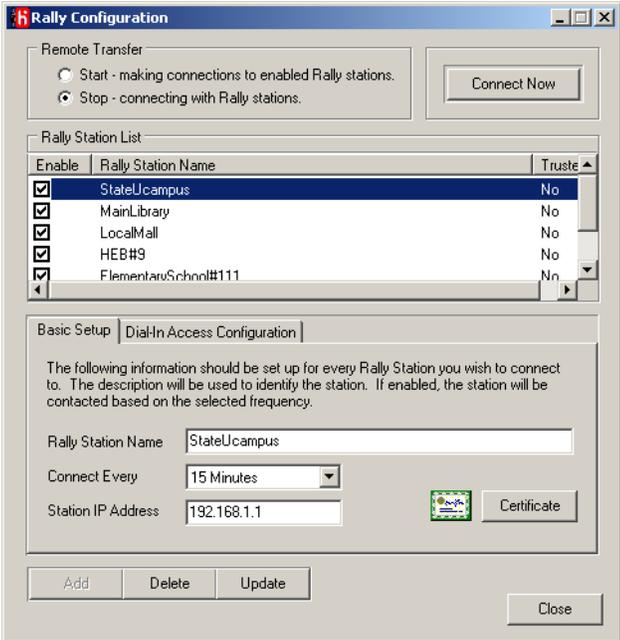
“Logic and Accuracy Testing Procedures” on page 37.

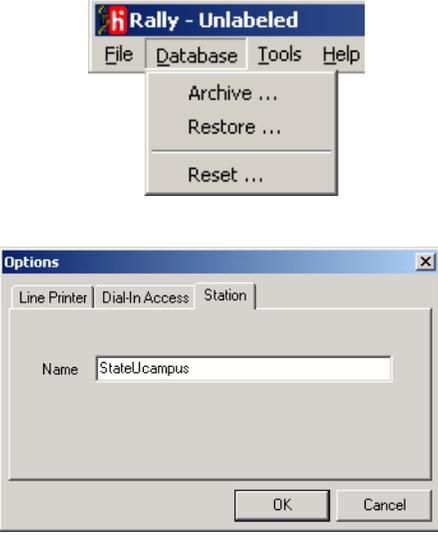
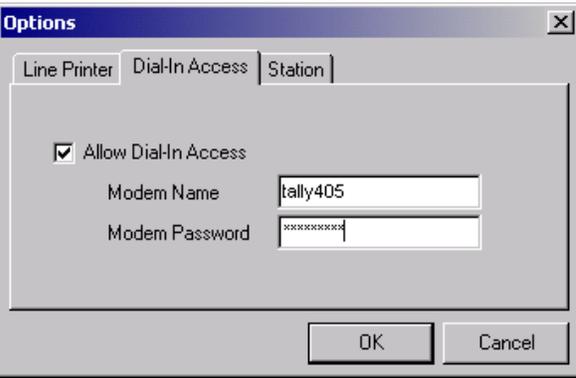
Part 1: Tally and Rally Configuration

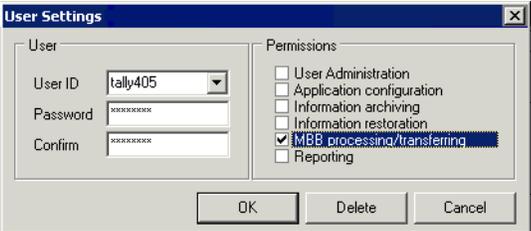
| Steps: | Details: |
|---|---|
| <p>1. In the BOSS program, finalize the BOSS database for Tally.</p>  | <p><input type="checkbox"/> Make certain all MBBs and DAU cards have been written before finalizing the BOSS database.</p> <p> After finalizing, no additional cards can be written.</p> |
| <p>2. Physically set up Tally and Rally PC hardware and Windows LAN and/or modem configurations.</p> | <p>See:</p> <p>“Appendix E: Windows Tally and Rally LAN Setup” on page 117.</p> <p>“Appendix F: Windows Tally and Rally Modem Setup” on page 121.</p> |
| <p>3. Double-click the Tally desktop shortcut to open the application.</p>  | |
| <p>4. Log in to Tally as a user with Administrator permissions.</p> | |
| <p>5. If you haven't already done so, set up Tally users and permission levels.</p>  | <p>Go to the Options menu and click User Configuration.</p> <p>See:</p> <p>“Tally User Permissions and Certificate” on page 15.</p> |

| Steps: | Details: |
|--|--|
| <p>6. Create and name/describe a new Test or Election mode database in Tally by copying the finalized BOSS database or importing an existing Tally database from file.</p>  | <ul style="list-style-type: none"> <input type="checkbox"/> Click the Election Databases Quick Link and click the New button to bring in a finalized BOSS database, or click the Import button to import an existing Tally database from file. <input type="checkbox"/> With the Database Wizard, set the Tally database configurations for split precincts, reporting display, and tabulation processing. <input type="checkbox"/> Set Database Configuration when creating the database, or after opening the database and before reading MBBs by going to the Options menu and selecting Database Configuration. <input type="checkbox"/> Test mode and Election mode databases are created in Tally separately. <input type="checkbox"/> Each Tally database must have a unique name/description. <input type="checkbox"/> Only one Tally Election mode database for a specific BOSS database may exist in a NEW or OPENED state at one time. <p>See: Suggested naming conventions in “Tally Menus” on page 7.</p> |
| <p>7. Highlight the target database, and click Select to open it.</p>  | |

| Steps: | Details: |
|--|---|
| <p>8. Set the Tally reporting options for report labeling, candidate cross-filing, and write-in reporting.</p>  | <p><input type="checkbox"/> Go to the Options menu and click Reporting Options.</p> |
| <p>9. (Optional) Change the ballot source labels that appear on reports.</p>  | <p><input type="checkbox"/> Go to the Options menu and click Label Options.</p> |
| <p>10. (Optional) In Tally, define qualified write-in candidates and aliases, if applicable.</p>  | <p><input type="checkbox"/> To define write-in candidates before reading MBBs, click the Write-In Resolution Quick Link.</p> <p>Note: Write-in candidates and aliases can be defined before and/or after MBBs are read. Write-in votes matching a candidate or alias name will automatically assign to that candidate.</p> <p>Tip(s): Defining candidates AFTER reading MBBs may be a more efficient process unless all write-in candidates and aliases are known before tabulation.</p> |

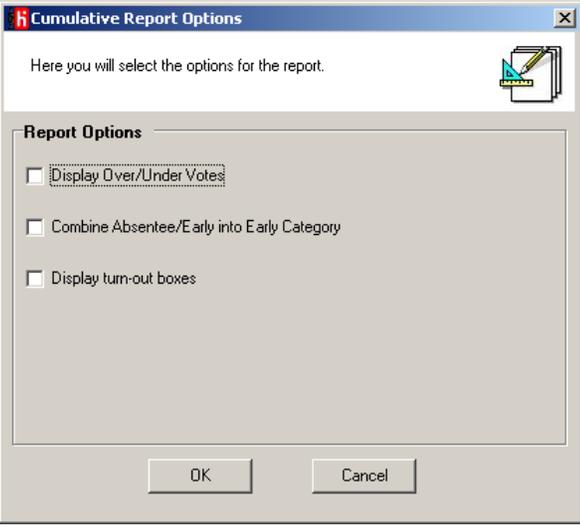
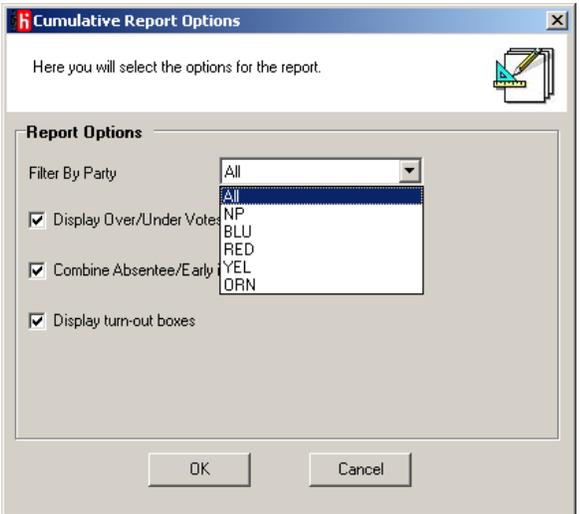
| Steps: | Details: |
|---|--|
| <p>11. In Tally, verify and enable Rally Configuration options for LAN and/or modem connections.</p>  | <ul style="list-style-type: none"> <input type="checkbox"/> Go to the Tally application Options menu and click Transfer Configuration. <input type="checkbox"/> For a LAN or a modem connection, in Tally, verify the Rally Configuration window Basic Setup tab information: <ul style="list-style-type: none"> • Stop • Enable Remote Transfer • Rally Station Name • Connect Every (time interval) • Station IP Address. <input type="checkbox"/> For a modem connection, in Tally, also verify the Dial-in Access Configuration tab: <ul style="list-style-type: none"> • Checked A modem is required... checkbox • (Rally Station PC) Phone Number • User ID that matches the Rally station's Options window, Modem Name field • User Password that matches the Rally station's Options window, Modem Password field. |
| <p>12. In Tally, verify certificate information.</p>  | <p>In Tally, select the Certificate button in the Rally Configuration window.</p> |
| <p>13. Exit Tally (optional).</p>  | <ul style="list-style-type: none"> <input type="checkbox"/> Go to the File menu and select Exit. <input type="checkbox"/> Exit Tally if a different user is identified as the election event Tally operator for Tally-Rally functions. |
| <p>14. At each Rally station, open the Rally application and log in as a user with all permissions.</p>  | <ul style="list-style-type: none"> <input type="checkbox"/> All Rally directives apply to each Rally station. <input type="checkbox"/> If you haven't already done so, assign Rally user names, passwords, and permissions. <p>See: The <i>Rally Training Manual</i> for Rally operator procedures.</p> |

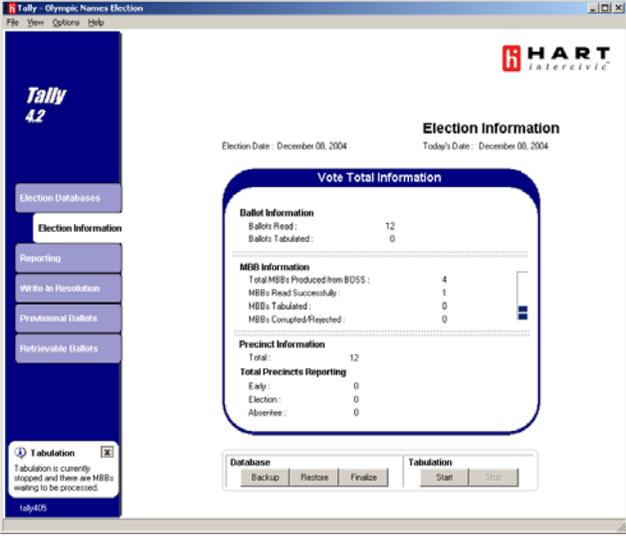
| Steps: | Details: |
|---|---|
| <p>15. In Rally, reset the database, and then enter the station name as defined in Tally's Rally Configuration window.</p>  <p>The screenshot shows the Rally application window titled "Rally - Unlabeled" with the "Database" menu open, showing options: "Archive ...", "Restore ...", and "Reset ...". Below it is the "Options" dialog box with the "Station" tab selected. The "Name" field contains "StateUcampus".</p> | <ul style="list-style-type: none"> <input type="checkbox"/> To reset the Rally database, go to the Rally application Database menu and click Reset. <input type="checkbox"/> To enter the Rally station name, click the Rally application Options Quick Link and click the Station tab. |
| <p>16. In Rally, at stations connecting to Tally via modem, verify dial-in options.</p>  <p>The screenshot shows the "Options" dialog box with the "Dial-In Access" tab selected. The "Allow Dial-In Access" checkbox is checked. The "Modem Name" field contains "tally405" and the "Modem Password" field contains "xxxxxxxx".</p> | <ul style="list-style-type: none"> <input type="checkbox"/> If using a modem connection, click the Rally application Options Quick Link and click the Dial-in Access tab. <ul style="list-style-type: none"> • Select Allow Dial-In Access. • Enter the Modem Name and Modem Password as entered in Tally's Rally Configuration window (this is identical to the election event Tally operator User ID and Password in the Tally application). • All Rally stations using modem connections will use the same Modem Name and Modem Password for an election. |
| <p>17. In Rally, if you haven't already done so, set up the Rally station operator as a user with at least Information archiving, MBB processing/transferring, and Reporting permissions.</p>  <p>The screenshot shows the "User Settings" dialog box. The "User" section has "User ID" set to "rally201", "Password" as "xxxxxxx", and "Confirm" as "xxxxxxx". The "Permissions" section has checkboxes for "User Administration", "Application configuration", "Information archiving", "Information restoration", "MBB processing/transferring", and "Reporting". The "MBB processing/transferring" checkbox is checked and highlighted.</p> | <p>Go to the Rally application Tools menu and click User Settings.</p> |

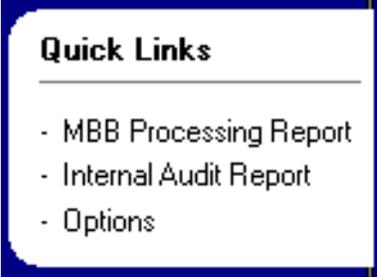
| Steps: | Details: |
|---|---|
| <p>18. In Rally, if you haven't already done so, set up the election event Tally operator as a user with at least MBB processing/transferring permissions.</p>  | <p>Go to the Rally application Tools menu and click User Settings.</p> |
| <p>19. In Rally, verify certificate information.</p>  | <p>In Rally, go to the Tools menu and click Certificate, or click the Certificate icon on the toolbar.</p> |
| <p>20. Exit Rally.</p>  | <p>Go to the File menu and click Exit.</p> |

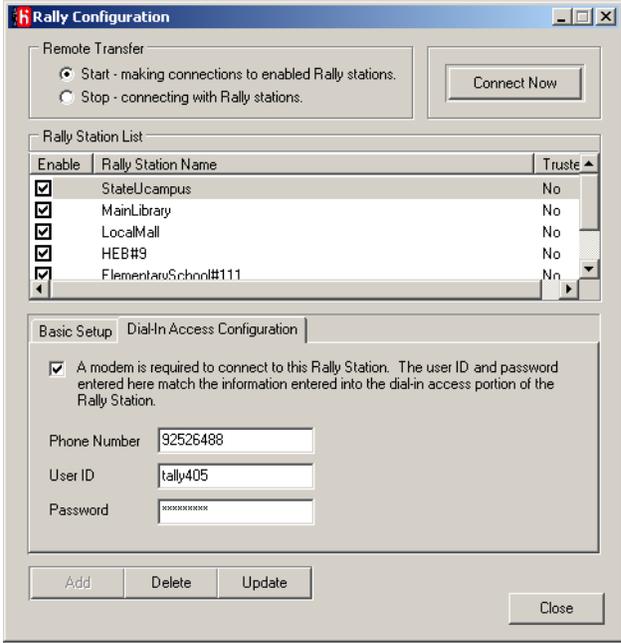
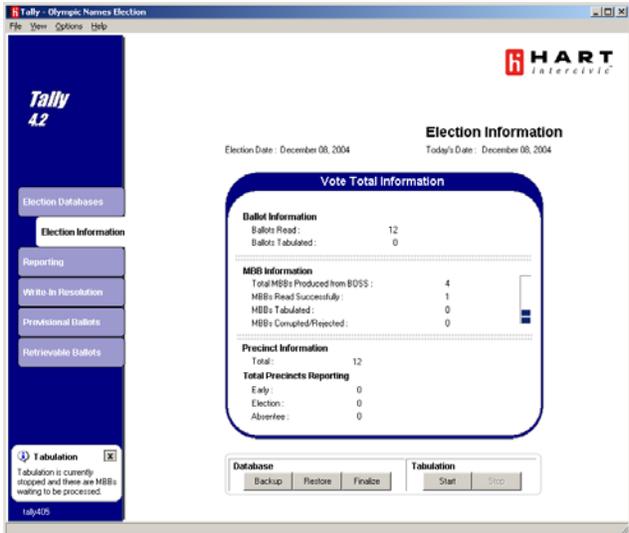
Part 2: Election Day Tally-Rally Steps

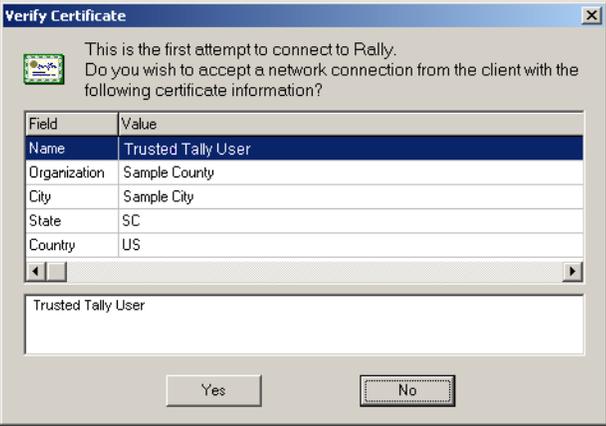
| Steps: | Details: |
|--|---|
| <p>1. Log in to Tally as the election event operator and select the target election.</p>  | <p>Note: Make certain to log in with the same user name and password used to configure Rally stations (for MBB transfer and dial-in access).</p> |
| <p>2. Create a Tally “Zero Report”.</p>  | <p>Click the Reporting Quick Link and select the “Cumulative Report” before reading any MBBs into Tally or Rally.</p> |

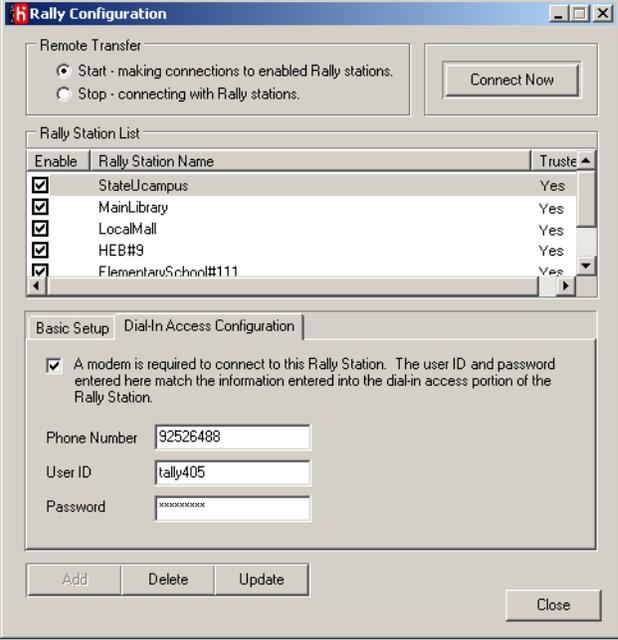
| Steps: | Details: |
|--|--|
| <p>2.1 Select report options available, click OK, and view the report.</p>   | <ul style="list-style-type: none"> <input type="checkbox"/> Print hard copy. <input type="checkbox"/> Export to file in an available soft copy format via the report export tool.  <p>Note: Report options available will vary per report type and election type. The graphics at left show the “Cumulative Report” options for a general election (top) and primary election (bottom).</p> |
| <p>3. If you haven't already done so, insert the eCM into a USB port.</p>  | <ul style="list-style-type: none"> <input type="checkbox"/> The eCM can be removed from the USB port after the first MBB for the session has been read into Tally. <input type="checkbox"/> Store the eCM in a secure location. <input type="checkbox"/> Each Rally station must also have an eCM in order to read the first MBB per session, per PC. <input type="checkbox"/> The simplest way to use an eCM is to keep the device handy (e.g., on a lanyard on your person) and to insert the eCM into a USB port on an election PC each time that PC is being used, removing the eCM when finished. |

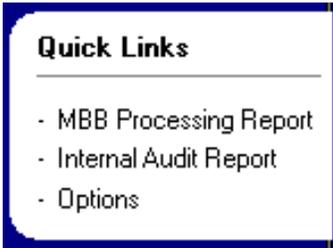
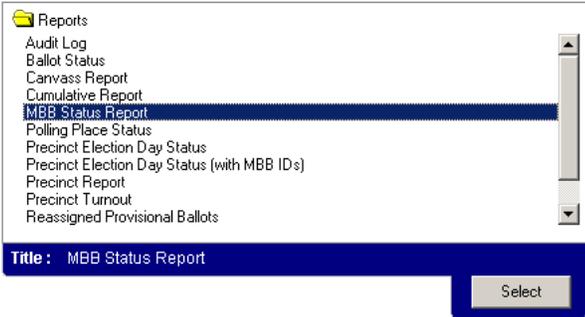
| Steps: | Details: | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|---------------|----|--------------------|---|-----------------|--|--------------------------------|---|-------------------------|---|-----------------|---|-------------------------|---|----------------------|--|--------|----|---------------------------|--|--------|---|-----------|---|-----------|---|---|
| <p data-bbox="253 222 760 285">4. Process Absentee and Early Voting MBBs.</p>  <p>The screenshot shows the Tally 4.2 application window titled "Tally - Olympic Names Election". The "Election Information" panel is active, displaying "Vote Total Information". The data is as follows:</p> <table border="1"> <thead> <tr> <th colspan="2">Ballot Information</th> </tr> </thead> <tbody> <tr> <td>Ballots Read:</td> <td>12</td> </tr> <tr> <td>Ballots Tabulated:</td> <td>0</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th colspan="2">MBB Information</th> </tr> </thead> <tbody> <tr> <td>Total MBBs Produced from BOSS:</td> <td>4</td> </tr> <tr> <td>MBBs Read Successfully:</td> <td>1</td> </tr> <tr> <td>MBBs Tabulated:</td> <td>0</td> </tr> <tr> <td>MBBs Consumed/Rejected:</td> <td>0</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th colspan="2">Precinct Information</th> </tr> </thead> <tbody> <tr> <td>Total:</td> <td>12</td> </tr> <tr> <td>Total Precincts Reporting</td> <td></td> </tr> <tr> <td> Early:</td> <td>0</td> </tr> <tr> <td> Election:</td> <td>0</td> </tr> <tr> <td> Absentee:</td> <td>0</td> </tr> </tbody> </table> <p>At the bottom, there are buttons for "Database" (Backup, Restore, Finalize) and "Tabulation" (Start, Stop). A status bar at the bottom left indicates "Tabulation is currently stopped and there are MBBs waiting to be processed."</p> | Ballot Information | | Ballots Read: | 12 | Ballots Tabulated: | 0 | MBB Information | | Total MBBs Produced from BOSS: | 4 | MBBs Read Successfully: | 1 | MBBs Tabulated: | 0 | MBBs Consumed/Rejected: | 0 | Precinct Information | | Total: | 12 | Total Precincts Reporting | | Early: | 0 | Election: | 0 | Absentee: | 0 | <ul style="list-style-type: none"> <input type="checkbox"/> Click the Election Information Quick Link. <input type="checkbox"/> After the first MBB for the session is inserted into the card reader, the Tally application will prompt the operator to enter the eCM PIN.  <p>The screenshot shows a dialog box titled "eCM PIN Required" with the subtitle "eSlate Cryptographic Module PIN". It contains a text field labeled "Enter PIN:" with a masked input (asterisks) and "OK" and "Cancel" buttons.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Tally automatically reads subsequent MBBs as they are inserted into the card reader. <input type="checkbox"/> To tabulate, select the Start button in the Election Information panel of the Tally window. The Start button may be selected while reading MBBs. <input type="checkbox"/> For a Logic & Accuracy Test (LAT), process Test mode MBBs in a Test mode Tally database. <p>See: "Logic and Accuracy Testing Procedures" on page 37.</p> <p>Note: You must stop tabulation in order to use the other Quick Links.</p> |
| Ballot Information | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ballots Read: | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ballots Tabulated: | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MBB Information | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total MBBs Produced from BOSS: | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MBBs Read Successfully: | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MBBs Tabulated: | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MBBs Consumed/Rejected: | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Precinct Information | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total: | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Precincts Reporting | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Early: | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Election: | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Absentee: | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p data-bbox="253 1157 467 1188">5. Print reports.</p>  <p>The screenshot shows the Tally 4.3 application window titled "Tally - Olympic Names Election". The "Reporting" panel is active, displaying "Existing Reports". The list of reports includes:</p> <ul style="list-style-type: none"> Reports Audit Log Ballot Status Canvass Report Cumulative Report (highlighted) MBB Status Report Polling Place Status Precinct Election Day Status Precinct Election Day Status (with MBB ID's) Precinct Report Precinct Turnout Reassigned Provisional Ballots <p>The "Title" field shows "Cumulative Report" and a "Select" button is visible. Below the list is a "Report Management" section with "Report Wizard" and "Delete" buttons.</p> | <ul style="list-style-type: none"> <input type="checkbox"/> Stop tabulation. <input type="checkbox"/> Click the Reporting Quick Link. <input type="checkbox"/> Print hard copies of desired reports. <input type="checkbox"/> Export soft copies of desired reports in available formats via the report export tool.  <p>The screenshot shows a small icon representing a report export tool, which is a square button with a red envelope and a document symbol.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

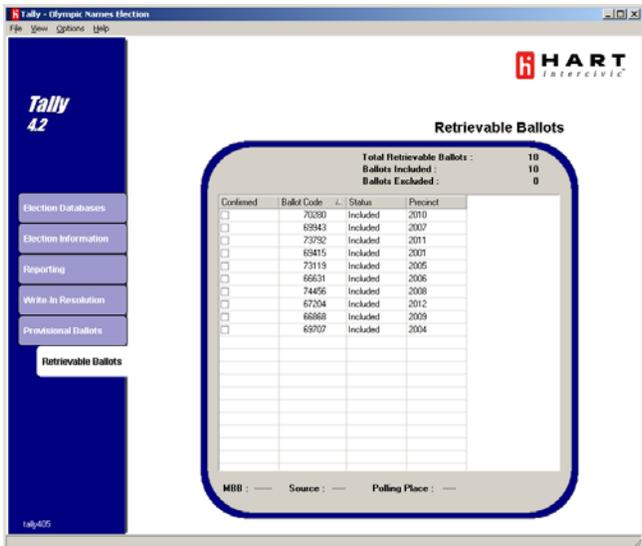
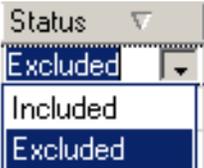
| Steps: | Details: |
|--|---|
| <p>6. For risk-reduction and archival purposes, back up the Tally database to a time-stamped folder.</p>  | <ul style="list-style-type: none"> <input type="checkbox"/> Click the Election Information Quick Link. <input type="checkbox"/> The Backup button in the Election Information window will back up the original TallyData.db and TallyData.cfg files to another location on the PC hard drive. <input type="checkbox"/> The file path to the Tally database folder (identified in the Election Databases panel of the Tally window) is: C:\Program Files\Hart InterCivic\Tally\Database\YearMonthDay-HourMinuteSecond (YYMMDD-HHMMSS). <p>See: "Appendix D: Backing Up Election Databases" on page 115.</p> |
| <p>7. At each Rally station, operator-level users log in.</p>  | <p>All Rally directives apply to each Rally station.</p> |
| <p>8. In Rally, print "Zero Reports".</p>  | <p>Rally operators click the Rally application reporting Quick Links.</p> <ul style="list-style-type: none"> • Rally operators print each report. |

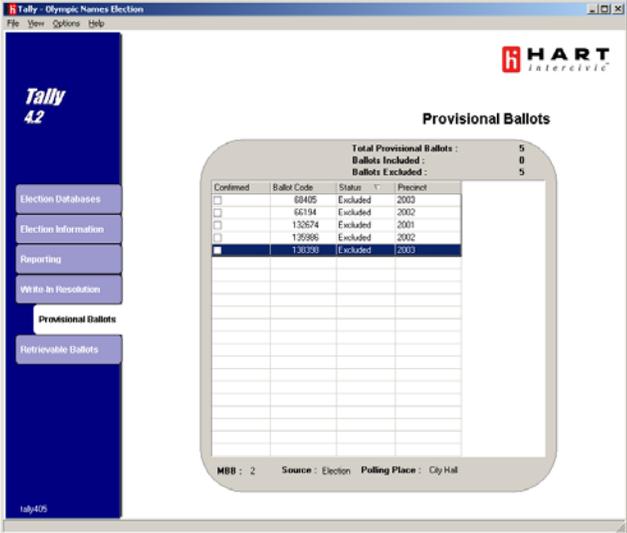
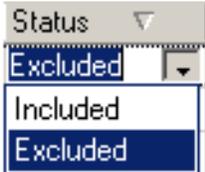
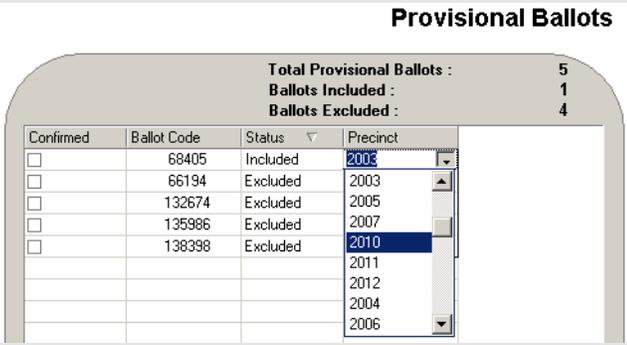
| Steps: | Details: |
|--|--|
| <p>9. In Tally, enable Rally stations and start remote transfer.</p>  | <p>Go to the Options menu and click Transfer Configuration.</p> <ul style="list-style-type: none"> • Select the Enable checkbox next to Rally station names being used • Select the Start radio button. |
| <p>10. In Tally, process Election Day MBBs.</p>  | <ul style="list-style-type: none"> ❑ In Tally, click the Election Information Quick Link. ❑ Tally automatically reads MBBs as they are inserted into the card reader. ❑ To tabulate, click the Start button in the Election Information panel of the Tally window. You can click the Start button while reading MBBs. <p>Note:</p> <p>Normal Tally functioning may continue while Rally connections are being made. You must stop tabulation in order to use the other Tally Quick Links.</p> |

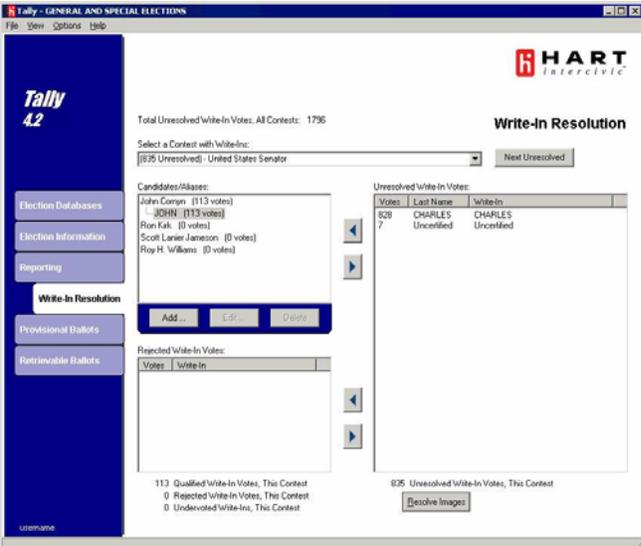
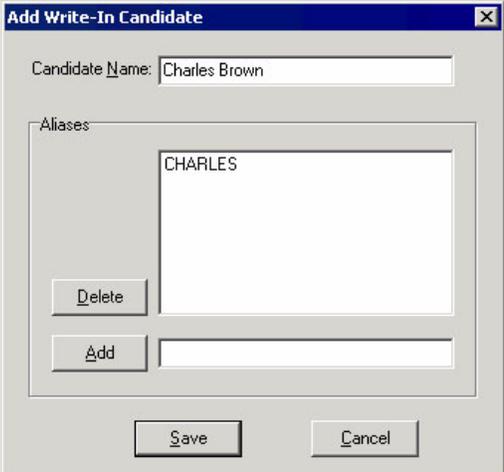
| Steps: | Details: |
|--|---|
| <p>11. In Rally, process Election Day MBBs.</p>  | <p>At each Rally station, the operator must insert an eCM and enter the PIN in order to read the first MBB for the Rally session.</p>  <p>See: The Rally Operations and Training Manuals for more information on processing MBBs in Rally.</p> |
| <p>12. In Tally, the first connection with each Rally PC includes accepting a security certificate from Rally. Verify and click Yes to accept this certificate.</p>  | <p>This step may have been completed during Tally-Rally testing.</p> <p>Tip(s): Make certain that Tally and Rally operators are aware of the contents of security certificates, so that they can verify and accept.</p> |
| <p>13. In Rally, the first connection with the Tally PC includes accepting a security certificate from Tally. Verify, and then select Yes to accept this certificate.</p>  | <p>This step may have been completed during Tally-Rally testing.</p> <p>Tip(s): Make certain that Tally and Rally operators are aware of the contents of security certificates, so that they can verify and accept.</p> |

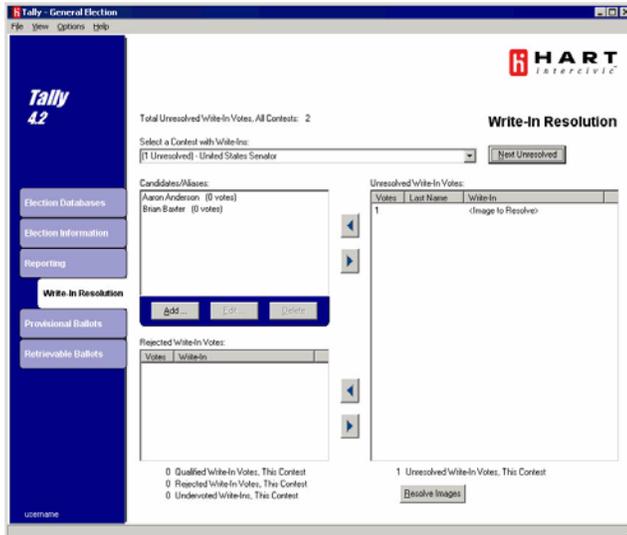
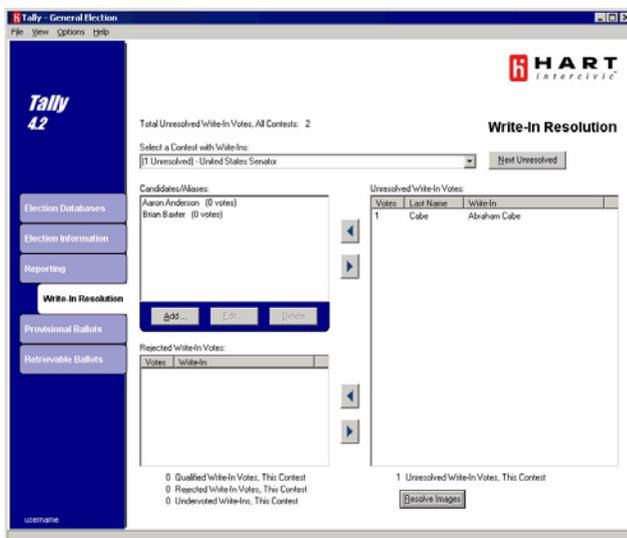
| Steps: | Details: |
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| <p>14. In Tally, verify that accepted Rally stations display “Yes” in the Trusted field of the Rally Configuration window.</p>  | <p>Go to the Options menu and click Transfer Configuration.</p> <ul style="list-style-type: none"> If the Tally or Rally certificate was <i>not</i> accepted, Tally and Rally operators should communicate (e.g., via mobile phone), log out of both applications, log back in, and re-establish communication (Tally operator can highlight the target Rally station in the Rally Configuration window and click the Connect Now button). <p>See: “Tally-Rally Troubleshooting” on page 93.</p> |
| <p>15. In Tally, print reports.</p>  | <ul style="list-style-type: none"> <input type="checkbox"/> In Tally, Stop tabulation. <input type="checkbox"/> Click the Reporting Quick Link. <input type="checkbox"/> Print hard copies of desired reports. <input type="checkbox"/> Export soft copies of desired reports in available formats via the report export tool.  |

| Steps: | Details: |
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| <p>16. For risk-reduction and archival purposes, back up the Tally database to a time-stamped folder.</p>  | <ul style="list-style-type: none"> <input type="checkbox"/> Click the Election Information Quick Link. <input type="checkbox"/> The Backup button in the Election Information window will back up the original TallyData.db and TallyData.cfg files to another location on the PC hard drive. <input type="checkbox"/> The file path to the Tally database folder (identified in the Election Databases panel of the Tally window) is: C:\Program Files\Hart InterCivic\Tally \Database\YearMonthDay-HourMinuteSecond (YYMMDD-HHMMSS). <p>See: “Appendix D: Backing Up Election Databases” on page 115.</p> |
| <p>17. In Rally, print reports.</p>  | <p>In Rally, operators click the Quick Links to access reports.</p> <ul style="list-style-type: none"> • Print hard copies of desired reports and export soft copies in available formats using the report export tool. |
| <p>18. In Tally, consult reports to verify that all expected Rally station MBB data has been received.</p> <p>Existing Reports</p>  | <ul style="list-style-type: none"> <input type="checkbox"/> Click the Reporting Quick Link, and view/print the following: <ul style="list-style-type: none"> • “MBB Status Report”, filtered for MBBs read • “Precinct Election Day Status (with MBB IDs)” report, sorted by precinct <input type="checkbox"/> Tally and Rally stations should confirm (e.g., via mobile phone contact) the following: <ul style="list-style-type: none"> • All polling places/precincts expected to report have been confirmed as reported • All expected MBBs have been processed in Rally • All expected data has been received in Tally before a Rally station operator logs off |
| <p>19. Exit Rally.</p>  | <p>Rally databases should be archived, but this step can be performed at a later date.</p> <p>See: “Appendix D: Backing Up Election Databases” on page 115.</p> |

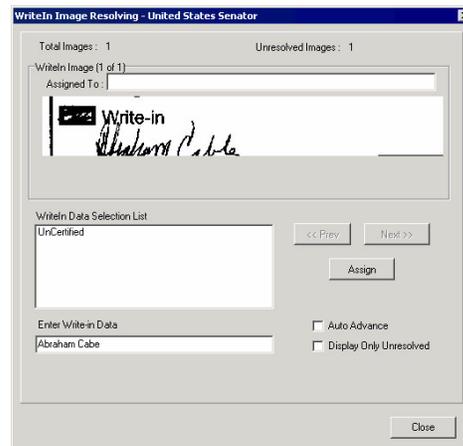
| Steps: | Details: |
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| <p>20. From each Rally station, transport processed MBBs and Rally reports to the counting station.</p>  | |
| <p>21. In Tally, after processing all MBBs, process Early Voting Retrievable ballots, if applicable.</p>  <p>OR Import retrievable data.</p> <p>See:</p> <p>“Tally Install Settings” on page 12.</p> <p>“Appendix I: Importing Data” on page 155.</p> | <p><input type="checkbox"/> Click the Retrieval Ballots Quick Link.</p> <ul style="list-style-type: none"> • Select a column heading to sort on that column, for example,  • Right-click a Status cell in order to change a single ballot's status  <ul style="list-style-type: none"> • OR Use Ctrl-click or Shift-click to select several rows, then right-click to change the status of multiple ballots  <ul style="list-style-type: none"> • Select the Confirm box for each ballot for which the status has been finalized and print the “Retrieval Ballot” report. <p><input type="checkbox"/> Early Voting Retrieval resolution is also available after finalizing the database.</p> |

| Steps: | Details: |
|---|--|
| <p>22. Include or confirm exclusion of provisional ballots, if applicable.</p>  <p>OR Import provisional data.</p> <p>See: “Tally Install Settings” on page 12. “Appendix I: Importing Data” on page 155.</p> | <ul style="list-style-type: none"> <input type="checkbox"/> Click the Provisional Ballots Quick Link. <ul style="list-style-type: none"> • Select a column heading to sort on that column.  • Click a Status cell in order to change a single ballot's status.  • OR Use <u>Ctrl</u>-click or <u>Shift</u>-click to select several rows, then right-click to change the status of multiple ballots.  • Select the Confirm box for each ballot for which the status has been verified. <p><input type="checkbox"/> Provisional ballot resolution is also available after finalizing the database.</p> |
| <p>23. Parse provisional ballots, if applicable.</p>  <p>OR Import provisional data.</p> <p>See: “Tally Install Settings” on page 12. “Appendix I: Importing Data” on page 155.</p> | <ul style="list-style-type: none"> <input type="checkbox"/> Provisional parsing modifies the tabulation of the provisional ballot so that only those contests on the voter's true voting precinct ballot will be reported. <input type="checkbox"/> During Tally installation, settings are selected enabling parsed ballots to report to either the original (voted) precinct or the reassigned (true) precinct. <p>See: “Tally Install Settings” on page 12.</p> <ul style="list-style-type: none"> <input type="checkbox"/> To parse a ballot: <ul style="list-style-type: none"> • Select the precinct cell for the target ballot. • Right-click and select the target precinct to reassign the ballot to. • Select the Confirm box for each ballot for which the status has been verified. <p><input type="checkbox"/> Provisional parsing is also available after finalizing the database.</p> |
| <p>24. Print the “Ballot Status” report for provisional ballots, if applicable.</p> | <ul style="list-style-type: none"> <input type="checkbox"/> Click the Reporting tab and double-click Ballot Status in the list of reports. <input type="checkbox"/> In the Ballot Status field, select Included. <input type="checkbox"/> In the Ballot Type field, select Provisional. <input type="checkbox"/> Click OK and print the report. |

| Steps: | Details: |
|---|--|
| <p>25. Resolve votes for write-in candidates, if applicable.</p> <p>25.1 Resolve write-in votes from the eSlate and Ballot Now.</p>  | <p><input type="checkbox"/> Click the Write-In Resolution Quick Link.</p> <ul style="list-style-type: none"> • Add qualified write-in candidates and aliases. <ul style="list-style-type: none"> > To add candidates after reading MBBs, highlight and click the full and correct spelling of the candidate name in the Unresolved Write-in Votes panel. In the Add Write-In Candidate window, click the Add button, and then click the Save button to move the candidate over to the Candidates/Aliases panel. > If there is a blank entry in the Unresolved Write-in Votes panel, then a voter has selected a write-in option, but entered no data.  <ul style="list-style-type: none"> • To assign unresolved votes to candidates, select the target candidate in the Candidates/Aliases panel, select the target alias name in the Unresolved Write-in Votes panel, and select the uppermost left-pointing arrow. • To reject unresolved votes, select the target name in the Unresolved Write-in Votes panel and select the lower left-pointing arrow to assign these to the Rejected Write-in Votes panel. <ul style="list-style-type: none"> > Use <u>C</u>trl-click and <u>S</u>hift-click to make multiple selections. <p>Note: You can also resolve write-in candidates after finalizing the database.</p> |

Steps:**25.2 Resolve write-in images and votes from the eScan.****Before Write-In Resolution****After Write-In Resolution****Details:**

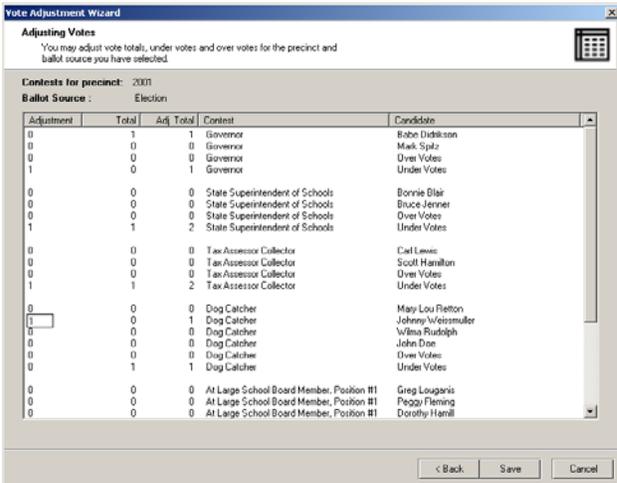
- Click the **Write-In Resolution** Quick Link.
 - Resolve write-in images so Tally can recognize them.
 - > Select a contest with write-ins and select the **Resolve Images** button.
 - > Enter the name of the write-in candidate in the **Enter Write-in Data** field of the **WriteIn Image Resolving - <contest name>** window and select the **Assign** button.
 - > *OR* Select the name from the **WriteIn Data Selection List**.



- > Select the **Close** button in the **WriteIn Image Resolving - <contest name>** window. The name is added to the contest's **Unresolved Write-In Votes** list.
- Resolve write-in votes using the same resolution process as eSlate and Ballot Now.
 - > Add qualified write-in candidates and aliases.
 - > Assign unresolved votes to candidates.
 - > Reject unresolved votes.

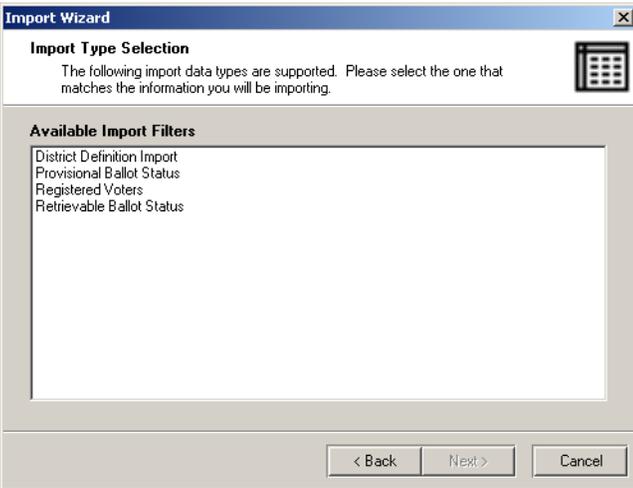
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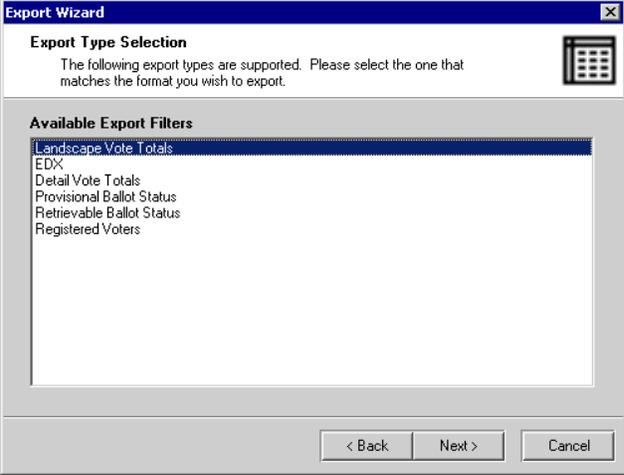
See step 25.1 on page 85 for more detailed instructions on resolving write-in votes.

| Steps: | Details: |
|---|---|
| <p>26. Calculate vote adjustments, if applicable.</p>  | <p><input type="checkbox"/> Go to the Options menu and click Vote Adjustments.</p> <ul style="list-style-type: none"> • Select the precinct (and split, if applicable). • If adjusting votes for a primary election, select the party. • Select the ballot source (Early Voting, Absentee, or Election Day). • For each contest on a ballot, enter the adjustment to the appropriate option by selecting the corresponding item in the Adjustment column. <ul style="list-style-type: none"> > Enter adjustments for overvoted and undervoted contests, in addition to properly marked ones. <p>Tip(s):</p> <p>Think of manual vote adjustments as being made <i>per ballot</i>.</p> <p>The number of ballots voted is calculated based on the maximum number of votes for any one contest in a precinct/split. For this reason, it is important that overvotes (e.g., for paper ballot adjustments) and undervotes be accurately registered.</p> <p><input type="checkbox"/> You can also adjust votes after finalizing the database.</p> |
| <p>27. For risk-reduction and archival purposes, back up the Tally database to a time-stamped folder before finalizing.</p>  | <p><input type="checkbox"/> Click the Election Information Quick Link.</p> <p><input type="checkbox"/> The Backup button in the Election Information window will back up the original TallyData.db and TallyData.cfg files to another location on the PC hard drive.</p> <p><input type="checkbox"/> The file path to the Tally database folder (identified in the Election Databases panel of the Tally window) is: C:\Program Files\Hart InterCivic\Tally\Database\YearMonthDay-HourMinuteSecond (YYMMDD-HHMMSS).</p> <p>See:</p> <p>“Appendix D: Backing Up Election Databases” on page 115.</p> |

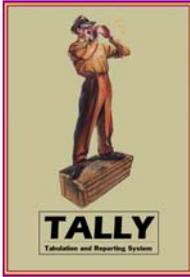
| Steps: | Details: |
|--|--|
| <p>28. After all MBBs have been processed, finalize the election in Tally.</p> <div data-bbox="240 302 621 380" style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p>Database</p> <div style="display: flex; gap: 10px;"> Backup Restore Finalize </div> </div> | <ul style="list-style-type: none"> <input type="checkbox"/> Before finalizing, read spare MBBs that were not used in the election in order to account for all MBBs. <input type="checkbox"/> You can finalize the database before processing Early Voting retrievable ballots, provisional ballots, write-ins, or vote adjustments. <input type="checkbox"/> To finalize, click the Election Information Quick Link and click the Finalize button. |
| <p>29. Print standard reports.</p> <div data-bbox="123 600 740 1129" style="border: 1px solid black; padding: 5px;"> </div> | <ul style="list-style-type: none"> <input type="checkbox"/> In Tally, after finalizing, report labels default to “Official”. To change labeling to “Unofficial”, go to the Options menu and click the Reporting Options tab. <input type="checkbox"/> Print hard copies of desired reports. <input type="checkbox"/> Export soft copies of desired reports in available formats via the report export tool. <div data-bbox="1057 810 1133 877" style="text-align: center; margin: 10px 0;"> </div> <p>Tip(s): Back up the database after releasing each set of reports as a risk-reduction step.</p> <p>See: “Appendix D: Backing Up Election Databases” on page 115.</p> |

| Steps: | Details: |
|---|---|
| <p>30. Create and print Custom Reports by clicking the Tally Report Wizard button in the Reporting window.</p> <div data-bbox="316 338 734 464" style="border: 1px solid gray; padding: 5px; margin-bottom: 10px;"> <p style="text-align: center;">Report Management</p> <p style="text-align: center;"> <input type="button" value="Report Wizard"/> <input type="button" value="Delete"/> </p> </div> <div data-bbox="203 531 842 1020" style="border: 1px solid gray; padding: 5px;"> <p>Custom Report Wizard</p> <p>Report Definition When defining your custom report, you may select an existing report as your foundation or import a report into the system.</p> <p>Report Name - Enter the name you want to call the report for future reference. <input type="text" value="Key Precincts Report Form"/></p> <p>Base Report - Select the report you want to use as the basis of your custom report. <input type="text" value="Cumulative.rpt"/> <input type="button" value="Browse ..."/></p> <p>Report Title - Enter the title you want to appear on the top of the report. <input type="text" value="Key Precincts Report"/></p> <p style="text-align: right;"> <input type="button" value=" < Back"/> <input type="button" value=" Next > "/> <input type="button" value=" Cancel"/> </p> </div> | <p><input type="checkbox"/> Create and print district reports with the Report Wizard.</p> <ol style="list-style-type: none"> A. Enter a unique Report Name that will appear in the Tally reports list. B. Select a Base Report using the drop-down arrow. C. Enter a unique Report Title to appear at the top of the report. D. Select Next and follow prompts. <ul style="list-style-type: none"> > In the Precinct Filter step, choose the desired district from the drop-down list and all associated precincts will be selected for the report, or create a new set of precincts. <div data-bbox="922 724 1474 1142" style="border: 1px solid gray; padding: 5px; margin-bottom: 10px;"> <p>Custom Report Wizard</p> <p>Precinct Selection Here you will select the precincts that will appear on your report. Your selections will be saved so that you can use them on future reports.</p> <p>Precinct Filters Select an existing filter, or type the name of a new one and select the desired precincts.</p> <p><input type="text" value="Key Precincts"/></p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> 2001 <input checked="" type="checkbox"/> 2002 <input checked="" type="checkbox"/> 2003 <input checked="" type="checkbox"/> 2004 <input checked="" type="checkbox"/> 2005 <input checked="" type="checkbox"/> 2006 <input checked="" type="checkbox"/> 2007 <input checked="" type="checkbox"/> 2008 <input checked="" type="checkbox"/> 2009 <input checked="" type="checkbox"/> 2010 <input type="checkbox"/> 2011 <p style="text-align: right;"> <input type="button" value=" < Back"/> <input type="button" value=" Next > "/> <input type="button" value=" Cancel"/> </p> </div> <p><input type="checkbox"/> If a previously undefined district is needed for reports, go to the File menu and click Import to import a .csv or .txt district definition file.</p> <p>See: "Appendix I: Importing Data" on page 155.</p> |
| <p>31. For risk-reduction and archival purposes, back up the Tally database to a time-stamped folder.</p> <div data-bbox="337 1493 717 1566" style="border: 1px solid gray; padding: 5px; margin-bottom: 10px;"> <p style="text-align: center;">Database</p> <p style="text-align: center;"> <input type="button" value="Backup"/> <input type="button" value="Restore"/> <input type="button" value="Finalize"/> </p> </div> | <p><input type="checkbox"/> Click the Election Information Quick Link.</p> <p><input type="checkbox"/> The Backup button in the Election Information window will back up the original TallyData.db and TallyData.cfg files to another location on the PC hard drive.</p> <p><input type="checkbox"/> The file path to the Tally database folder (identified in the Election Databases panel of the Tally window) is: C:\Program Files\Hart InterCivic\Tally\Database\YearMonthDay-HourMinuteSecond (YYMMDD-HHMMSS).</p> <p>See: "Appendix D: Backing Up Election Databases" on page 115.</p> |

| Steps: | Details: |
|--|---|
| <p>32. Import data, if necessary.</p>  | <ul style="list-style-type: none"> <input type="checkbox"/> Go to the File menu and click Import to import files via the Tally Import Wizard. <input type="checkbox"/> Importing data may be performed at any time. <input type="checkbox"/> Import types include: <ul style="list-style-type: none"> • District Definition - to update precinct/district associations • Provisional Ballot Status - to update include/exclude status and parsing of provisional ballots • Registered Voters - to update the number of registered voters per precinct as defined in BOSS • Retrievable Ballot Status - to update include/exclude status of retrievable ballots. <p>Tip(s): Import files may originate from a Voter Registration system.</p> <p>See: “Appendix I: Importing Data” on page 155.</p> |
| <p>33. If data was imported, repeat reporting and database backup steps.</p>  <p style="text-align: center;">Database</p> <p style="text-align: center;">Backup Restore Finalize</p> | |

| Steps: | Details: |
|---|--|
| <p>34. Export data, if necessary.</p>  | <ul style="list-style-type: none"> <input type="checkbox"/> Go to the File menu and click Export to export files via the Tally Export Wizard. <input type="checkbox"/> Exporting data may be performed at any time. <input type="checkbox"/> Export types include: <ul style="list-style-type: none"> • Landscape Vote Totals - aggregated vote totals in a landscape .txt format • EDX - Election Data eXchange XML format for integration with other systems • Detail Vote Totals - filtered for Absentee, Early Voting, and/or Election Day results in .txt format • Provisional Ballot Status - codes included/accepted and excluded/rejected in .txt format • Retrievable Ballot Status - codes included/accepted and excluded/rejected in .txt format • Registered Voters - registered voter data in .csv format <p>Note: When creating Registered Voters export files for primary elections, select the Export By Party checkbox so the vote totals can be re-imported.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Also export reports with the Export tool available in each Tally report toolbar. <p>See: "Appendix J: Exporting Data" on page 163.</p> |
| <p>35. Exit Tally.</p>  | <p>Go to the File menu and click Exit.</p> |

Notes:

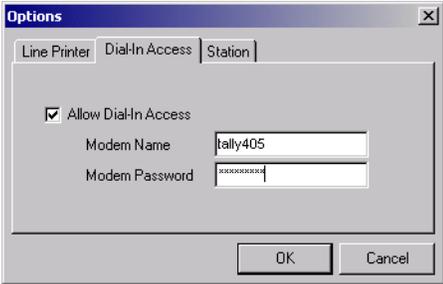
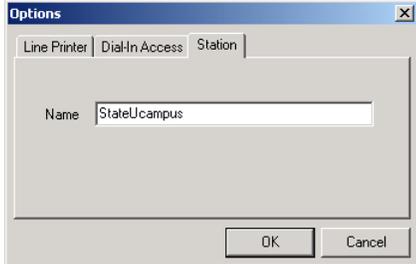


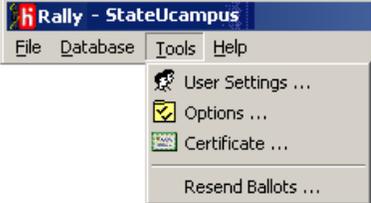
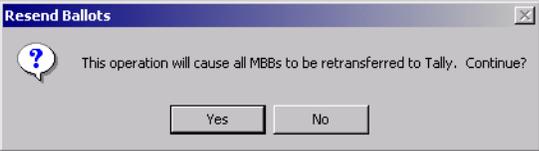
Chapter 6

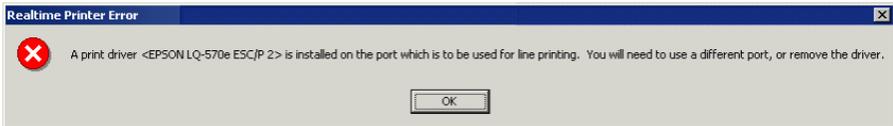
Tally-Rally Troubleshooting

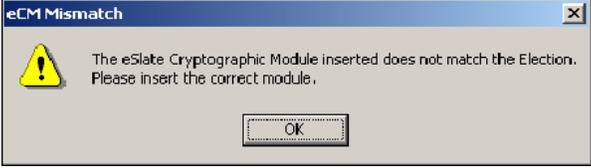
The following table presents possible Tally-Rally issues and resolution steps for each.

| Problem: | Resolution Steps: |
|--|---|
| <p>Connection from Tally is repeatedly unsuccessful</p> | <ol style="list-style-type: none"> 1. Check LAN and/or modem wiring connections. 2. Verify that the Tally application has the correct phone number(s) and IP address(es) entered for each Rally station. <p>See: “Appendix F: Windows Tally and Rally Modem Setup” on page 121.</p> <ol style="list-style-type: none"> 3. Verify that the election event Tally operator has correct user permissions on each Rally station’s PC. 4. Verify that the Tally operator is logged into Tally with the correct User ID and password. <div data-bbox="782 976 1315 1207" data-label="Image"> </div> <ol style="list-style-type: none"> 5. Verify that both Tally and Rally have accepted certificates from each other. <ol style="list-style-type: none"> 5.1 In Tally, the Rally Configuration window will indicate whether the station is trusted (Yes), or not (No). 5.2 In Rally, check the “Internal Audit Report” to see that the Tally certificate has been accepted. 5.3 If either Rally or Tally has not accepted the other’s certificate, log out of both applications and log back in. Attempt connection from Tally. <ol style="list-style-type: none"> 5.31 Tally operator should highlight the target Rally station in the Rally Configuration window and select the Connect Now button. |

| Problem: | Resolution Steps: |
|--|--|
| <p>Connection from Tally is repeatedly unsuccessful (continued)</p> | <p>6. If using a modem connection, verify that Tally's Rally Configuration settings match the Modem Name and Modem Password on the Dial-in Access tab in Rally, and that Allow Dial-in Access is enabled.</p>  <p>7. If using a modem connection, verify that the Tally and Rally PC modems are configured to the same maximum speed.</p> <p>See: "Appendix F: Windows Tally and Rally Modem Setup" on page 121.</p> <p>8. If using a modem connection, check the Windows OS password policy for the Tally modem user name on the Rally PC to make certain that the maximum password age has not expired.</p> <p>9. Verify Rally's station name:</p> <ol style="list-style-type: none"> 9.1 Go to the Tools menu and click Options. Click the Station tab and view the Name field. 9.2 Make sure the Name field matches Tally's Rally Configuration window Rally Station Name field. 9.3 The station name is <i>not</i> the Rally PC name or the current Rally operator's User ID.  <p>10. If necessary, exit Rally, restart the PC, and then open Rally and log in.</p> |

| Problem: | Resolution Steps: |
|--|--|
| <p>Connection from Tally initially successful, but then interrupted and lost</p> <p>AND</p> <p>Tally did not receive data</p> | <ol style="list-style-type: none"> 1. Check connections. 2. Resend the ballots in Rally, and Rally will re-submit them when Tally makes the next connection: <ol style="list-style-type: none"> 2.1 Go to the Tools menu and click Resend Ballots.  <ol style="list-style-type: none"> 2.2 Click Yes in the Resend Ballots dialog box.  <ol style="list-style-type: none"> 2.3 Tally rereads all ballot data from this Rally station on the next connection. Tally rejects any ballot data that it has already successfully processed. <p> Do <i>not</i> reread MBBs at the Rally station. MBB data is not reset with the Resend Ballots command.</p> <p> Do <i>not</i> attempt to reset the Rally database.</p> |
| <p>Login to Rally unsuccessful</p> | <ol style="list-style-type: none"> 1. Verify the spelling, case, and spacing of the User ID and Password. 2. A user with appropriate permissions may add users. |
| <p>MBBs are not reading into Rally</p> | <ol style="list-style-type: none"> 1. Check that ONLY ONE card device is connected to the PC. 2. Check the card device connection to a USB port on the PC. 3. Check that the card device's green light is on (power indicator). 4. Exit Rally, shut down the PC, insert an MBB into the card device, power on the PC, and log in to Rally. |
| <p>Rally displays an MBB information message</p> |  <ol style="list-style-type: none"> 1. Read the message and check the Rally window and reports to confirm information. 2. Click OK and continue operations. |

| Problem: | Resolution Steps: |
|---|---|
| Rally displays a printer error message |  <ol style="list-style-type: none">1. Click OK in the Realtime Printer Error dialog box.2. Exit Rally.3. Check the line printer.<ol style="list-style-type: none">3.1 Is it turned on?3.2 Is the paper jammed or has the paper run out?3.3 Is it connected to the Rally PC?4. Log in to Rally.5. If the problem persists:<ol style="list-style-type: none">5.1 Go to the Tools menu and click Options.5.2 Click the Line Printer tab and set the "Audit Printer Settings" to "FILE."5.3 Exit and re-enter Rally.5.4 The real-time audit report will print to a file named "FILE" in the directory, C:\Program Files\Hart InterCivic\Rally. <p>See: "Setting Up Rally's Real-Time Audit Log" in the <i>Rally Training Manual</i>.</p> |

| Problem: | Resolution Steps: |
|---|---|
| <p>Rally displays an eCM warning message</p> | <ol style="list-style-type: none"> <p>An eCM Missing message means that the eCM was not inserted into the USB port within 20 seconds of the attempt to read the first MBB. Insert the eCM and click Retry.</p>  <p>The dialog box titled "eCM Missing" contains a yellow warning icon and the text: "Please insert the eSlate Cryptographic Module and then select Retry." Below the text are "Retry" and "Cancel" buttons.</p> <p>An eCM PIN Failed message warns that the PIN entered is not correct for this eCM. Click OK and enter the correct PIN.</p>  <p>The dialog box titled "eCM PIN Failed" contains a yellow warning icon and the text: "An invalid eSlate Cryptographic Module PIN was entered." Below the text is an "OK" button.</p> <p>After five failed attempts the "Too many invalid PIN attempts" message appears. Click OK. Exit Rally. Obtain the correct PIN. Open Rally and retry.</p>  <p>The dialog box titled "eCM PIN Failed" contains a yellow warning icon and the text: "Too many invalid PIN attempts." Below the text is an "OK" button.</p> <p>An eCM Error with a code number usually means that the eCM is corrupt. Click OK and try another eCM written for this election.</p>  <p>The dialog box titled "eCM Error" contains a yellow warning icon and the text: "Invalid eSlate Cryptographic Module. Please insert a valid module." Below the text is the code: "Code: ecm0001" and an "OK" button.</p> <p>An eCM Mismatch message means the key ID does not match the election. Click OK and try another eCM written for this election.</p>  <p>The dialog box titled "eCM Mismatch" contains a yellow warning icon and the text: "The eSlate Cryptographic Module inserted does not match the Election. Please insert the correct module." Below the text is an "OK" button.</p> <p>A Multiple eCMs message indicates that there is more than one eCM inserted into the USB ports on the PC. Remove all but one eCM and click Retry.</p>  <p>The dialog box titled "Multiple eCMs" contains a yellow warning icon and the text: "More than one eSlate Cryptographic Module is connected. Please remove the unnecessary modules and select Retry." Below the text are "Retry" and "Cancel" buttons.</p> |

Notes:

Appendix A: Glossary

| Term: | Definition: |
|--|--|
| Abandoned Ballot | A ballot that the voter did not cast into the ballot box before leaving the polling place. On an eSlate, this is a ballot that the voter did not cast by pressing the CAST BALLOT button and the voter is not present. Local election rules dictate dispensation of an abandoned ballot. |
| Absentee Ballot | An official ballot issued to a voter who will be "absent" from the polling place on Election Day. |
| Absentee Voting | A voting method by which people can cast their ballots without going to the polling place on Election Day. Early Voting is sometimes referred to as "Absentee-in-person," and by-mail voting is sometimes referred to as "Absentee-by-mail." |
| Access Code | The four-digit number given to each voter that indicates to the eSlate system which precinct and ballot style to display to the voter on the eSlate voting unit. The Access Code is printed on a slip of paper printed on the JBC. |
| Access Code Status Report | A JBC report that is printed on-demand. It lists the number of Access Codes issued, voted, expired, canceled, and active. |
| Access Code Summary | A JBC report that is printed with the "Tally" report when polls are closed on Election Day. It lists the number of Access Codes issued, voted, expired, and canceled. |
| Americans with Disabilities Act (ADA) | A 1990 federal act (Public Law 101-336) that established comprehensive standards for the treatment of persons with disabilities in employment, public accommodations, and other programs, including those operated by state and local governments. |
| ATA | Advanced Technology Attachment; a disk drive implementation that integrates the controller on the disk drive itself. |
| Audio Card | Used in a DAU eSlate, the PC card that contains the audio prompt recordings for an election. Formerly also called a "DAU Card". |
| Audit Log, Audit Trail, Audit Report | Recorded information that allows elections officials to view the steps that occurred on the equipment included in an election to verify or reconstruct the steps followed without compromising ballot or voter secrecy. |
| Authentication | The verification of the identity of a person or process. In a communication system, authentication verifies that messages really come from their stated source, like the signature on a (paper) letter. |
| Ballot Box, eScan | A secure receptacle for the eScan that collects scanned paper ballots and that has an emergency compartment for temporary storage of voted ballots in case the eScan is disabled. |

| Term: | Definition: |
|---|---|
| Ballot Box Security Seal | The seal attached to the MBB door on a JBC or eScan to secure the installed MBB. Also, the seal attached to the lid/receptacle junction of the eScan ballot box. |
| Ballot Code | A unique number assigned to either a provisional ballot or an Early Voting retrievable ballot to enable swift retrieval of that ballot from the Hart Voting System Tally application by election officials. |
| Ballot Format | The arrangement of the ballot created in BOSS. Ballots may be formatted for the eSlate or for Ballot Now. |
| Ballot Instructions | Instructional text that appears at the top of the ballot. There are two separate types of Ballot Instruction text: (1) eSlate and (2) Ballot Now. There is also separate audio instruction associated with the eSlate ballot instruction. |
| Ballot Key | The unique alphanumeric identifier associated with each VBO cast vote record. This identifier aids in reconciling votes in case of a manual recount. |
| Ballot Now™ | The Hart Voting System software application that prints paper ballots on demand and then digitally images the voted ballots to save for delivery to Tally. |
| Ballot Now Image Processor | Ballot Now Image Processor (BNIP) is an application that runs in parallel with Ballot Now. After scanning ballots, BNIP processes ballot images. |
| Ballot Origination Software System™ (BOSS) | The software application used to build an election database and create ballot styles. BOSS is used to write the MBB, Audio, Solo, and Demo cards used in Hart Voting System equipment. |
| Ballot Style | <p>One of any number of specific ballot configurations issued to the appropriate precinct. At minimum, ballot styles differ from one another in content. They may also differ in size of type, in language used, or in method of presentation (e.g., visual or audio).</p> <p>A ballot with a unique collection of contests to be used in the election. Every precinct's (or split precinct's) ballot is linked to one ballot style and there may be several precincts with the same ballot style. The ballot style information is carried on the MBB. A ballot style barcode is printed on the ballot.</p> |
| Ballot Text | Instructional text embedded in the ballot. Ballot Text is often used to identify a section of the ballot. |
| Bar Code | A printed horizontal strip of vertical bars of varying widths, groups of which represent decimal digits. In the Hart Voting System, bar codes are required in order for paper ballots to be correctly scanned. Ballot Now uses bar codes to represent a ballot page's election identifier (ID), party ID, language ID, precinct ID, sheet ID, serial number (if applied), page number, ballot type, and duplex code. |
| Card Device | The PC-card drive for reading and writing Hart Voting System data and audio cards. |
| Cast Vote Record (CVR) | An anonymous record of the contest options that a voter selected on his/her cast ballot. In the Hart Voting System, Cast Vote Records are stored in electronic format. One Cast Vote Record is equivalent to one ballot. |

| Term: | Definition: |
|---|---|
| Challenged Ballot | Terminology and rules for “challenged ballots” or “challenged voters” vary by state. In general, a challenged ballot results when a voter’s right to cast a ballot in a certain jurisdiction is challenged for various procedural reasons. If the challenge stands, the voter may, in most cases, vote provisionally. |
| Contest | A choice to be made on the ballot; a race. Contest types include offices, issues, referendums, propositions and questions. |
| Credentials | Authentication information that enables access to operations in the system or associated databases. Credentials typically include user IDs and passwords. |
| Cumulative (Access Code) Summary | A summary on the JBC “Suspend Report” or “Daily Detail Report” that lists the Access Codes issued, voted, expired, and canceled for the entire session of Early Voting. |
| Cumulative Voting | The votes for each candidate in an office contest are replicated as many times as the number of valid choices. |
| Cyclic Redundancy Check | A continuous test of each transfer of data within a system to ensure that the data received at the end of the transfer is the same as the data originated by the source. |
| (Daily) Detail Report | A report that the JBC or eScan prints when the polls at an Early Voting site are suspended. This report identifies the number of ballots cast per precinct. |
| Daily (Access Code) Summary | A summary on the JBC “Suspend Report” and “Daily Detail Report” that lists the Access Codes issued, voted, expired, and canceled for only the current day of Early Voting. |
| Daisy Chain | Items connected in a series. The eSlates are daisy chained, one to another, with one plugging into the JBC. |
| Damaged Contest | In Ballot Now, a mark requiring resolution because the option box has been erased or partially erased (damaged). A damaged contest may be resolved for voter intent or confirmed. If confirmed, a damaged contest will register as no choice for that selection. This may result in fewer selections than allowed for that contest; i.e., an undervote. |
| Database | A storage point for information (data). |
| Demo Card | An ATA memory card that contains both ballot and audio data for use in a Demonstration eSlate. |
| Demonstration eSlate (Demo) | An eSlate set up for voter education purposes, to allow voters to practice using the eSlate buttons and interface (including headphones and adaptive devices, if desired) on a functioning unit that cannot record votes. A Demonstration eSlate does not require a JBC in order to display ballots because it uses a special ATA memory card that contains both ballot and audio data. Demonstration eSlates are also known as “demo units.” |
| Digital Signature | An encrypted digital code appended to data, making it possible to require authentication before allowing access to that data. |
| Direct Record Electronic (DRE) | The election industry term for an electronic machine at which a voter can view, vote, and cast a ballot. |

| Term: | Definition: |
|---|---|
| Disabled Access Unit™ (DAU) | An eSlate that includes accessory components so that disabled persons can vote independently and privately. DAU eSlates include a module that accepts audio cards so that voters can listen to the ballot with headphones. DAU eSlates also have jacks for tactile input switches or “sip and puff” devices so that voters with limited mobility have alternatives to the SELECT wheel. |
| District | A selection of precincts and/or split precincts that determine a voting group. |
| Duplicate Ballot | During scanning, if serial numbers were printed on ballots, Ballot Now will search the database for an identical ballot serial number every time a ballot is scanned, and disallow the ballot if it is a duplicate. |
| Duplex | Two-sided. In Ballot Now ballots are printed and scanned on both sides of the ballot sheet. The eScan scans both sides of the ballot sheet. |
| Early Voting | In the Hart Voting System, the term for votes cast in-person prior to Election Day. Nomenclature for “Early Voting” varies from state to state in the U.S.A. (Absentee In-Person, Absentee Walk-In, etc.). Totals are not available from the polling place during the Early Voting period (i.e., no “Tally” report available). |
| Early Voting Retrievable Ballot | Ballots cast on the eSlate at Early Voting polling places that can be retrieved by Ballot Code from the Tally tabulation application by election officials. The Ballot Code is printed on the Retrieval Stub for an Early Voting retrievable ballot. A checkbox in BOSS must be selected in order to identify eSlate ballots cast during Early Voting as retrievable. |
| eCM | eSlate Cryptographic Module; a highly secure peripheral USB device provided by Hart InterCivic. The eCM contains the signing key, the key ID, and the eCM PIN required to perform certain functions in the Hart Voting System applications. |
| eCM Manager | The Hart InterCivic software application that manages approved security functions for use in the Hart Voting System. eCM Manager is used to create a signing key, and then write the signing key, key ID and eCM PIN to the eSlate Cryptographic Module (eCM). |
| eCM PIN | eSlate Cryptographic Module Personal Identification Number; a password selected by the jurisdiction system administrator before any signing keys are written. This PIN is used to access functions requiring the eCM. |
| EDX | Election Definition XML (eXtensible markup language); a format for election information data exchange. |
| Election Assistance Commission (EAC) | An independent federal commission that serves as a national clearinghouse and resource for the compilation of information and review of procedures with respect to the administration of federal elections. |
| Election ID | An election identification code that is unique for every election. The election ID is used internally by the software applications. |

| Term: | Definition: |
|---|--|
| Election Identification Report | A report that the JBC or eScan prints when the polling place ID is selected. The report contains the current date and time, jurisdiction name, election name, election date, polling place, and number of precincts enabled for the polling place. For Election Day, shows the name of all precincts enabled for the polling place. |
| Election Management System (EMS) | A set of processing functions and databases within a Voting System that define, develop and maintain election databases; perform election definition and setup functions; format ballots; count votes; consolidate and report results; and maintain audit trails. |
| Encryption | Any procedure used in cryptography to convert plaintext into ciphertext (encrypted message) in order to prevent any but the intended recipient from reading that data. |
| eScan™ | Hart InterCivic's precinct paper ballot scanning device. A paper ballot printed from Ballot Now can be scanned and recorded on this device. |
| eSlate® | Hart InterCivic's direct record electronic (DRE) voting device. An electronic ballot can be viewed, voted, and recorded on this device. |
| Event | In SERVO, a specific backup of a set of devices in SERVO. An Election MBB is required to create an Event. Each Event relates directly to either an Election or a Test Election. |
| FEC | Federal Election Commission, an independent federal regulatory agency. Voting systems regulation formerly assigned to this body have been transferred to the Elections Assistance Commission (EAC). |
| Finalized | In BOSS, the database status that prevents further data modification and writing of MBBs to make it available to Tally. In Tally, the database status that prevents further reading of votes from MBBs into Tally. |
| FireWire | A personal computer and digital video serial bus interface standard offering high-speed communications and isochronous real-time data services. FireWire (also known as i.Link or IEEE 1394) can be considered a successor technology to the SCSI Parallel Interface. FireWire is capable of transfer speeds of up to 400 megabits per second. |
| Firmware | Computer programs (software) stored in read-only memory (ROM) devices embedded in the system and not capable of being altered during system operation. For purposes of applying the Standards, firmware is considered a form of software. |
| Flash Memory | Reprogrammable, read only memory that is used in PC cards or MBBs. Flash Memory does not require continuous electric power to operate. It is a system that can store more data and work faster than a traditional floppy disk. |
| Fractional Cumulative Voting | A voter selects at least one candidate in a contest that allows votes for multiple options, but selects fewer than the number of options allowed. The unvoted options that were allowable are distributed equally to the voted options. |
| Functionality Test | Testing of hardware functionality (e.g., testing to see that an eSlate button responds when pressed). |

| Term: | Definition: |
|---|---|
| Fusion™ | A supplemental Hart Voting System software application used to integrate data, as from Tally and another voting system, and/or to provide custom reporting. |
| Hart Voting System | The full suite of Hart InterCivic's election software and hardware products, covering everything from ballot creation to tabulation. Includes: BOSS, Ballot Now, eScan, JBC, eSlate, Rally, Tally, utility products, and SERVO. Previously referred to as the 'eSlate Electronic Voting System.' |
| Hash | Algorithm that maps a bit string of arbitrary length to a fixed-length bit string. Approved hash functions satisfy the following properties: (a) it is computationally infeasible to find any input that maps to any prespecified output, and (b) it is computationally infeasible to find any two distinct inputs that map to the same output. |
| HAVA | The Help America Vote Act, signed into law October, 2002. HAVA intends to assist states in the administration of federal elections and establishes "minimum standards for states and units of local governments with the responsibility for the administration of federal elections." |
| Incomplete Ballot | A multi-sheet ballot being scanned in a scan batch that has its first sheet, but is missing following sheets. |
| Infusion™ | A supplemental Hart Voting System software utility used to extract data, as from another voting system or voter registration system, and/or to provide ballot data formatted for import into BOSS. |
| Initialized Report | A report printed from the JBC and eScan any time the device is powered on. This report shows a timestamp, firmware version, and diagnostic test result. A self-diagnostic test is run on the system, and the result is indicated as "***PASS***" on the report. |
| Judge's Booth Controller™ (JBC) | The control unit of the eSlate system, through which a poll worker distributes electronic ballots to the eSlate and DAU eSlate. |
| Jurisdiction | A precinct or group of precincts managed by a single organization. |
| Key GUID | Key Globally Unique Identifier. A unique, system-generated value assigned to each signing key in the eCM Manager. |
| Key ID | A user-selected identification number that prompts the eCM Manager application to generate a new 128-bit encrypted signing key. Allowed values are from 1 to 99. |
| Locked Ballot | In Ballot Now, a ballot that is currently checked out in the resolve process for editing by a user. |
| Logic and Accuracy Test (L & A or LAT) | In the context of an election, a test to check the accuracy of a piece of voting equipment. An LAT is accomplished by feeding test ballots for which the results are already known (i.e., a "test deck") through the ballot counting system and comparing the results with the expected results. If an error occurs (i.e., the actual test deck count does not match the expected count), then the problem is investigated and corrected, and the test is repeated. |

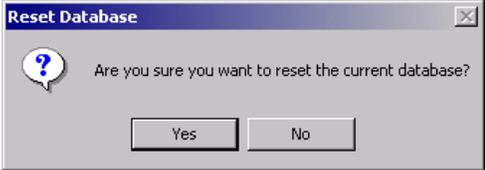
| Term: | Definition: |
|-------------------------------------|--|
| MBB, Election | An MBB used to collect votes for an election. The Election MBB can only contain information from Election ballots. |
| MBB, Test | An MBB used for test purposes when validating the eSlate system before an election. The Test MBB can only contain information from Test ballots. |
| Mobile Ballot Box™ (MBB) | A PC card that holds all of the ballot information for the Hart Voting System. An MBB is placed in the JBC unit, the eScan device, and/or in the Ballot Now computer. Cast Vote Records are also stored on MBBs, which are read into Tally. Audio is not stored on an MBB. |
| Network Configuration Report | A report printed on the JBC after booths are assigned. The report contains the serial number, software version, PUB count, and PVT count for the JBC and each eSlate unit. |
| Non-partisan Office | An elected office for which candidates run independent of political party affiliation. |
| Orphan Ballot | A multi-sheet ballot being scanned in a scan batch that has missing leading sheets. |
| Overvote | The generally prohibited practice of voting for more than the allotted number of options for a given contest. On the eSlate it is not possible to overvote. |
| Party | A political party, for example Democratic or Republican. |
| PC Card | An information storage device that is about the size of a credit card. Similar to a USB memory stick. It is also called a “PCMCIA” card. In the Hart Voting System it is called a Mobile Ballot Box (MBB), an audio card, or a demo card. |
| Persistence | A property of a programming language where created objects and variables continue to exist and retain their values between runs of the program. |
| Polling Place | The area within the polling location where voters cast ballots. Often a single polling place supports several precincts. |
| Polls Closed Report | Report printed by the JBC, VBO and/or eScan when the polls are closed. This report includes a timestamp indicating the date and time printed. |
| Polls Open Report | Report printed by the JBC, VBO and/or eScan when the polls are opened. This report includes a timestamp indicating the date and time printed. |
| Poll Worker Button | A button, located on the back panel of the eScan device, used to access poll worker and administrator functions. |
| Precinct | A jurisdiction subdivision for election purposes. |
| Precinct Voting System (PVS) | A legacy term for those components of the Hart Voting System that are used for election activities at individual polling places. |
| Provisional Ballot | A ballot provided to individuals who claim they are eligible to vote but whose eligibility cannot be confirmed when they present themselves to vote. Once voted, such ballots are not included in the tabulation until after the voter’s eligibility is confirmed. |

| Term: | Definition: |
|--------------------------------|--|
| Provisional Ballot Stub | A report that prints below the Access Code when a provisional ballot is requested during the “Add Voter” procedure on the JBC. This stub includes the Ballot Code used for ballot retrieval during the tabulation process. The stub must be separated from the Access Code and kept for ballot tracking purposes for this unique type of ballot. |
| Provisional Parsing | The process of selectively reporting on a provisional ballot only those contests in which a provisional voter is eligible to vote, based on his/her precinct of residence. Provisional parsing becomes necessary when the provisional voter has cast a ballot outside of his/her correct precinct, and the voted ballot style includes contests for which the voter is not eligible to vote. When the Tally software application is installed, users have the option to enable a provisional parsing interface. If enabled, once the Tally application has selectively identified (i.e., “parsed”) those contests on a provisional ballot for which voted options shall be reported, election officials can choose <i>how</i> to report results: cast votes may be associated with the original precinct in which the provisional ballot was actually cast, or they may be reassigned to the voter’s correct precinct. |
| Provisional Voter | A voter whose eligibility is yet to be determined at a given polling place. A provisional voter is allowed to vote on a “provisional ballot” under conditions set by state election law. Because the voter is “provisional”, his/her ballot must be retrievable by election officials under certain conditions that vary from state to state. |
| PUB (Public) Count | Also called the “ballot counter”. A six-digit number, shown on the JBC and eScan configuration reports and Polls Open screen, and in the Ballot Now window, that indicates how many votes have been counted, and CVRs recorded, on that machine for the current election. The public count of a device is reset to “zero” during warehouse operations between elections. |
| PVT (Private) Count | A six-digit number, shown on the JBC and eScan configuration reports and Polls Open screen, and in the Ballot Now window, that indicates how many ballots have been cast on that machine in its lifetime. CVRs are not associated with the private counter. The private counter cannot be zeroed. |
| Rally™ | The Hart Voting System application that reads, stores, and transfers CVRs via local area network or modem connection to a PC running the Tally application. |
| Replacement Ballot | A ballot that is designated by the election authority to be a replacement for a spoiled ballot. |
| Resolution | The Ballot Now task of assigning the voter’s intent to votes on ballots that contain an undervoted contest, an overvoted contest, or a contest with a selected write-in. Resolution may also exclude a completely blank ballot or a damaged ballot. |
| Sample Ballot | A ballot printed as a sample of the real election ballot. Sample ballots contain a special barcode which prevents them from being included as a CVR in an MBB. |
| Scan Batch | A group of ballot sheets to be scanned. Each scan batch has certain number of sheets. Ballot Now assigns and prints a sequence number when the ballots are printed. The user can assign comments to a scan batch in the Scan Ballots window prior to scanning the batch of ballots. |

| Term: | Definition: |
|-------------------------------|--|
| Select Wheel | The rotary wheel on the eSlate and DAU eSlate that allows a voter to navigate the ballot and highlight choices by turning the wheel. |
| Serial Number | A barcode and/or human-readable number placed on the ballot stub and/or the sheets of a ballot that uniquely identifies the ballot in order to prevent duplicate scanning of paper ballots. |
| SERVO™ | The eSlate application used as a System for Election Record Verification and Operations. This application is used for polling place equipment cast vote record backup, recovery, recount, and resetting. |
| Sheet | In reference to Ballot Now paper ballots, one piece of paper printed on both sides, i.e., duplex. Ballot Now ballots can consist of no more than 9 sheets. |
| Signing Key | A true 128-bit random number used to cryptographically protect data, making it possible to require authentication before allowing access to the data. In the Hart Voting System, the signing key is written to the eCM, JBCs, eScans, and MBBs. |
| Sip-and-Puff | A voter's personal input device that connects to the DAU eSlate in the disabled access jack. This enables disabled voters with extremely limited mobility to vote with a mouth-controlled device. |
| Split Precinct | The smallest division of a precinct for election purposes. |
| Spoiled Ballot | A ballot that has been rendered invalid by a voter who is still present at the polling place, making it necessary to give the voter a new ballot. With the eSlate, a ballot is spoiled if the voter gets the wrong ballot style, the wrong language, or is not on the DAU eSlate but needs to be. |
| SSL | Secure Sockets Layer; a protocol developed by Netscape for transmitting private documents via the Internet. SSL works by using a private key to encrypt data that is transferred over the SSL connection. |
| Straight Party Voting | A voting method that presents a contest that allows selection of a single political party in order to automatically select candidates of that party in contests that allow straight party voting. |
| Suspend Report | A JBC or eScan report that automatically prints when polls are suspended in Early Voting. For the JBC, the report lists the PUB count and PVT count of the JBC and eSlate units, a Daily (Access Code) Summary, and a Cumulative (Access Code) Summary, as well as a timestamp. |
| Tactile Input Switches | Also called "dual mode switches," "jelly switches," or "buddy buttons," these red and green "paddles" enable voters with disabilities to vote without using the SELECT wheel and ENTER button on the eSlate. Voters without fine motor control may use these. The red tactile input switch allows voters to navigate through the ballot, similar to turning the SELECT wheel in a clockwise direction. The green switch is similar to pressing the ENTER button. |
| Tally™ | The Hart Voting System tabulation software. After an election, the Tally software counts the votes on the MBB(s) and produces reports on those cast votes. |

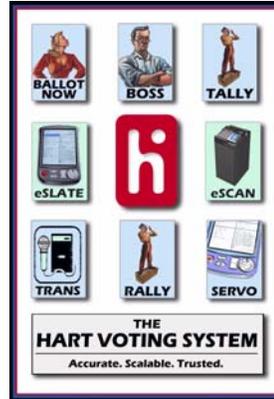
| Term: | Definition: |
|------------------------------------|---|
| Tally Report Tape | An Election Day report that may be printed on a JBC or eScan after polls are closed. It includes the date, time, precinct, a tally of votes for each contest, and an Access Code or ballot summary. BOSS includes a setting for allowing, or disallowing, this report to be printed from the JBC or eScan after close of polls on Election Day. |
| TRANS | Translation, Recording, and Audio Normalization System; an eSlate application for translating multi-language ballot text and for recording all audio (including English) to be imported into the BOSS database. |
| Undervote | The practice of voting for less than the total number of election contests listed on the ballot, or of voting for less than the number of options allotted for a given contest. |
| UPS | Uninterruptible Power Supply. |
| USB | Universal Serial Bus; an external peripheral interface standard for communication between a computer and other devices. In the Hart Voting System, an eCM connects to a USB port. |
| VBO | Verifiable Ballot Option; the Hart Voting System VVPAT (Voter-Verified Paper Audit Trail) device that can be connected to the eSlate or Demonstration eSlate inside the voting booth in order to print a paper record of each ballot cast. |
| Voter Registration Computer | An electronic poll book sometimes known as a “thin client” or “VR Computer.” |
| VVPAT | Voter-Verified Paper Audit Trail; Implemented in the Hart Voting System by the VBO (Verifiable Ballot Option) device. |
| WAV file | A file format (.wav) used for storing digital audio. TRANS audio is stored in .wav file format. |
| Write-in | A name of a candidate entered by the voter in order to vote for a candidate that is not listed on the ballot. |
| Write-in, certified | A candidate that has been certified by the election authority as being a valid write-in candidate for the election. |
| Write-in Voting | A means to cast a vote for an individual not listed on the ballot. |
| XLIFF | XML Localization Interchange File Format. A file type (.xlf) used by BOSS and TRANS for language text translation. |
| XML | eXtensible Markup Language. A structured, extensible, text-based data definition and data exchange format. TRANS uses an .xml file as a manifest, or index, to associated audio .wav files. |
| Zero Tape Report | A JBC or eScan report that prints out when polls are opened on the first day of Early Voting and on Election Day. This report lists the timestamp, the number of precincts at the polling place, the contests and candidates on the ballot, and verifies that the number of votes for each candidate or option is zero. |

Appendix B: Information, Confirmation, Error, and Warning Messages

| <i>Type of Message:</i> | <i>Explanation:</i> | <i>Example:</i> |
|--|---|--|
| <p>Information</p>  | <ul style="list-style-type: none"> <input type="checkbox"/> Informs about an operation <input type="checkbox"/> Includes an information icon <input type="checkbox"/> Includes an OK button |  |
| <p>Confirmation</p>  | <ul style="list-style-type: none"> <input type="checkbox"/> Asks user to confirm an action, particularly when the action cannot be reversed <input type="checkbox"/> May include text from the command performed <input type="checkbox"/> Includes a question mark icon <input type="checkbox"/> User responds with Yes or No |  |
| <p>Error</p>  | <ul style="list-style-type: none"> <input type="checkbox"/> First statement in error identifies the problem <input type="checkbox"/> Second statement may inform user of required action <input type="checkbox"/> Includes an error icon <input type="checkbox"/> Includes an OK button |  |
| <p>Warning</p>  | <ul style="list-style-type: none"> <input type="checkbox"/> Appears when the user must double-check a command <input type="checkbox"/> May include text from the command performed <input type="checkbox"/> Includes a warning icon <input type="checkbox"/> Includes an OK button |  |

Notes:

Appendix C: Hart Voting System Software User Tips



The following apply to ALL Hart Voting System programs.

Software Password, Certificate, and PIN Tips

Best Practices

- Do not give out an administrator password, applicable either to the PC where the Hart Voting System software is housed, or to a Hart Voting System application itself.
- Change every user ID, password, certificate, eCM key ID, signing key, and PIN(s) during PC acceptance and at regular intervals and in accordance with federal, state, and local guidelines.
- The user currently logged in should stay at the computer while running the application and exit the application if s/he steps away from the PC.

Avoid Using

- Any password you have used before
- Any string of three characters repeated or reversed
- Any character repeated more than twice
- Your name or your initials
- The computer or application user ID
- The names of relatives, birthdays, phone numbers or the company name
- The number for this year, last year or next year, or the three-character abbreviations for the months
- Telephone number or car license plate numbers

Do Use

- A combination of upper and lowercase letters
- A password that is at least 6 - 12 characters long
- A new password for every user at regularly scheduled intervals (e.g., annually or quarterly)
- Random characters users will remember

Tips for a Secure Password, Certificate, or PIN

- Use the first letters of the words in a memorable phrase.
- Use a meaningless but easy-to-remember phrase.
- Insert numbers into the phrase.
- Note the password, certificate information, and/or eCM PIN, in a private and secure location.

Computer Security

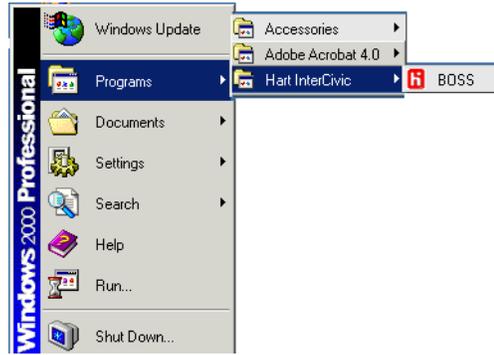
Computers running Hart InterCivic software should be kept in locked spaces with limited access. Password-protected screen savers or other similar security measures should be applied.

Software Features

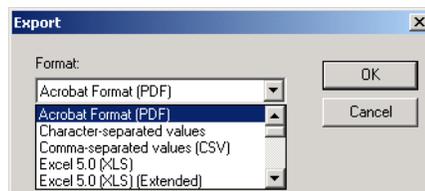
- ❑ Whichever button is shadowed/dotted inside a window is the button selected for activation with the keyboard Enter key.
- ❑ Whichever character on a menu or button is underlined indicates that the function may be activated with the Alt key and that character.



- ❑ In a menu, an arrow facing to the right opens a pop-up menu, offering more choices.



- ❑ In a dialog box, the arrow facing down opens a list box, offering more choices.



- ❑ Per application, to view the version release number (N.N.N), go to the **Help** menu and click **About**.



The following tips apply to specific software programs:

- BOSS, Ballot Now, Tally, and SERVO: To highlight/select a list of items (e.g., precincts) that are consecutive, use Shift + Click.
 1. Click the first item once.
 2. Hold down on Shift.
 3. Click the last item once.
 4. Release Shift.

- BOSS, Ballot Now, Tally, and SERVO: To highlight/select a list of items (e.g., precincts) that are *not* all consecutive, use Ctrl + Click.
 1. Click the first item.
 2. Hold Ctrl.
 3. Continue to click items, holding Ctrl, until you have selected all targeted items.
 4. Release Ctrl.

- Tally Copy and Paste:
 1. Select the item(s) you wish to copy.
(To select, click and drag over the item to highlight it.)
 2. Press Ctrl and then C (the shortcut key for copy).
 3. Make certain the cursor is blinking in the field you wish to paste into and press Ctrl + V to paste.
 4. You can copy and paste from one field to another (e.g., in write-in candidate and alias fields) by using Ctrl + a shortcut key (C,X,V), or by using standard right-click functionality.

- Tally: Test and Election mode MBBs are read into separate databases. This protects database integrity.
 - Only one opened Election mode database may exist for a unique BOSS database.

- Tally: A jurisdiction can opt to read unvoted MBBs that were written as spares into Tally. This allows the jurisdiction to account for all MBBs written for the election. Reports and the audit trail will reflect that MBBs are accounted for.

Notes:

Appendix D: Backing Up Election Databases

What Data to Back Up

The following database folders should be backed up to CD¹:

- eCM Manager; *.eCM file created with the **Save File** function
- BOSS; Numbered folder with BossData.db and BossData.cfg files
- Ballot Now Test; Numbered folder with the election I.D. followed by a “T” (e.g., 023T), in addition to the BNsecurity.db and BNsecurity.cfg files in the “Ballot Now” folder
- Ballot Now Election; Numbered folder with the election I.D. (e.g., 023), in addition to the BNsecurity.db and BNsecurity.cfg files in the “Ballot Now” folder
- Rally; “Database” folder with the Mbbtrans.db and Mbbtrans.cfg files
- Tally Test; Numbered folder with the TallyData.db and TallyData.cfg files
- Tally Election; Numbered folder with the TallyData.db and TallyData.cfg files
- SERVO; “Database” folder with the ServoData.db and ServoData.cfg files.

Locations of Election Database Folders for Backup:

- eCM Manager; after clicking **Save File**, use standard Windows navigation to navigate to a folder named for the election and to name the .eCM file.
- BOSS; C:\boss\Database\YearMonthDay-HourMinuteSecond (12 digits)
- Ballot Now; C:\Program Files\Hart Intercivic\Ballot Now\### (three-digit Election I.D.)
 - C:\Program Files\Hart Intercivic\Ballot Now\BNsecurity.db
 - C:\Program Files\Hart Intercivic\Ballot Now\BNsecurity.cfg
- Rally; C:\Program Files\Hart InterCivic\Rally\Database
- Tally; C:\Program Files\Hart InterCivic\Tally\Database\YearMonthDay-HourMinuteSecond (12 digits)
- SERVO; C:\Program Files\Hart InterCivic\SERVO\Database

Naming conventions for folders and CD files:

- Name each application’s backup folder with the application, election, type of election, and date of election. (Example: BOSSgeneral_11.02.04)
- Name the CD within the character limits for the CD creator application. The jurisdiction, election, and election date should be included. (Example: Smith_gen11.2.04)

How and When to Back Up Data

BOSS, Tally, and Rally include backup or archive functions within the user interface. An administrator-level user may use this function to back up the database and configuration files to a user-defined directory on the PC. Database and configuration files should always be saved to folders named for the election, the time and date, and the status of the database.

All application databases can be backed up by saving the folders indicated in the “Locations of Election Databases” section to a user-defined directory on the PC and/or directly to CD. These folders should always be saved to a directory (folder) named for the election, the time and date, and the status of the database.

- Back up the .eCM file:
 - Immediately after creating eCMs for the election.
- Back up the numbered BOSS database folder (or use the **Archive** function in BOSS):
 - Immediately before exporting text for translation
 - After importing translated text and audio
 - After completing all proofreading and before generating the ballot

1. If a database is too large for backup to CD, another medium will be required.

- After generating the ballot and writing media, but before finalizing the database
- After finalizing the database.
- Back up the numbered Ballot Now database folder and BNsecurity.db and BNsecurity.cfg files:
 - After closing the election in Ballot Now, at minimum.
- Back up the numbered Tally database folder (or use the **Backup** function in Tally):
 - After each instance of creating printed and exported reports for public use (e.g., media outlets)
 - After processing absentee by-mail MBBs on Election Day
 - After processing Early Voting MBBs
 - After each instance of creating printed and exported reports for public use (e.g., media outlets) on Election Day
 - After processing absentee by-mail late mail MBBs after Election Day
 - Before resolving write-in votes
 - Before resolving provisional ballots
 - Before finalizing
 - After finalizing
 - Immediately after Canvassing.
- Back up each Rally station “Database” folder (or use the **Archive** function in Rally):
 - After processing all MBBs and printing and exporting final reports and before resetting the Rally database (including before resetting the Rally database as an emergency procedure).
- Back up the SERVO “Database” folder:
 - After inventorying equipment with SERVO pre-election
 - After backing up equipment post-election
 - On the “master” SERVO PC after combining events into one “master” event for an election, if applicable.

Backing up to CD

In order to back up to a CD, use the CD creator application supplied with the Hart InterCivic PCs. Refer to the online help for the specific steps for creating a CD.

Hart InterCivic suggests using a CD-R rather than a CD-RW. A CD-R is a one-time use—you can only write to it once, and then you can only read off of it. A CD-RW is readable/writable, and can be used multiple times like a floppy disk—you can read and write to it as often as you want. CD-Rs are inexpensive, and the data on the CD itself cannot be changed. This makes the CD-R option a good media for backing up data.

- After creating a CD, always navigate to the CD drive and verify that the CD contains all of the data intended for backup.
- Label the CD with the Jurisdiction, Election Title, Date, and eSlate application.
- File the CD in a secure location.

Appendix E: Windows Tally and Rally LAN Setup

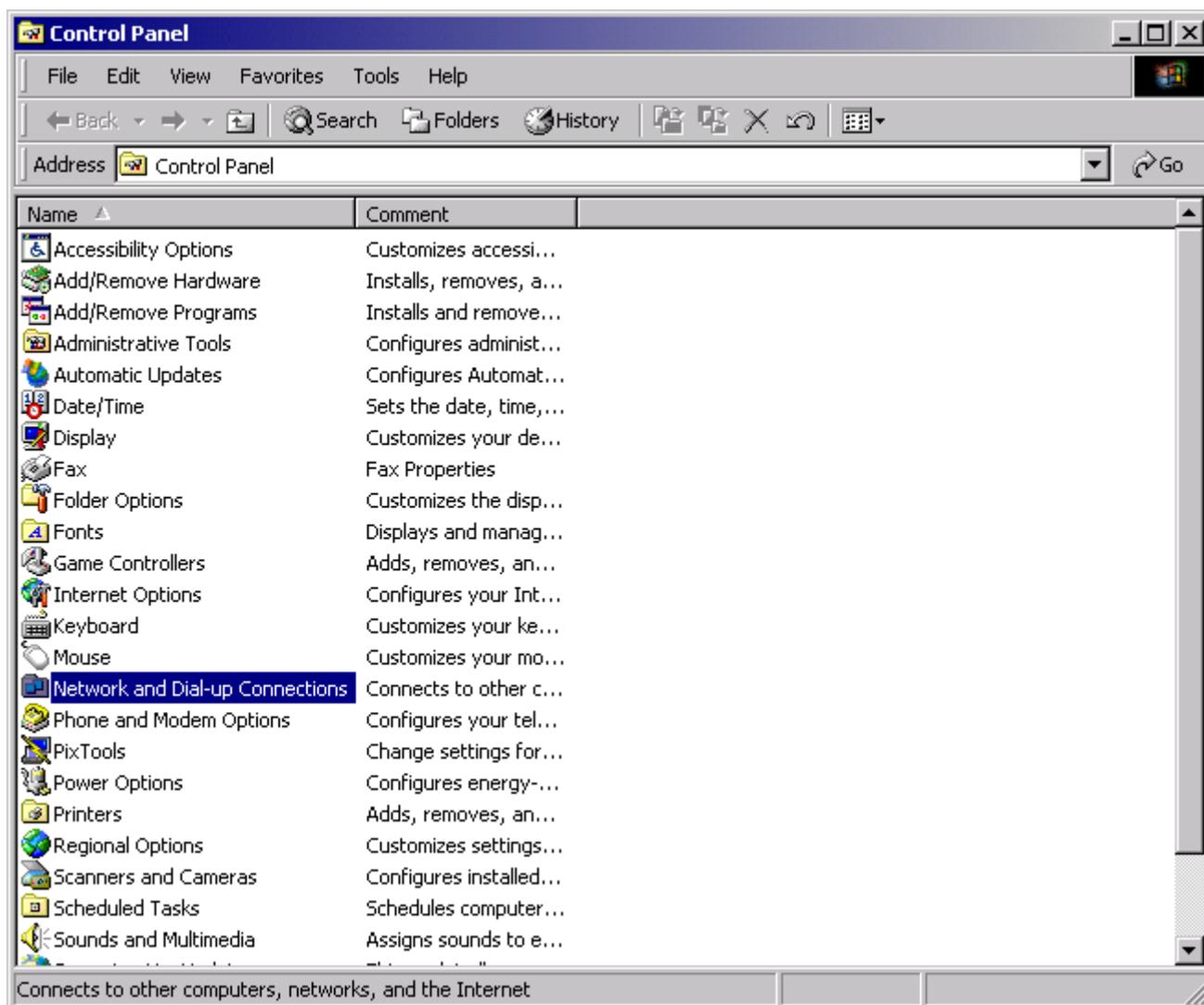
If using a Local Area Network (LAN) connection to communicate from Tally to Rally stations, Tally must be set up to communicate with the Rally stations, and Rally stations using LAN must be set up to accept Tally communications. All PCs must have unique IP addresses. The steps illustrated here outline setting up the proper LAN connections in a Windows 2000 environment after the LAN lines have been physically connected to the PCs. The actual windows that display may vary slightly per PC.

Note:

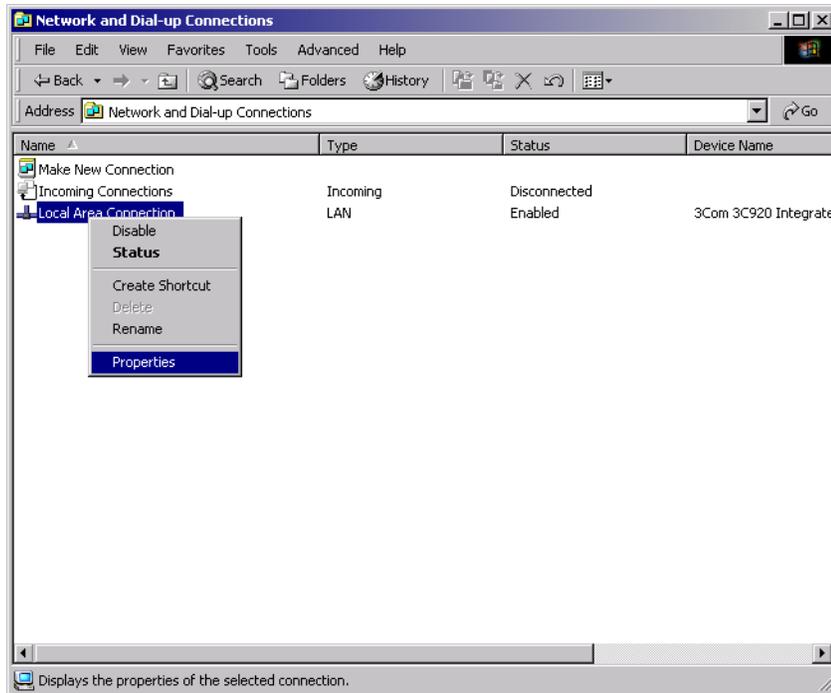
Tally can be set up to communicate with some Rally stations via LAN, and others via modem.

LAN Setup: At the Tally PC and at each LAN Rally PC

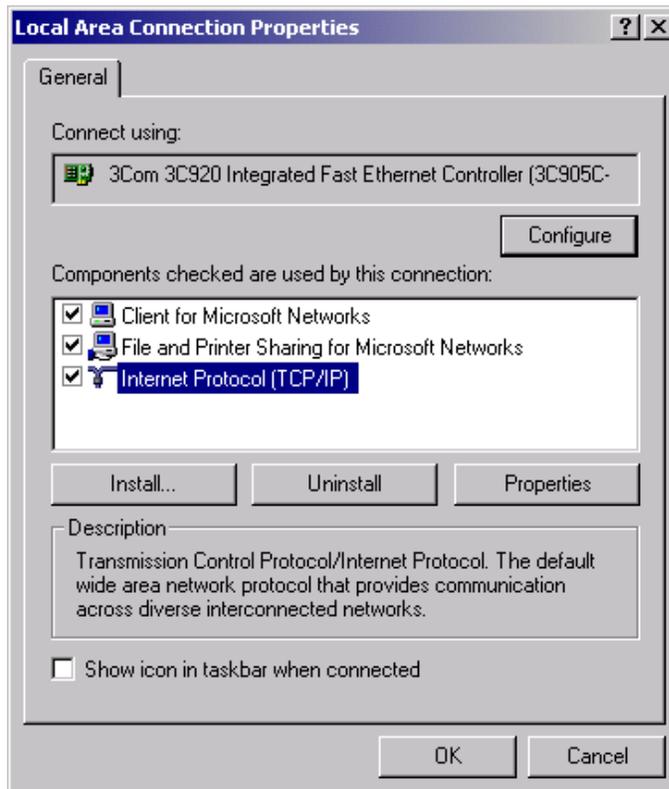
1. Close all applications.
2. Go to the PC Control Panel and double-click **Network and Dial-up Connections**.



3. Right-click the network card (“Local Area Connection” in this illustration), and select **Properties**.

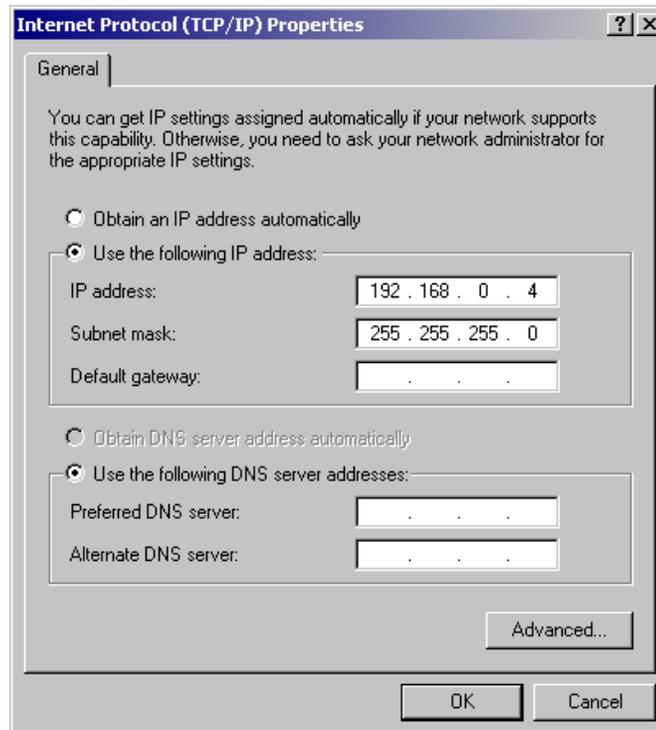


4. Verify that the **Internet Protocol (TCP/IP)** network component is checked, highlight it, and click the **Properties** button.

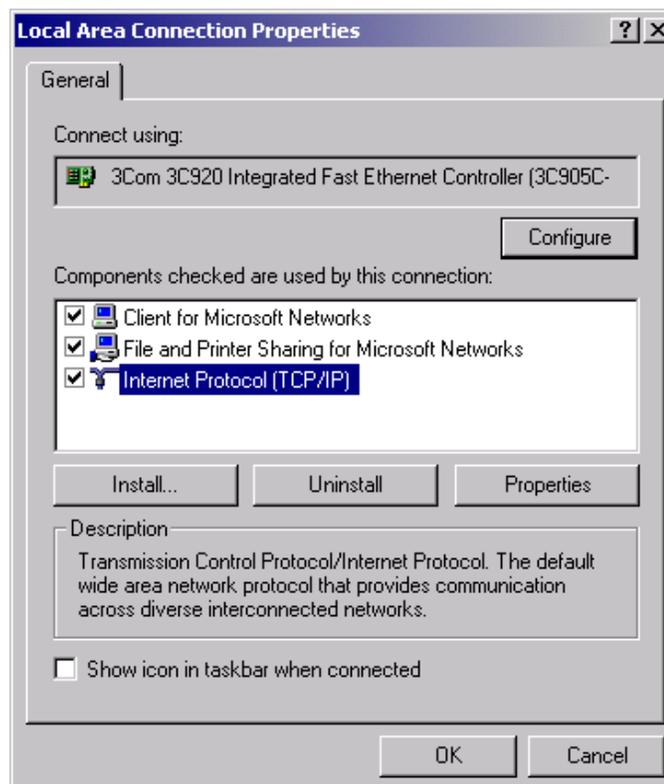


5. Select the **Use the following IP address** radio button, enter the Tally or Rally PC's unique IP address, and press **Tab**.
6. Click the **Subnet mask** field, and it will autofill.

7. Click **OK**.



8. Click **OK** and exit the Control Panel.



9. Repeat for each Tally and Rally PC. All PCs must have unique IP address. This concludes LAN setup for Tally and Rally PCs. Next, set up user permissions, Tally's **Rally Configuration** settings, and Rally's **Options** settings.

See:

- “Tally User Permissions and Certificate” on page 15.
- “Coordinating Definitions in Tally and Rally” on page 63.

Notes:

Appendix F: Windows Tally and Rally Modem Setup

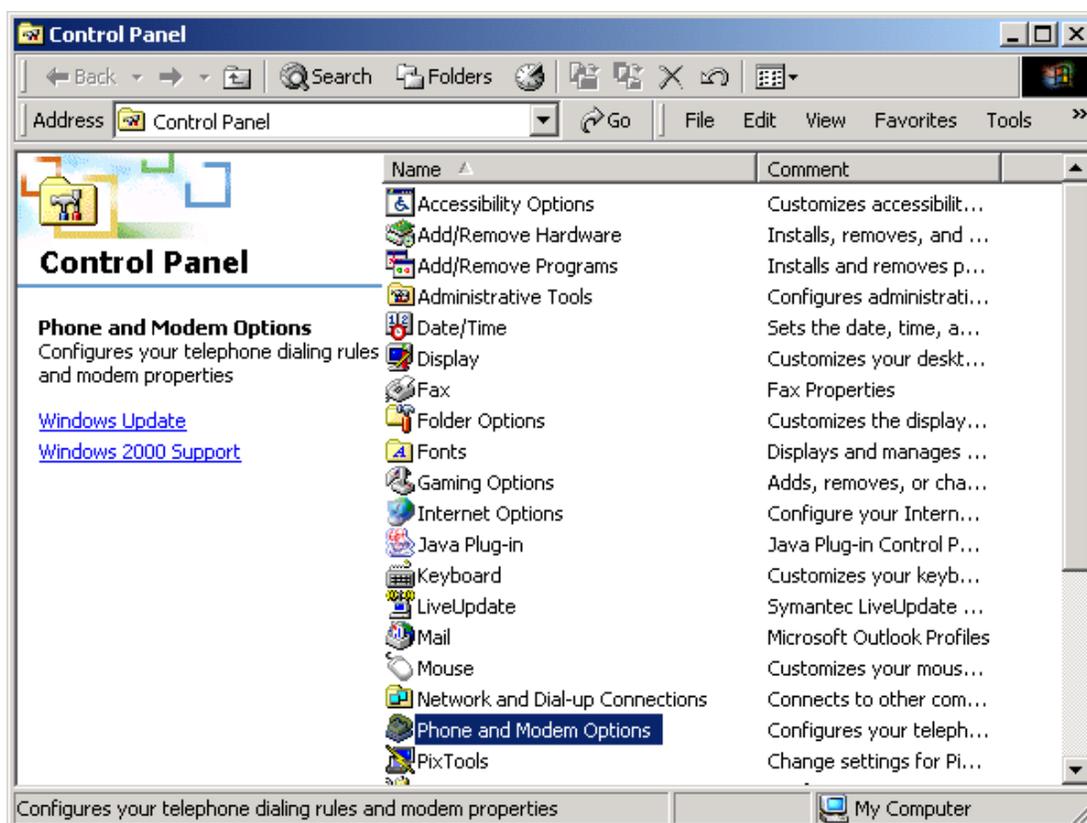
If using a modem connection to communicate from Tally to Rally stations, Tally must be set up to dial out to the Rally stations, and the Rally stations using modems must be set up to accept incoming calls. All PCs must have unique IP addresses. The steps illustrated here outline setting up the proper modem connections in a Windows 2000 environment after the modems have been physically connected to the PCs. The actual windows that display may vary slightly per PC.

Note:

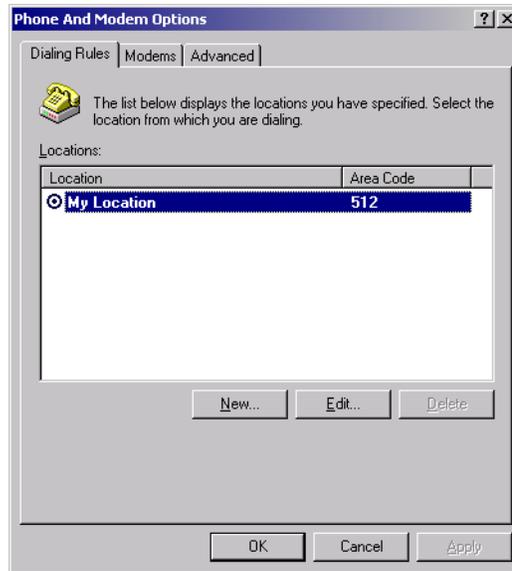
Tally can be set up to communicate with some Rally stations via LAN, and others via modem.

Modem Setup Part 1: At the Tally PC Using a Modem

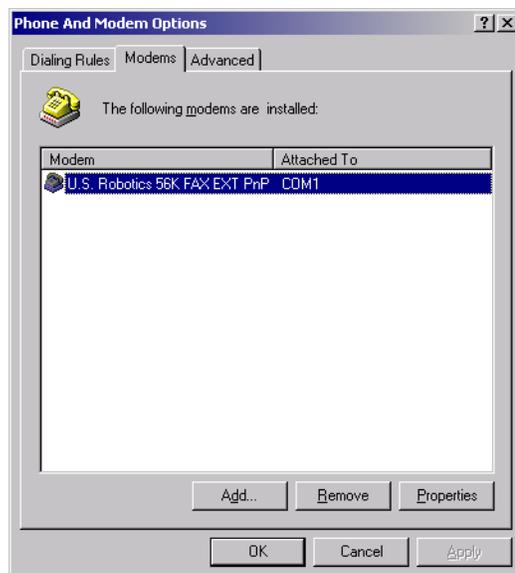
1. Close all applications.
2. Install a modem that is compatible with the Tally PC.
3. Go to the PC Control Panel and double-click **Phone and Modem Options**.



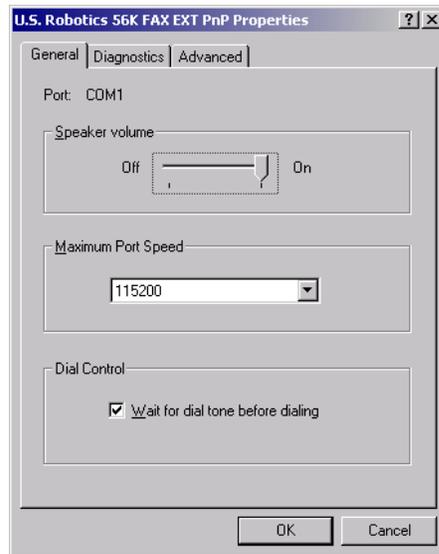
- Click the **Modems** tab.



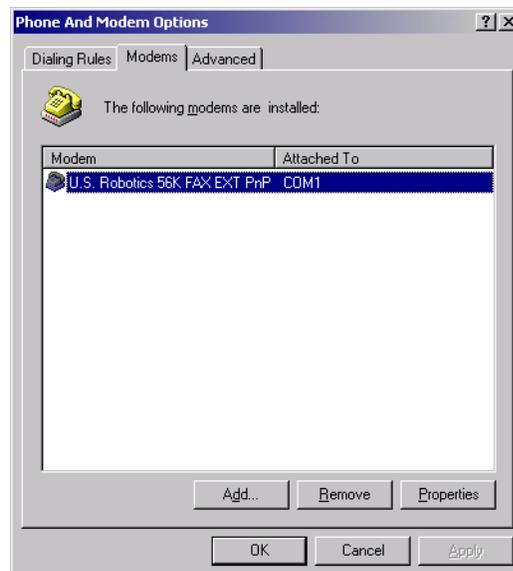
- Select the modem name and click **Properties**.



- Verify that the **Maximum Port Speed** is set to at least 28 bps, and that it is set for the same speed as the incoming connection on the Rally PCs (115200 is the recommended speed).



- Click **OK**.



- Click **OK** and exit the Control Panel.
- Continue to set up each Rally PC using a modem.

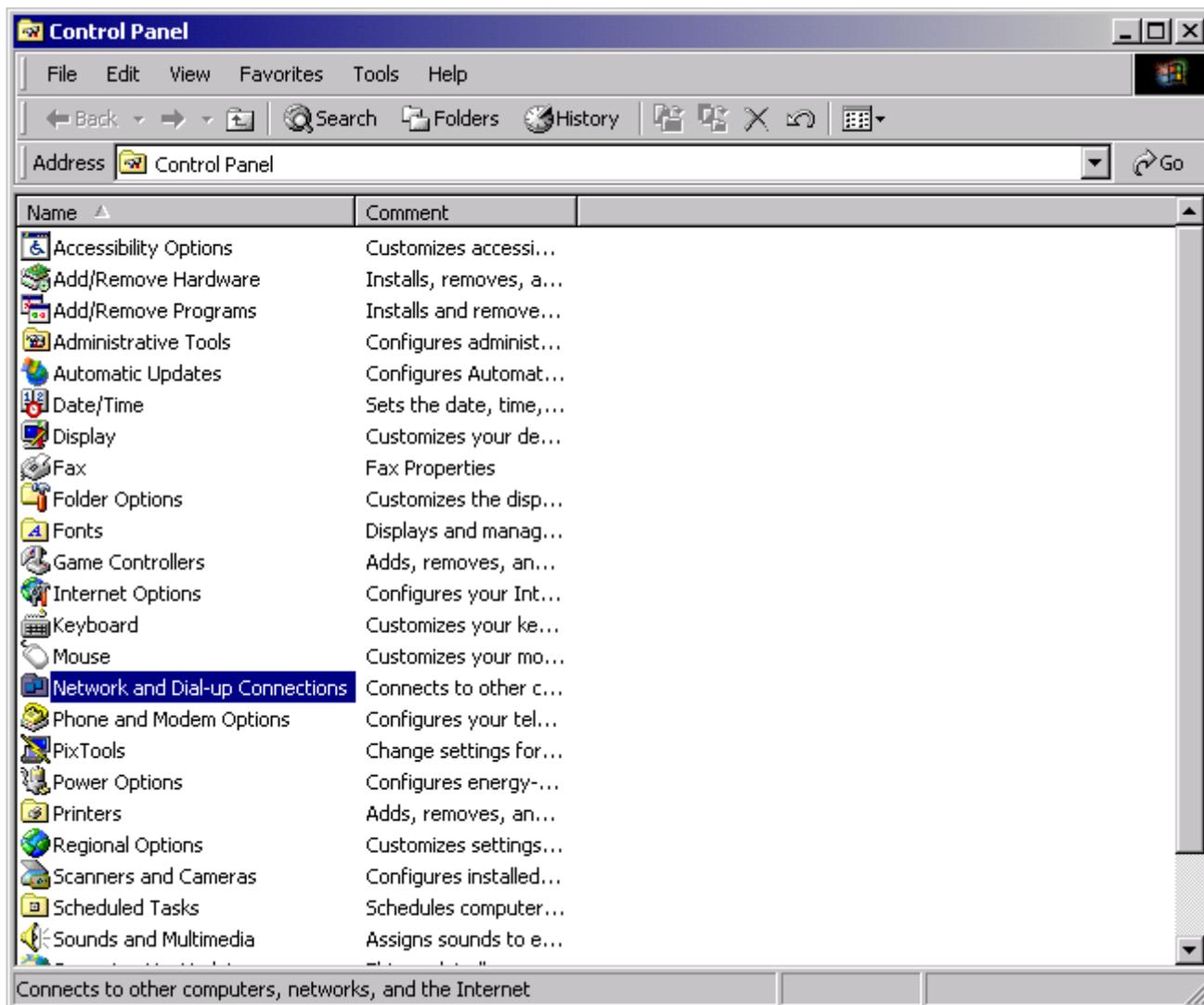
See:

"Modem Setup Part 2: At each Rally PC Using a Modem" on page 124.

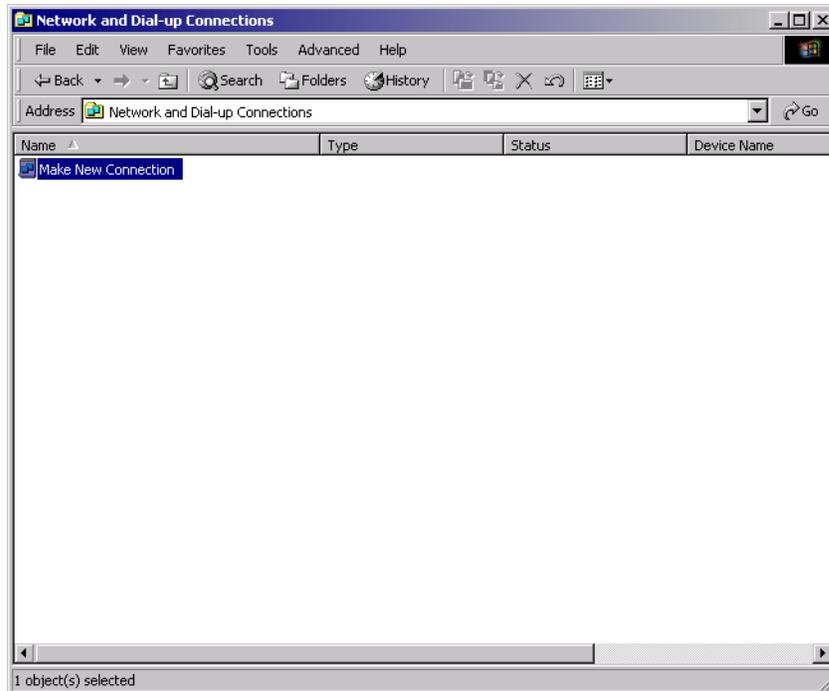
Modem Setup Part 2: At each Rally PC Using a Modem

Conduct the following steps at each Rally PC where a modem will be used for the Tally-Rally connection.

1. Close all applications.
2. Go to the PC Control Panel and select **Network and Dial-up Connections**.



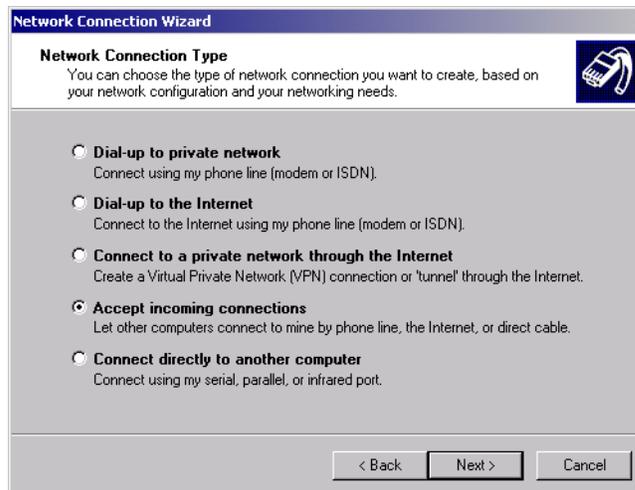
3. Double-click **Make New Connection**.



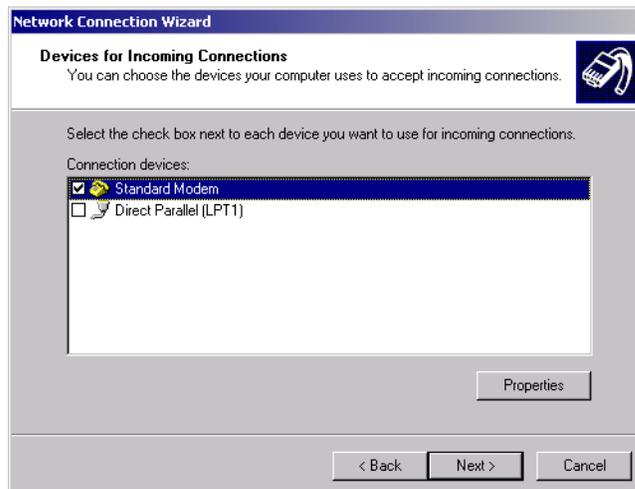
4. Click **Next**.



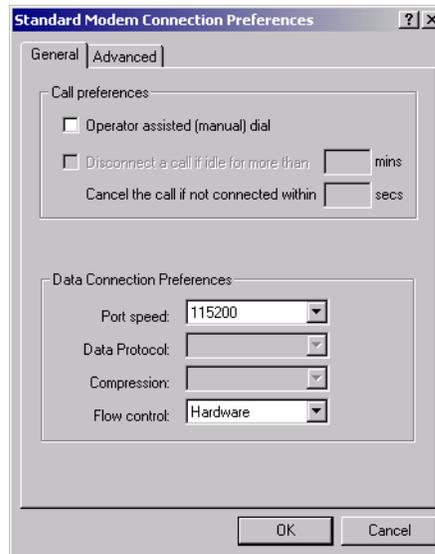
5. Select **Accept incoming connections**, and click **Next**.



6. Select the checkbox for the modem being used for incoming connections, and select the **Properties** button.



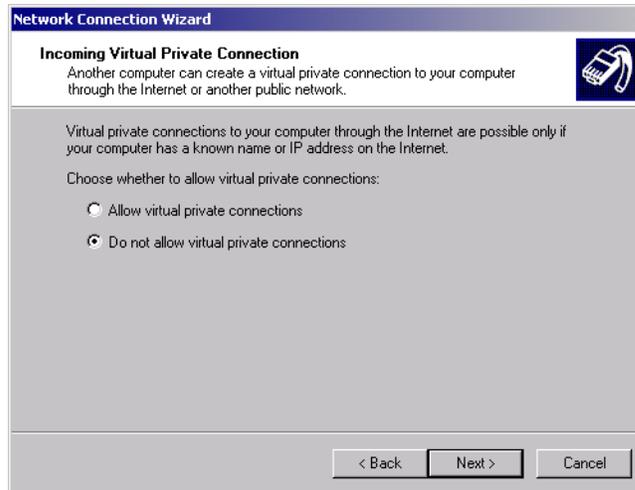
7. Verify that the **Port speed** is set to at least 28 bps (all Tally and Rally PCs must be set to the same modem speed; 115200 bps is recommended), and click **OK**.



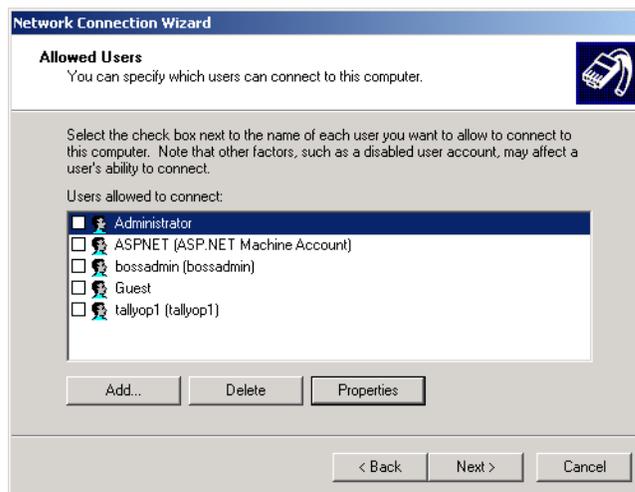
8. Click **Next**.



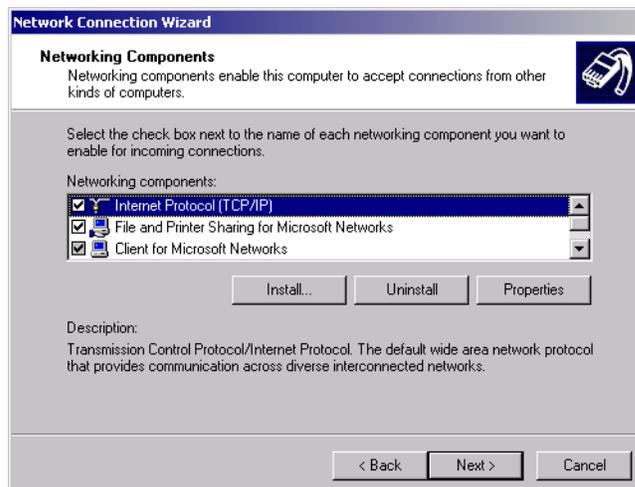
9. Select **Do not allow virtual private connections**, and select the **Next** button.



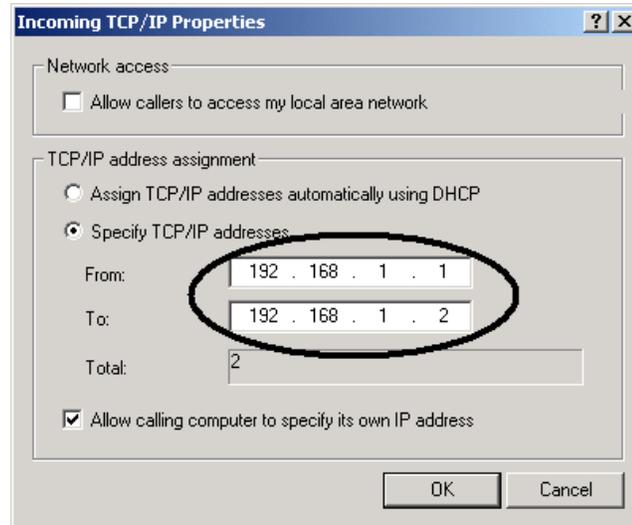
10. Leave the "Allowed Users" as is, and select the **Next** button.



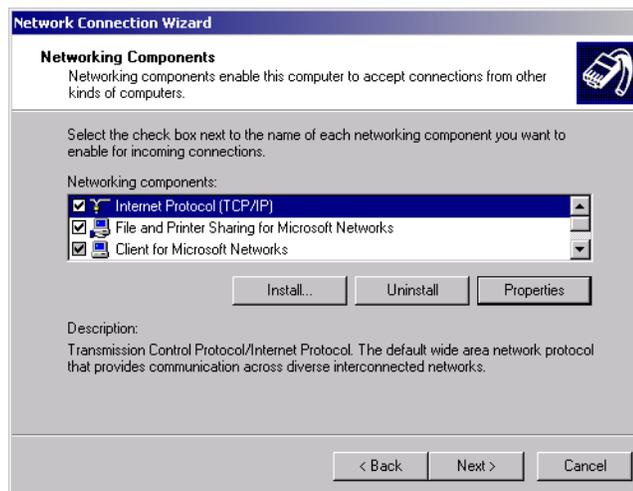
11. Verify that the **Internet Protocol (TCP/IP)** network component is selected (checked), highlight it, and select the **Properties** button.



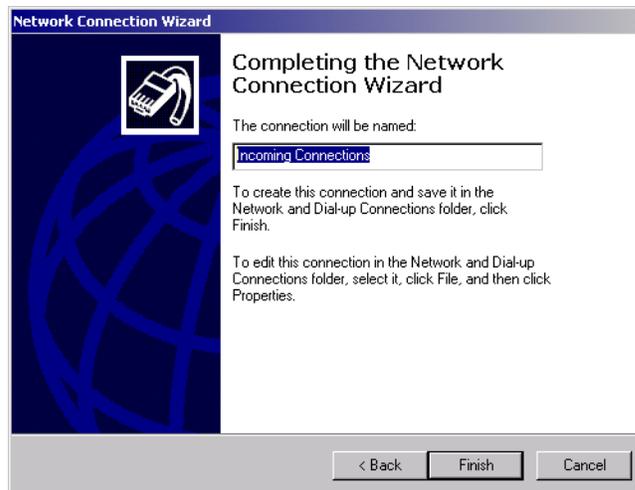
12. Deselect (uncheck)
 - > **Allow callers to access my local area network.**
13. Select **Specify TCP/IP address**
 - > EACH RALLY PC SHOULD USE THE SAME IP ADDRESS RANGE, as illustrated below.
14. Select **Allow calling computer to specify its own address** (check).
15. Click **OK**.



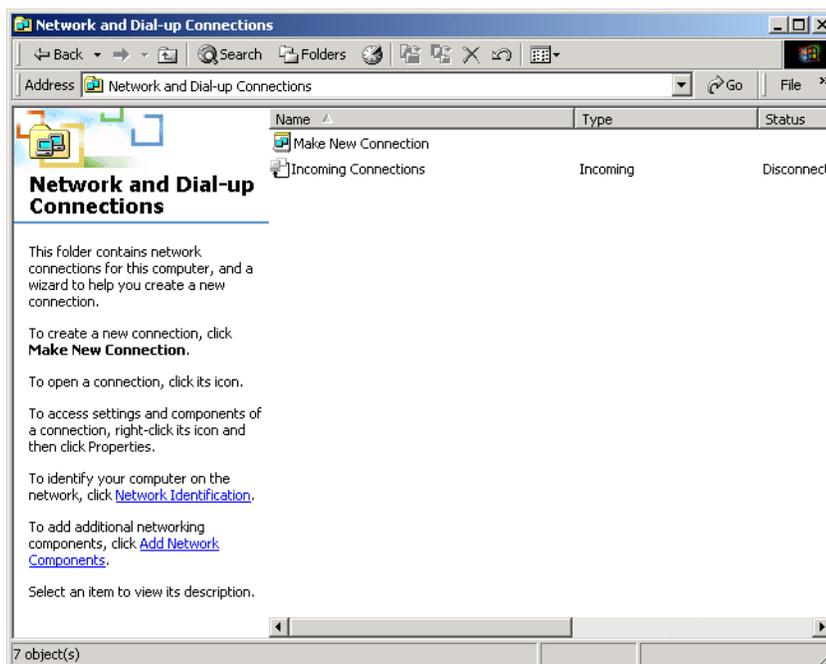
16. Click **Next**.



17. Name the connection, and select the **Finish** button.



18. The new connection appears in the **Network and Dial-up Connections** window. Close all windows.



19. Repeat for each Rally PC using a modem connection. This concludes modem setup for Tally and Rally PCs. Next, set up user permissions, Tally's **Rally Configuration** settings, and Rally's **Options** settings.

See:

“Tally User Permissions and Certificate” on page 15.
 “Coordinating Definitions in Tally and Rally” on page 63.

Note:

After testing the Tally/Rally connection, check the password policy for the Tally modem user name on each Rally PC to make certain that the maximum password age does not expire before the election event.

Appendix G: Hart Voting System Recount Procedures

Overview

This appendix outlines the procedures for performing recounts with the Hart Voting System. Recount operations should be performed by advanced PC users. Recount databases in Tally should follow database naming conventions, including identification with “RECOUNT” wording in the database description.

See:

“Tally Database Management” on page 9.

Several types of recount are documented here:

1. Full Recount

- 1.1 Tally Full Recount
- 1.2 SERVO MBB Full Recount
- 1.3 SERVO Manual Full Recount
- 1.4 VBO Report and Paper Ballot Manual Full Recount

2. Precinct-Specific Recount

- 2.1 Tally Precinct-Specific Recount
- 2.2 SERVO MBB Precinct-Specific Recount
- 2.3 SERVO Manual Precinct-Specific Recount
- 2.4 VBO Report and Paper Ballot Manual Precinct-Specific Recount

3. Contest-Specific Recount

- 3.1 Tally Contest-Specific Recount
- 3.2 SERVO MBB Contest-Specific Recount
- 3.3 SERVO Manual Contest-Specific Recount
- 3.4 VBO Report and Paper Ballot Manual Contest-Specific Recount

4. Recount of a Percentage of the Cast Ballots or Precincts

- 4.1 Tally Percentage Recount
- 4.2 SERVO MBB Percentage Recount
- 4.3 SERVO Manual Percentage Recount
- 4.4 VBO Report and Paper Ballot Manual Percentage Recount

5. Recount of a Polling Place

- 5.1 Tally Polling Place Recount
- 5.2 SERVO MBB Polling Place Recount
- 5.3 SERVO Manual Polling Place Recount
- 5.4 VBO Report and Paper Ballot Manual Polling Place Recount

1. Full Recount

1.1 Tally Full Recount

| Steps: | Details: |
|--|--|
| 1.1.1 After the election has been run in Tally, back up the original numbered Tally database folder to CD. | <input type="checkbox"/> File path to the Tally database folder is: C:\tally\Database\TimestampFolder Note: Optional: Archive the database within Tally. This creates duplicate database and database configuration files in a separate location on the PC. |
| 1.1.2 If you haven't already done so, finalize the original Tally database. | A NEW status Election mode database cannot reside on the PC with the original Tally database from the same election, unless the original database has a "Finalized" status. |
| 1.1.3 Click the Election Databases Quick Link and click New . | |
| 1.1.4 Copy the original BOSS database into Tally, setting parameters consistent with those set in the original Tally database. | <input type="checkbox"/> Split Precinct processing <input type="checkbox"/> Reporting Options <input type="checkbox"/> Tabulation Start Time |
| 1.1.5 Name/describe the new Tally database "RECOUNT Full Tally <Election Name Date>". | |
| 1.1.6 Click the Election Databases Quick Link, highlight the recount database name, and click Select . | |
| 1.1.7 Set parameters for write-in processing. | Go to the Options menu and click the Reporting Options tab. |
| 1.1.8 Print a "Zero Report." | Click the Reporting Quick Link and select the "Cumulative Report." |
| 1.1.9 Process MBBs. | Re-read all original MBBs. |
| 1.1.10 Process Early Voting Retrieval Ballots as in original Tally database, if applicable. | |
| 1.1.11 Print Reports. | |
| 1.1.12 Process Provisional Ballots as in original Tally database, if applicable. | Also parse provisional ballots as in original Tally database, if applicable. |
| 1.1.13 Print reports. | |

| Steps: | Details: |
|--|---|
| 1.1.14 Perform Write-in Resolution as in original Tally database, if applicable. | |
| 1.1.15 Print reports. | |
| 1.1.16 Process Vote Adjustments as in original Tally database, if applicable. | |
| 1.1.17 Print Reports. | |
| 1.1.18 Finalize the recount election. | |
| 1.1.19 Print official reports. | Click the Reporting Quick Link and select the reports you want to print. |
| 1.1.20 Save the recount database to CD. | |

1. Full Recount

1.2 SERVO MBB Full Recount (via Tally)

| Steps: | Details: |
|--|--|
| 1.2.1 After the election has been run in Tally, back up the original numbered Tally database folder to CD. | <input type="checkbox"/> File path to the Tally database folder is: C:\tally\Database\TimestampFolder Note: Optional: Archive the database within Tally. This creates duplicate database and database configuration files in a separate location on the PC. |
| 1.2.2 If you haven't already done so, finalize the original Tally database. | A New status Election mode database cannot reside on the PC with the original Tally database from the same election, unless the original database has a "Finalized" status. |
| 1.2.3 After the election, back up polling place equipment using the SERVO application. | Back up eScans, JBCs and eSlates, as applicable. |
| 1.2.4 Using SERVO, build JBC recount MBB(s) with blank Election mode MBB(s) from the original BOSS database. | <input type="checkbox"/> One MBB can contain approximately 1.2 million ballots. <input type="checkbox"/> Option 2: With SERVO, build eSlate recount MBB(s) with Election MBB(s) from the original BOSS database. |
| 1.2.5 Using SERVO, build eScan recount MBB(s) with blank Election mode MBB(s) from the original BOSS database. | <input type="checkbox"/> One MBB can contain approximately 1.2 million ballots. |
| 1.2.6 Click the Tally Election Databases Quick Link and click New . | |
| 1.2.7 Copy the original BOSS database into Tally, setting parameters consistent with those set in the original Tally database. | <input type="checkbox"/> Split Precinct processing <input type="checkbox"/> Reporting Options <input type="checkbox"/> Tabulation Start Time |
| 1.2.8 Name/describe the new Tally database "RECOUNT Full SERVO <JBC or eSlate> <Election Name Date>". | |
| 1.2.9 Click the Election Databases Quick Link, highlight the recount database name, and click Select . | |
| 1.2.10 Set parameters for write-in processing. | Go to the Options menu and click the Reporting Options tab. |
| 1.2.11 Print a "Zero Report." | Click the Reporting Quick Link and select the "Cumulative Report." |

| Steps: | Details: |
|---|---|
| 1.2.12 Read the JBC and/or eScan recount MBB(s) into Tally, as applicable. | <ul style="list-style-type: none"> <input type="checkbox"/> Option 2: Read the eSlate recount MBB(s) into Tally, instead of the JBC recount MBB(s). <input type="checkbox"/> Do not read both the JBC AND eSlate MBBs, as they duplicate the same information. The situation will dictate which MBBs to read. <input type="checkbox"/> If JBC <i>and</i> eSlate recounts are both needed, they must read into separate Tally recount databases. <p>Note: If the election was conducted with Early Voting and Election Day as separate Events in SERVO, an MBB must be written for each Event.</p> |
| 1.2.13 Read the original Ballot Now MBB(s) into the recount database, if applicable. | <ul style="list-style-type: none"> <input type="checkbox"/> Or rescan Ballot Now ballots into a new Ballot Now PC, using a blank Election mode MBB from this election. <input type="checkbox"/> Resolve EXACTLY as with the original Ballot Now database. In order to accomplish this, use the Ballot Now “Scan Batch” and “Audit Trail” reports to duplicate resolution decisions. |
| 1.2.14 Process Early Voting Retrievable Ballots as in original Tally database, if applicable. | |
| 1.2.15 Print Reports. | |
| 1.2.16 Process Provisional Ballots as in original Tally database, if applicable. | Also parse provisional ballots as in original Tally database, if applicable. |
| 1.2.17 Print reports. | |
| 1.2.18 Perform Write-in Resolution as in original Tally database, if applicable. | |
| 1.2.19 Print reports. | |
| 1.2.20 Process Vote Adjustments as in original Tally database, if applicable. | |
| 1.2.21 Print Reports. | |
| 1.2.22 Finalize the recount election. | |

| Steps: | Details: |
|---|---|
| 1.2.23 Print official reports. | Click the Reporting Quick Link and select the reports you want to print. |
| 1.2.24 Save the recount database to CD. | |

1. Full Recount

1.3 SERVO Manual Full Recount

| Steps: | Details: |
|--|--|
| 1.3.1 After the election, back up polling place equipment using the SERVO application. | <p>Note:</p> <p>Early Voting equipment should be backed up to an Early Voting Event, and Election Day equipment should be backed up to an Election Day Event.</p> |
| 1.3.2 In SERVO, go to Reports/Votes By Precinct | |
| 1.3.3 Select the Event and Device (type). | <p><input type="checkbox"/> Print SERVO records for JBCs or eSlates only, if also counting eScan paper ballots.</p> <p><input type="checkbox"/> If the election was conducted in Early Voting and Election Day modes, then perform this procedure for each.</p> |
| 1.3.4 Select all precincts. | Highlight the first precinct in the list, hold the <u>Shift</u> key, and highlight the last precinct in the list. |
| 1.3.5 Click OK . | |
| 1.3.6 Print. | |
| 1.3.7 Manually recount Cast Vote Records (CVRs) and Ballot Now and eScan paper ballots, as applicable. | <p>Use a spreadsheet or paper form to keep track of votes.</p> <p> Due to the high likelihood for human error using this recount method, the results may not match the original Tally reports, or Tally or SERVO electronic recounts.</p> |

1. Full Recount

1.4 VBO and Paper Ballot Manual Full Recount

| Steps: | Details: |
|--|---|
| 1.4.1 After the election, remove VBO printouts from all eSlate booths, and store these printouts in a secure location. | |
| 1.4.2 Manually recount all VBO “Paper Verification Page Reports” that include the “Ballot Accepted” nomenclature. | <ul style="list-style-type: none"> <input type="checkbox"/> OR Collect this data via reading the 2-D bar code on each “Paper Verification Page Report” with a 2-D bar code scanner. <input type="checkbox"/> If comparing VBO “Paper Verification Page Reports” to SERVO reports, note that only JBC and/or eSlate device cast vote records will include the Ballot Key information to reconcile with VBO reports. (eScans do not include VBO devices.) |
| 1.4.3 Manually recount Ballot Now and eScan paper ballots, as applicable. | <p>Use a spreadsheet or paper form to keep track of votes.</p> <p> Due to the high likelihood for human error using this recount method, the results may not match the original Tally reports, or Tally or SERVO electronic recounts.</p> |

2. Precinct-Specific Recount

2.1 Tally Precinct-Specific Recount

| Steps: | Details: |
|---|---------------------------------|
| 2.1.1 Perform steps for a full recount with Tally. See: "Tally Full Recount" on page 132. | Use the original election MBBs. |
| 2.1.2 Print the "Precinct Report" for specific precincts. | |
| 2.1.3 If necessary, create a custom report based on the Precinct Report: 2.1.4 Report Name: "Precinct X Results" 2.1.5 Based On: Precinct.rpt 2.1.6 Report Title: "Precinct X Results" 2.1.7 Name precinct in filter and select precinct 2.1.8 Select all contests 2.1.9 Open and print report 2.1.10 Repeat process for each precinct. | |

2. Precinct-Specific Recount

2.2 SERVO MBB Precinct-Specific Recount (via Tally)

| Steps: | Details: |
|---|---|
| 2.2.1 Perform steps for a Full Recount/ SERVO MBB Recount. | Use SERVO recount MBBs from either the JBCs or eSlates. |
| 2.2.2 In Tally, print the "Precinct Report" for specific precincts. | |
| 2.2.3 If necessary, create a custom report based on the Precinct Report: 2.2.4 Report Name: "Precinct X Results" 2.2.5 Based On: Precinct.rpt 2.2.6 Report Title: "Precinct X Results" 2.2.7 Name precinct in filter and select precinct 2.2.8 Select all contests 2.2.9 Open and print report 2.2.10 Repeat process for each precinct. | |

2. Precinct-Specific Recount

2.3 SERVO Manual Precinct-Specific Recount

| Steps: | Details: |
|---|--|
| 2.3.1 After the election, back up polling place equipment with the SERVO application. | Back up eScans, JBCs and eSlates, as applicable. |
| 2.3.2 In SERVO, go to Reports/Votes by Precincts . | |
| 2.3.3 Select the Event, Device (type), and Precinct(s) . | <input type="checkbox"/> Print SERVO records for JBCs or eSlates only, if also counting eScan paper ballots. <input type="checkbox"/> If the election was conducted in Early Voting and Election Day modes, perform this procedure for each. <input type="checkbox"/> Use the <u>Ctrl</u> key and click to highlight numerous precincts. |
| 2.3.4 Click OK . | |
| 2.3.5 Print the report generated. | SERVO will also export reports to a spreadsheet format with the export tool (envelope icon on report menu bar). Tip(s): The Excel 5.0 extended export is a format that is simple to use. |
| 2.3.6 Manually recount Ballot Now and eScan paper ballots from the targeted precincts, as applicable. | Use a spreadsheet or paper form to keep track of votes.  Due to the high likelihood for human error using this recount method, the results may not match the original Tally reports, or Tally or SERVO electronic recounts. |

2. Precinct-Specific Recount

2.4 VBO and Paper Ballot Manual Precinct-Specific Recount

| Steps: | Details: |
|---|---|
| 2.4.1 After the election, remove VBO printouts from all eSlate booths, and store these printouts in a secure location. | |
| 2.4.2 Manually recount all VBO “Paper Verification Page Reports”, from the targeted precinct(s), that include the “Ballot Accepted” nomenclature. | <ul style="list-style-type: none"> <input type="checkbox"/> OR Collect this data via reading the 2-D bar code on each “Paper Verification Page Report” with a 2-D bar code scanner. <input type="checkbox"/> If comparing VBO “Paper Verification Page Reports” to SERVO reports, note that only JBC and/or eSlate device cast vote records will include the Ballot Key information to reconcile with VBO reports. (eScans do not include VBO devices.) |
| 2.4.3 Manually recount Ballot Now and eScan paper ballots from the targeted precincts, as applicable. | <p>Use a spreadsheet or paper form to keep track of votes.</p> <p> Due to the high likelihood for human error using this recount method, the results may not match the original Tally reports, or Tally or SERVO electronic recounts.</p> |

3. Contest-Specific Recount

3.1 Tally Contest-Specific Recount

| Steps: | Details: |
|---|---------------------------------|
| 3.1.1 Perform steps for a full recount with Tally. See: "Tally Full Recount" on page 132. | Use the original election MBBs. |
| 3.1.2 Print the "Canvass Report" for the contest required. | |
| 3.1.3 If necessary, create a custom report based on the Precinct Report: 3.1.4 Report Name: "Contest X Recount Results" 3.1.5 Based On: Precinct.rpt 3.1.6 Report Title: "Contest X Recount Results" 3.1.7 Select all precincts 3.1.8 Name contest in filter and select specific contest 3.1.9 Open and print report 3.1.10 Repeat process with base report of Canvass.rpt. Select a new report name and title. | |

3. Contest-Specific Recount

3.2 SERVO MBB Contest-Specific Recount (via Tally)

| Steps: | Details: |
|--|---|
| 3.2.1 Perform steps for a Full Recount/ SERVO MBB Recount. | Use SERVO recount MBBs from either the JBCs or eSlates. |
| 3.2.2 In Tally, print the "Canvass Report" for the contest required. | |

| Steps: | Details: |
|--|-----------------|
| <p>3.2.3 If necessary, create a custom report based on the Precinct Report:</p> <p>3.2.4 Report Name: "Contest X Recount Results"</p> <p>3.2.5 Based On: Precinct.rpt</p> <p>3.2.6 Report Title: "Contest X Recount Results"</p> <p>3.2.7 Select all precincts</p> <p>3.2.8 Name contest in filter and select specific contest</p> <p>3.2.9 Open and print report</p> <p>3.2.10 Repeat process with base report of Canvass.rpt. Select a new report name and title.</p> | |

3. Contest-Specific Recount

3.3 SERVO Manual Contest-Specific Recount

| Steps: | Details: |
|--|---|
| 3.3.1 After the election, back up polling place equipment with the SERVO application. | Back up eScans, JBCs and eSlates, as applicable. |
| 3.3.2 Go to Reports/Votes by Precincts . | |
| 3.3.3 Select the Event and Device (type). | <input type="checkbox"/> Print SERVO records for JBCs or eSlates only, if also counting eScan paper ballots. <input type="checkbox"/> If the election was conducted in Early Voting and Election Day modes, perform this procedure for each. |
| 3.3.4 Select all precincts. | Highlight the first precinct in the list, hold the <u>Shift</u> key, and highlight the last precinct in the list. |
| 3.3.5 Click OK . | |
| 3.3.6 Print the report. | For a fully manual recount, highlight the contest on each printed CVR and tabulate using a form. |
| 3.3.7 Export the report to a spreadsheet. | Example: Excel 5.0 extended |
| 3.3.8 Sort to achieve a format where a vote for a candidate in a contest is represented per row. | e.g., "President, Abraham Lincoln" |
| 3.3.9 Add a column containing a "1" for each row. | <input type="checkbox"/> e.g., "President, Abraham Lincoln, 1" <input type="checkbox"/> This allows Autosum in the next step. |
| 3.3.10 Autosum per candidate in order to tabulate the 1's. | |
| 3.3.11 In the spreadsheet, set the print area and print a recount report. Save as "Recount SERVO Contest Election Date". | |
| 3.3.12 Print to .pdf. | |
| 3.3.13 Manually recount Ballot Now and eScan paper ballots for the targeted contest(s), as applicable. | Use a spreadsheet or paper form to keep track of votes.  Due to the high likelihood for human error using this recount method, the results may not match the original Tally reports, or Tally or SERVO electronic recounts. |

3. Contest-Specific Recount

3.4 VBO and Paper Ballot Manual Contest-Specific Recount

| Steps: | Details: |
|---|---|
| 3.4.1 After the election, remove VBO printouts from all eSlate booths, and store these printouts in a secure location. | |
| 3.4.2 Manually recount all VBO “Paper Verification Page Reports”, for the targeted contest(s), that include the “Ballot Accepted” nomenclature. | <ul style="list-style-type: none"> <input type="checkbox"/> OR Collect this data via reading the 2-D bar code on each “Paper Verification Page Report” with a 2-D bar code scanner, and sort. <input type="checkbox"/> If comparing VBO “Paper Verification Page Reports” to SERVO reports, note that only JBC and/or eSlate device cast vote records will include the Ballot Key information to reconcile with VBO reports. (eScans do not include VBO devices.) |
| 3.4.3 Manually recount Ballot Now and eScan paper ballots for the targeted contest(s), as applicable. | <p>Use a spreadsheet or paper form to keep track of votes.</p> <p> Due to the high likelihood for human error using this recount method, the results may not match the original Tally reports, or Tally or SERVO electronic recounts.</p> |

4. Recount of a percentage of the cast ballots or precincts

4.1 Tally Percentage Recount

| Steps: | Details: |
|--|--|
| 4.1.1 Perform steps for a full recount with Tally. See: "Tally Full Recount" on page 132. | Use the original election MBBs. |
| 4.1.2 Use the original Tally reports to identify the precinct reports needed to fulfill the recount requirements. | <input type="checkbox"/> The "Precinct Turnout" report gives precinct turnout information per contest. <input type="checkbox"/> Determine the precincts needed in order to meet the required percentage, and any other stipulations, for the recount. |
| 4.1.3 Print "Precinct Report" reports for the precincts needed to fulfill requirements. | |
| 4.1.4 If necessary, create a custom report based on the "Precinct Report": 4.1.5 Report Name: "Mandatory Recount X Percent Results" 4.1.6 Based On: Precinct.rpt 4.1.7 Report Title: "Mandatory Recount X Percent Results" 4.1.8 Name precinct filter and select specific precincts 4.1.9 Select all contest 4.1.10 Open and print report 4.1.11 Repeat process with base report of Canvass.rpt. Select a new report name and title. | |

4. Recount of a percentage of the cast ballots or precincts

4.2 SERVO MBB Percentage Recount (via Tally)

| Steps: | Details: |
|--|---|
| 4.2.1 Perform steps for a Full Recount/ SERVO MBB Recount. See: “SERVO MBB Full Recount (via Tally)” on page 134. | Use SERVO recount MBBs from either the JBCs or eSlates. |
| 4.2.2 Use the original Tally reports to identify the precinct reports needed to fulfill the recount requirements. | <input type="checkbox"/> The “Precinct Turnout” report gives precinct turnout information per contest. <input type="checkbox"/> Determine the precincts needed in order to meet the required percentage, and any other stipulations, for the recount. |
| 4.2.3 In the Tally recount database, print “Precinct Report” reports for the precincts needed to fulfill requirements. | |
| 4.2.4 If necessary, create a custom report based on the “Precinct Report”: 4.2.5 Report Name: “Mandatory Recount X Percent Results” 4.2.6 Based On: Precinct.rpt 4.2.7 Report Title: “Mandatory Recount X Percent Results” 4.2.8 Name precinct filter and select specific precincts 4.2.9 Select all contest 4.2.10 Open and print report 4.2.11 Repeat process with base report of Canvass.rpt. Select a new report name and title. | |

4. Recount of a percentage of the cast ballots or precincts

4.3 SERVO Manual Percentage Recount

| Steps: | Details: |
|---|--|
| 4.3.1 After the election, back up polling place equipment with the SERVO application. | Back up eScans, JBCs and eSlates, as applicable. |
| 4.3.2 Use the original Tally reports to identify the precinct reports needed to fulfill the recount requirements. | <ul style="list-style-type: none"> <input type="checkbox"/> The “Precinct Turnout” report gives precinct turnout information per contest. <input type="checkbox"/> Determine the precincts needed in order to meet the required percentage, and any other stipulations, for the recount. |
| 4.3.3 In SERVO, go to Reports/Votes by Precincts . | |
| 4.3.4 Select the Event, Device (type), and Precinct(s) . | <ul style="list-style-type: none"> <input type="checkbox"/> Print SERVO records for JBCs or eSlates only, if also counting eScan paper ballots. <input type="checkbox"/> If the election was conducted in Early Voting and Election Day modes, you will need to perform this procedure for each. <input type="checkbox"/> Use the <u>Ctrl</u> key and left mouse click to highlight numerous precincts. |
| 4.3.5 Click OK . | |
| 4.3.6 Print the report generated. | <p>SERVO will also export reports to a spreadsheet format with the export tool (envelope icon on report menu bar).</p> <p>Tip(s): Excel 5.0 extended is an example that is simple to use.</p> |
| 4.3.7 Manually recount Ballot Now and eScan paper ballots, as applicable. | <p>Use a spreadsheet or paper form to keep track of votes.</p> <p> Due to the high likelihood for human error using this recount method, the results may not match the original Tally reports, or Tally or SERVO electronic recounts.</p> |

4. Recount of a percentage of the cast ballots or precincts

4.4 VBO and Paper Ballot Manual Percentage Recount

| Steps: | Details: |
|--|---|
| 4.4.1 After the election, remove VBO printouts from all eSlate booths, and store these printouts in a secure location. | Back up eScans, JBCs and eSlates, as applicable. |
| 4.4.2 Use the original Tally reports to identify the precinct reports needed to fulfill the recount requirements. | <input type="checkbox"/> The “Precinct Turnout” report gives precinct turnout information per contest. <input type="checkbox"/> Determine the precincts needed in order to meet the required percentage, and any other stipulations, for the recount. |
| 4.4.3 Manually recount all VBO “Paper Verification Page Reports”, for the targeted precinct(s), that include the “Ballot Accepted” nomenclature. | <input type="checkbox"/> <i>OR</i> Collect this data via reading the 2-D bar code on each “Paper Verification Page Report” with a 2-D bar code scanner, and sort. <input type="checkbox"/> <i>If</i> comparing VBO “Paper Verification Page Reports” to SERVO reports, note that only JBC and/or eSlate device cast vote records will include the Ballot Key information to reconcile with VBO reports. (eScans do not include VBO devices.) |
| 4.4.4 Manually recount Ballot Now and eScan paper ballots for the targeted precinct(s), as applicable. | Use a spreadsheet or paper form to keep track of votes.  Due to the high likelihood for human error using this recount method, the results may not match the original Tally reports, or Tally or SERVO electronic recounts. |

5. Recount of a Polling Place

5.1 Tally Polling Place Recount

| Steps: | Details: |
|--|---|
| 5.1.1 If precinct report level recount is required for a select group of polling places, perform steps for a full recount with Tally, <i>but only process those MBBs from the polling place(s) in question.</i> | Use the original election MBBs <i>from selected polling places.</i> |
| 5.1.2 Print "Precinct Report" reports for the precincts needed to fulfill requirements. | |
| 5.1.3 If individual reports are needed per polling place: 5.1.4 Create a new Tally Database, as in procedures for a full recount. Name the Tally Database "RECOUNT Polling Place <X> <Election Name Date>" 5.1.5 Read MBB(s) in for the polling places involved in the recount 5.1.6 Finalize the database. 5.1.7 Create a custom report based on the "Precinct Report": 5.1.8 Report Name: "Polling Place X Results" 5.1.9 Based On: Precinct.rpt 5.1.10 Report Title: "Polling Place X Results" 5.1.11 Name the precinct filter according to the polling place and select precincts assigned to that polling place 5.1.12 Select all contests 5.1.13 Open and print report. 5.1.14 Repeat reporting process for each target polling place. | |

5. Recount of a Polling Place

5.2 SERVO MBB Polling Place Recount

| Steps: | Details: |
|--|--|
| 5.2.1 Perform steps for a Full Recount/ SERVO MBB Recount. See: “SERVO MBB Full Recount (via Tally)” on page 134. | Use SERVO recount MBBs from either the JBCs or eSlates. |
| 5.2.2 In Tally, print the “Precinct Report” for all precincts assigned to the target polling place. | |
| 5.2.3 If necessary, create a custom report based on the Precinct Report: 5.2.4 Report Name: “Polling Place X Results” 5.2.5 Based On: Precinct.rpt 5.2.6 Report Title: “Polling Place X Results” 5.2.7 Name polling place in precinct filter and select precincts assigned to polling place 5.2.8 Select all contests 5.2.9 Open and print report 5.2.10 Repeat process for each target polling place. | |

5. Recount of a Polling Place

5.3 SERVO Manual Polling Place Recount

| Steps: | Details: |
|--|---|
| 5.3.1 After the election, back up polling place equipment with the SERVO application. | Back up eScans, JBCs and eSlates, as applicable. |
| 5.3.2 In SERVO, go to Reports/Votes by Precincts . | |
| 5.3.3 Select the Event, Device (type), and the Precinct(s) that were assigned to the target polling place. | <input type="checkbox"/> Print SERVO records for JBCs or eSlates only, if also counting eScan paper ballots. <input type="checkbox"/> Use the <u>Ctrl</u> key and click to highlight numerous precincts. |
| 5.3.4 Click OK . | |
| 5.3.5 Print the report generated. | SERVO will also export reports to a spreadsheet format with the export tool (envelope icon on report menu bar). Tip(s): The Excel 5.0 extended export is a format that is simple to use. |
| 5.3.6 Manually recount Ballot Now and eScan paper ballots from the target polling place(s), as applicable. | Use a spreadsheet or paper form to keep track of votes.  Due to the high likelihood for human error using this recount method, the results may not match the original Tally reports, or Tally or SERVO electronic recounts. |

5. Recount of a Polling Place

5.4 VBO and Paper Ballot Manual Polling Place Recount

| Steps: | Details: |
|--|--|
| 5.4.1 After the election, remove VBO printouts from all eSlate booths, and store these printouts in a secure location. | |
| 5.4.2 Manually recount all VBO “Paper Verification Page Reports”, for equipment from the targeted polling place(s), that include the “Ballot Accepted” nomenclature. | <ul style="list-style-type: none"> <input type="checkbox"/> OR Collect this data via reading the 2-D bar code on each “Paper Verification Page Report” from the targeted polling place(s) with a 2-D bar code scanner. <input type="checkbox"/> If comparing VBO “Paper Verification Page Reports” to SERVO reports, note that only JBC and/or eSlate device cast vote records will include the Ballot Key information to reconcile with VBO reports. (eScans do not include VBO devices.) |
| 5.4.3 Manually recount Ballot Now and eScan paper ballots for the targeted polling place(s), as applicable. | <p>Use a spreadsheet or paper form to keep track of votes.</p> <p> Due to the high likelihood for human error using this recount method, the results may not match the original Tally reports, or Tally or SERVO electronic recounts.</p> |

Appendix H: Restoring a Tally Database to a Previous State

A Tally database can be restored to a previous state if the database has been backed up while in that previous state.



Only advanced PC and HVS users should restore a Tally database. Restoring a Tally database overwrites the active Tally database with a Tally database from the backup folder. Follow proper database management procedures in order to protect the integrity of the election during this process.

See:

“Tally Database Management” on page 9.

| Steps: | Details: |
|---|---|
| 1. At any point in the tabulation process, click the Election Information Quick Link and click Backup .  | Back up to a folder identified with the Function (Backup) Election Date and the Current Time. |
| 2. Continue with tabulation operations. | |
| 3. Click the Election Information Quick Link, click Restore , and follow prompts to navigate to the backup folder, and to the TallyData.db file.  | The election currently running will restore to the status of the backup database.  This action overwrites the Tally database currently active with the Tally database from the backup folder. |
| 4. Continue with tabulation operations. | |

Notes:

Appendix I: Importing Data

Data For Import

The Tally Import Wizard guides the user through importing files. Tally accepts comma-delimited ASCII text files that may, or may not, surround fields with single quotation marks, and that must contain header information. Several types of data can be imported into the active Tally election database (from a voter registration system, for example):

- District layers for use in building custom reports
- Provisional ballot status updates
- Registered voters per precinct and/or party numbers updates
- Retrievable ballot status updates

Tip(s):

Back up the Tally database before performing imports. This will preserve the pre-import tabulation data.

See:

The *Tally Operations Manual* for more information about importing data into Tally.

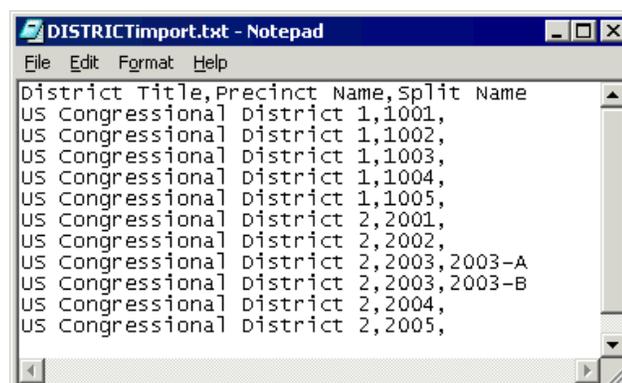
Import File Formats

District Layer Import File Format

The district layer defines a district name with a group of associated precinct/splits. This same function exists in Tally via the Report Wizard without importing new district associations, simply by defining a new precinct group filter.

| Field Name: | Type: | Description: |
|-----------------------|--------------|----------------------|
| District Title | Char (100) | Name of the District |
| Precinct Name | Char (100) | Precinct Name |
| Split Name | Char (100) | Optional Split Name |

- Each District Title can be between 1 and 100 characters.
- The precinct/split names must match precinct/split names currently in the Tally database.
- Split name is optional. If split names are not specified, all splits associated with the precinct will be included in the district.
- The import file can contain multiple district layers.



Provisional Ballot Status Import File Format

Provisional ballots can be identified as included/accepted or excluded/rejected, and can be parsed by precinct and/or party via data import. This feature allows data exports from a voter registration system, where provisional voters have already been resolved, to be imported into Tally in order to mirror that resolution without doing so manually.

| Field Name: | Type: | Description: |
|--------------------------|--------------|--|
| Ballot ID | Number | The Ballot Code |
| Ballot State | Char(1) | E = Exclude ballot from count I = Include ballot in count |
| Precinct Name | String | Precinct to be associated with the ballot (thus defining contests counted) |
| Split Name | String | The split to be associated with the ballot (thus further defining contests counted) |
| Ballot Party Code | String | The party ballot type associated with the ballot (thus further defining contests counted for a closed primary) |
| Voter Party Code | String | The party voter type associated with the ballot (thus further defining contests counted for a modified closed primary) |

- The Ballot ID must match a provisional Ballot Code in the Tally database.
- The Ballot ID and Ballot State fields are required. The other fields are optional, and can be left blank.
- Provisional parsing requires the use of the precinct/split field(s). These must match precincts/splits defined in the Tally database.
- Provisional parsing by party requires the use of the Ballot Party Code field for a closed primary and the Voter Party Code for a modified closed primary. These must match precincts/splits defined in the Tally database.
- In general and special elections, Tally ignores the party fields.
- The first line of the import file specifies the column headers.

```

"Ballot Code","Ballot state","Precinct Name","Split Name"
66194,"I","2002",""
68405,"I","2010",""
132674,"I","2012",""
135986,"I","2002",""

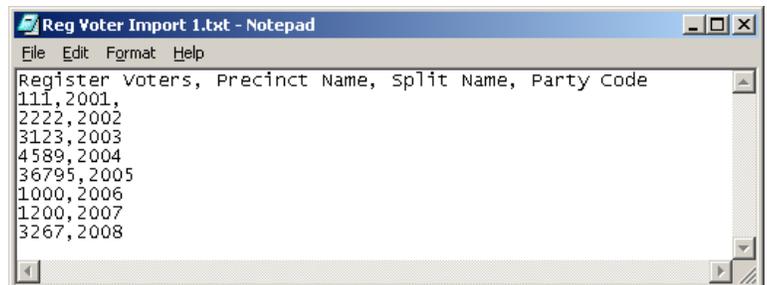
```

Registered Voters Import File Format

Tally allows for an import updating the number of registered voters in the precincts defined in the election. This import may come from an export from a voter registration system or another source that creates the comma-delimited ASCII text file.

| Field Name: | Type: | Description: |
|--------------------------|--------------|--|
| Registered Voters | Integer | Number of registered voters in the precinct/split |
| Precinct Name | Char(100) | Name of the precinct in the election |
| Split Name | Char(100) | Name of split, if applicable |
| Party Code | Char(50) | The code for the associated party, if a primary election |

- The precinct/split names must match precinct/split names currently in the Tally database.
- Only the precincts/splits listed in the import file will be updated.

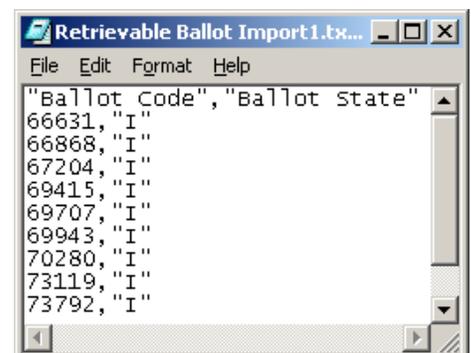


Retrievable Ballot Status Import File Format

Retrievable ballots can be identified as included/accepted or excluded/rejected via data import. This feature allows for data exports from a voter registration system, where retrievable ballots for early voters have already been resolved, to be imported into Tally in order to mirror that resolution without doing so manually.

| Field Name: | Type: | Description: |
|---------------------|--------------|--|
| Ballot ID | Char(10) | The Ballot Code |
| Ballot State | Char(1) | E = Exclude ballot from count I = Include ballot in count |

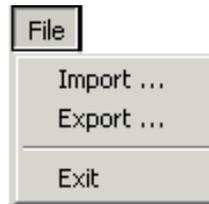
- The Ballot ID must match a provisional Ballot Code in the Tally database.
- The Ballot ID and Ballot State fields are required.
- The first line of the import file specifies the column headers.



Using the Tally Import Wizard

The following is one example of the Tally Import Wizard. Windows will vary per import type.

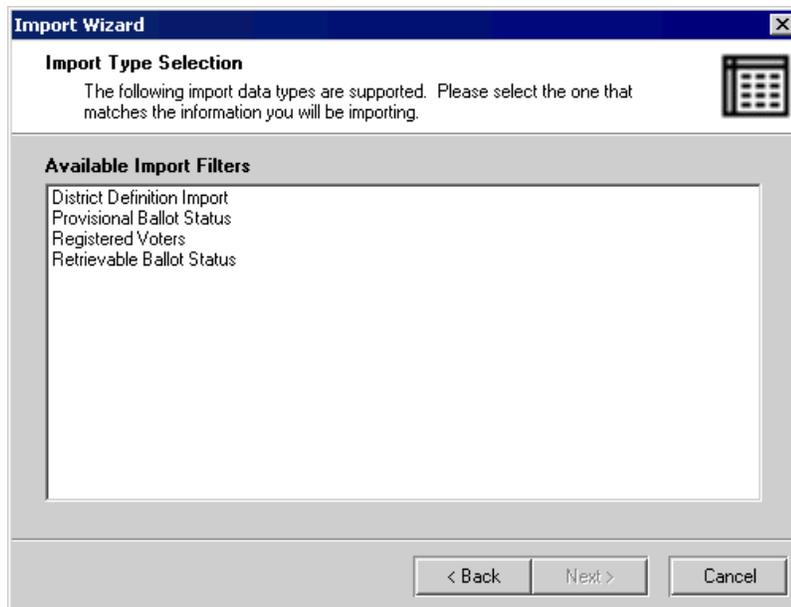
1. To access the Import Wizard, go to the **File** menu and click **Import**.



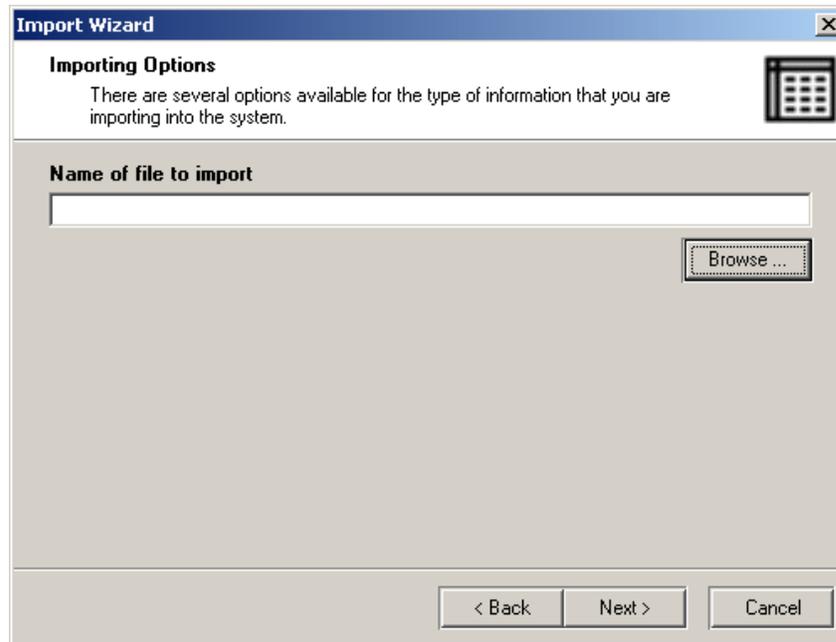
2. Click **Next**.



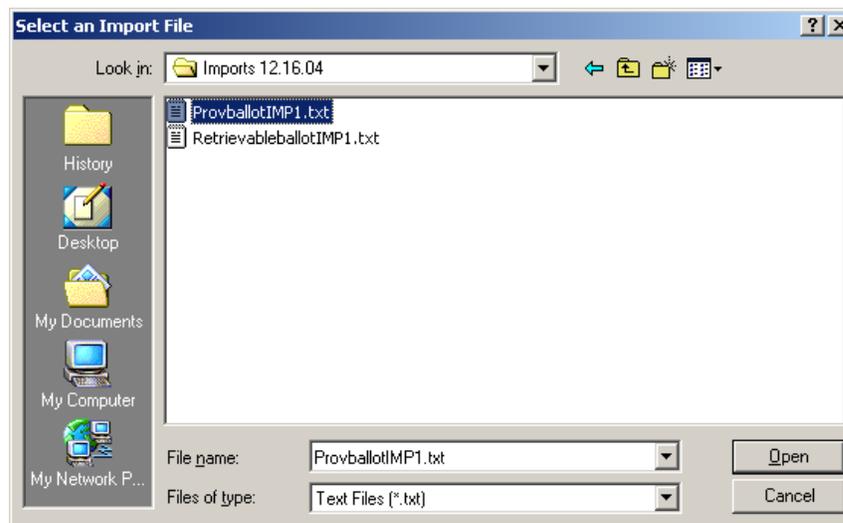
3. Select the import type and click **Next**.



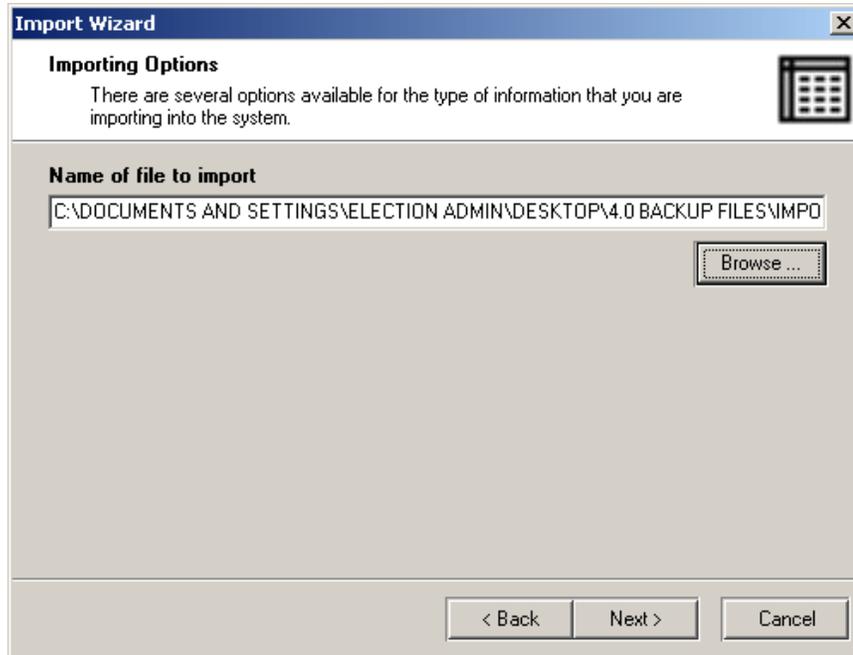
- Depending on the import type, use available buttons to identify import options, and click the **Browse** button to navigate to the file you want to import.



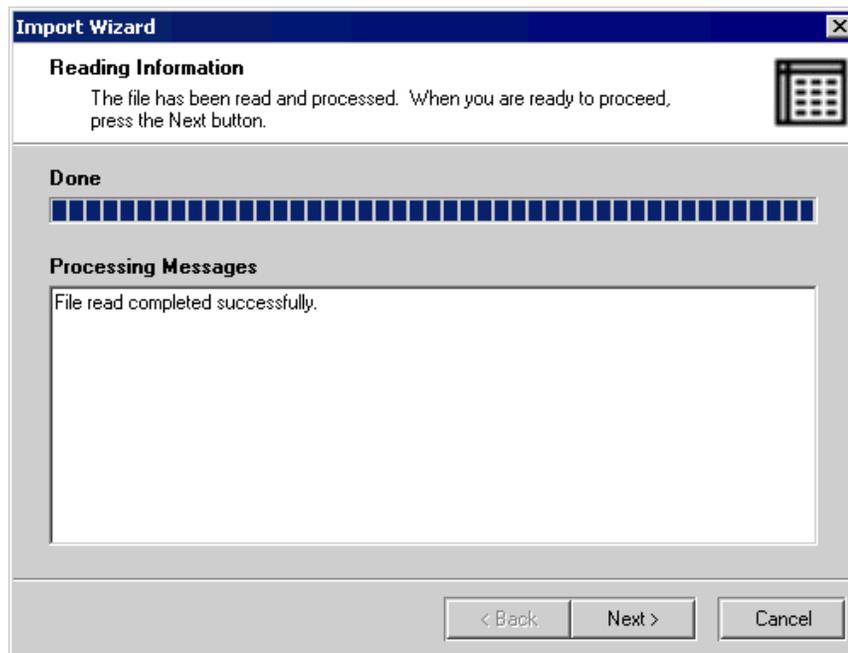
- Highlight the file you want to import and click **Open**.



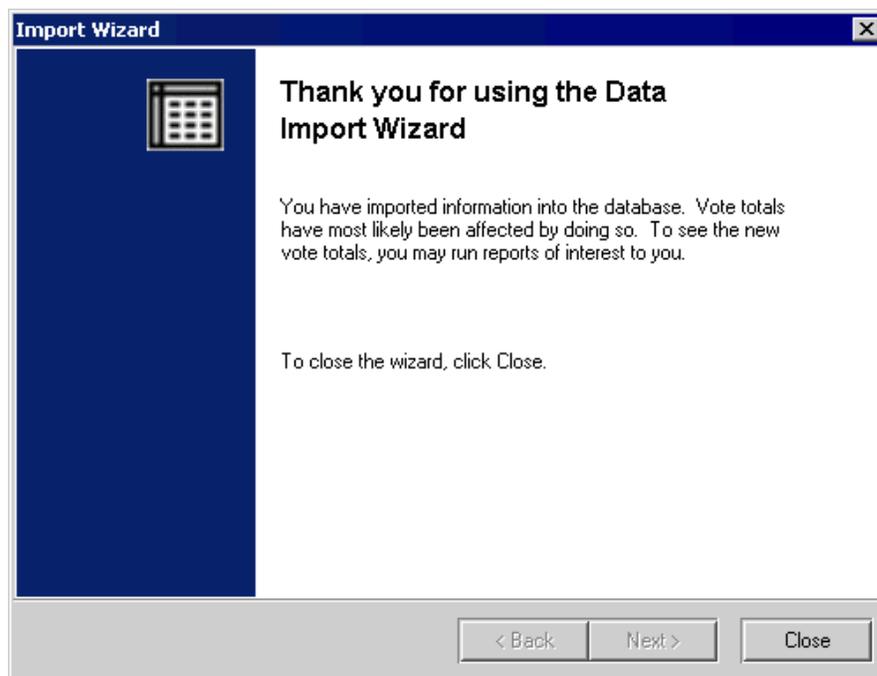
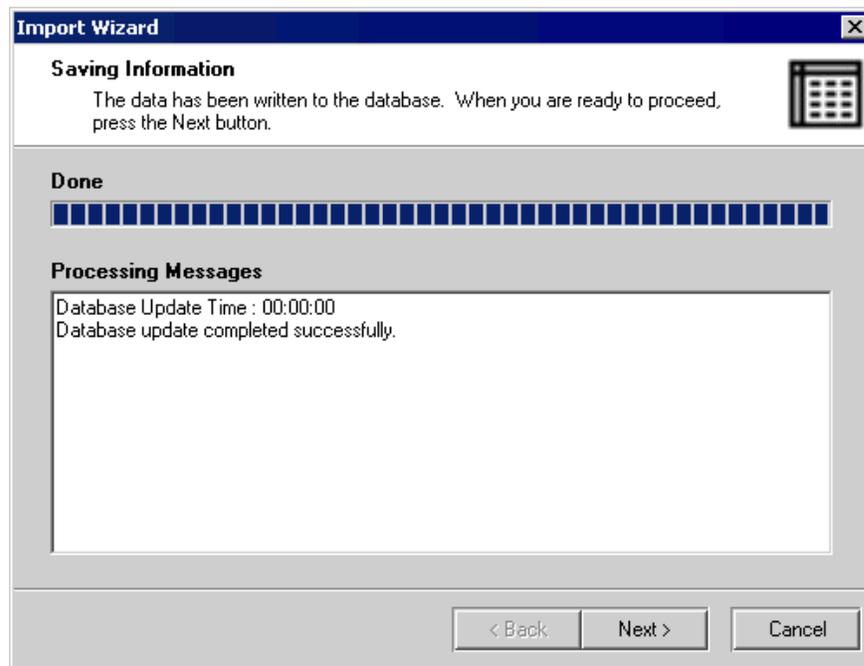
6. The filepath to the import file appears in the **Name of file to import** field. Click **Next**.



7. The Import Wizard will verify that the data is being read, and it will display any error or alert messages if there are problems with the import file. Correct errors if necessary and click **Next**.



- The Import Wizard verifies that data is saved to the database, and that the import process is completed. Click **Next** and then click **Close**.



- Verify imported data by viewing the Tally windows and reports.

Notes:

Appendix J: Exporting Data

Data for Export

The Tally Export Wizard guides the user through exporting files. Tally exports tab-delimited and comma-delimited ASCII text files and EDX files. Several types of data can be exported from the Tally election database:

- Landscape Vote Totals - aggregated vote totals in a landscape .txt format
- EDX - Election Data eXchange XML format for integration with other systems
- Detail Vote Totals - filtered for Absentee, Early Voting, and/or Election Day results
- Provisional Ballot Status - suitable for export, update, and import
- Retrievable Ballot Status - suitable for export, update, and import
- Registered Voters - registered voter data in .csv format

Note:

When creating Registered Voters export files for primary elections, select the **Export By Party** checkbox so the vote totals can be re-imported.

See:

The *Tally Operations Manual* for more information about exporting Tally data.

Export File Types

Landscape (Aggregated) Vote Totals

The landscape aggregated vote totals option exports all data in the database in a tab-delimited text file format.

| PCT. NUM. | PRECINCTS COUNTED | REGISTERED VOTERS | BALLOTS CAST | PERCENT OF VOTER TURNOUT | STRAIGHT PARTY |
|-------------|-------------------|-------------------|--------------|--------------------------|----------------|
| | | TOTAL | TOTAL | Democratic | Republ |
| 1001 | 0 | 500 | 79 | 15.80 | 28 |
| 1002 | 0 | 500 | 64 | 12.80 | 24 |
| 1003 | 0 | 500 | 76 | 15.20 | 24 |
| 1004 | 0 | 500 | 75 | 15.00 | 29 |
| 1005 | 1 | 500 | 117 | 23.40 | 38 |
| 2001 | 1 | 1000 | 110 | 11.00 | 28 |
| 2002 | 1 | 1000 | 126 | 12.60 | 34 |
| 2003-2003-A | 1 | 500 | 93 | 18.60 | 23 |
| 2003-2003-B | 0 | 500 | 71 | 14.20 | 20 |
| 2004 | 0 | 1000 | 79 | 7.90 | 25 |
| 2005 | 0 | 1000 | 78 | 7.80 | 17 |
| TOTAL | 4 | 7500 | 968 | 12.91 | 290 |

EDX

EDX exports all data in the database in an Election Data eXchange XML file format.

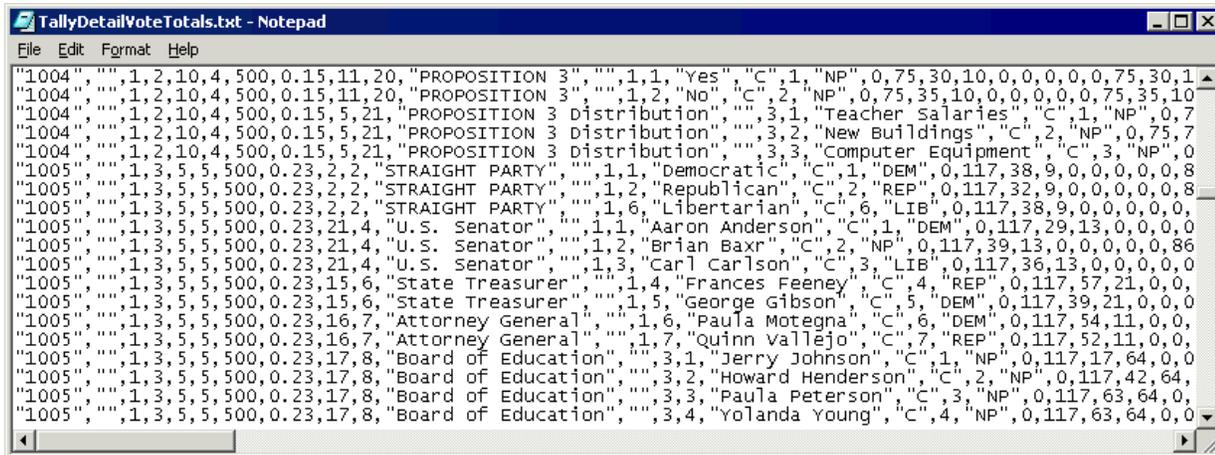
```
<?xml version="1.0" encoding="utf-8" ?>
<EDX>
<Jurisdiction id="1" name="sample County" state="SC">
<Election name="Sample County General" guid="{5F5495DF-23B8-4246-AAA9-5E33C50FE6E5}" id="1" date="2004
<DataSources>
<DataSource name="Tally" isDefault="true">
<SourceDescription>
Hart Intercivic Tally (Tally)</sourceDescription>
</DataSource>
</DataSources>
<Parties>
<Party name="Democratic" id="2" code="DEM"/>
<Party name="Republican" id="3" code="REP"/>
<Party name="Libertarian" id="4" code="LIB"/>
```

Detail Vote Totals

The Detail Vote Totals option exports the vote totals from each precinct from the Tally database into comma-separated-values files which may be exported in detailed types via filters in the export wizard. Detail types include:

- Total (Absentee results, Early Voting results, Election Day results)
- Early (Early Voting results only)
- Election (Election Day results only)

Filters are applied to the detailed export types, allowing the user to combine Early and Absentee results in the Total export, and to include or exclude over and under votes in any of the detail exports.



```

"1004" """,1,2,10,4,500,0.15,11,20,"PROPOSITION 3""",1,1,"Yes","C",1,"NP",0,75,30,10,0,0,0,0,0,75,30,1
"1004" """,1,2,10,4,500,0.15,11,20,"PROPOSITION 3""",1,2,"No","C",2,"NP",0,75,35,10,0,0,0,0,0,75,35,10
"1004" """,1,2,10,4,500,0.15,5,21,"PROPOSITION 3 Distribution""",3,1,"Teacher Salaries","C",1,"NP",0,7
"1004" """,1,2,10,4,500,0.15,5,21,"PROPOSITION 3 Distribution""",3,2,"New Buildings","C",2,"NP",0,75,7
"1004" """,1,2,10,4,500,0.15,5,21,"PROPOSITION 3 Distribution""",3,3,"Computer Equipment","C",3,"NP",0
"1005" """,1,3,5,5,500,0.23,2,2,"STRAIGHT PARTY""",1,1,"Democratic","C",1,"DEM",0,117,38,9,0,0,0,0,0,8
"1005" """,1,3,5,5,500,0.23,2,2,"STRAIGHT PARTY""",1,2,"Republican","C",2,"REP",0,117,32,9,0,0,0,0,0,8
"1005" """,1,3,5,5,500,0.23,2,2,"STRAIGHT PARTY""",1,6,"Libertarian","C",6,"LIB",0,117,38,9,0,0,0,0,0,0
"1005" """,1,3,5,5,500,0.23,21,4,"U.S. Senator""",1,1,"Aaron Anderson","C",1,"DEM",0,117,29,13,0,0,0,0,0
"1005" """,1,3,5,5,500,0.23,21,4,"U.S. Senator""",1,2,"Brian Baxr","C",2,"NP",0,117,39,13,0,0,0,0,0,86
"1005" """,1,3,5,5,500,0.23,21,4,"U.S. Senator""",1,3,"Carl Carlson","C",3,"LIB",0,117,36,13,0,0,0,0,0,0
"1005" """,1,3,5,5,500,0.23,15,6,"State Treasurer""",1,4,"Frances Feeney","C",4,"REP",0,117,57,21,0,0,0
"1005" """,1,3,5,5,500,0.23,15,6,"State Treasurer""",1,5,"George Gibson","C",5,"DEM",0,117,39,21,0,0,0,0
"1005" """,1,3,5,5,500,0.23,16,7,"Attorney General""",1,6,"Paula Motegna","C",6,"DEM",0,117,54,11,0,0,0
"1005" """,1,3,5,5,500,0.23,16,7,"Attorney General""",1,7,"Quinn Valléjo","C",7,"REP",0,117,52,11,0,0,0
"1005" """,1,3,5,5,500,0.23,17,8,"Board of Education""",3,1,"Jerry Johnson","C",1,"NP",0,117,17,64,0,0
"1005" """,1,3,5,5,500,0.23,17,8,"Board of Education""",3,2,"Howard Henderson","C",2,"NP",0,117,42,64,0
"1005" """,1,3,5,5,500,0.23,17,8,"Board of Education""",3,3,"Paula Peterson","C",3,"NP",0,117,63,64,0,0
"1005" """,1,3,5,5,500,0.23,17,8,"Board of Education""",3,4,"Yolanda Young","C",4,"NP",0,117,63,64,0,0

```

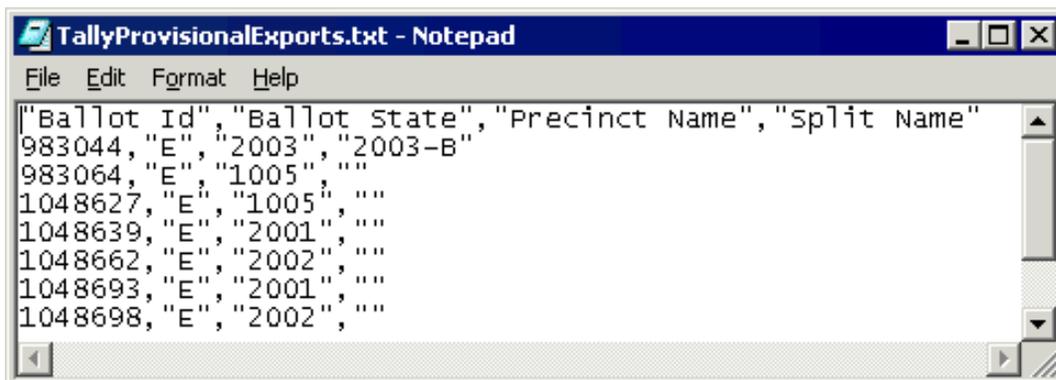
See:

The *Tally Operations Manual* for a definition of fields in the Detail Vote Totals export file.

Provisional Ballot Status

The Provisional Ballot Status export file can be used to verify data in an associated voter registration system, for example. This file can be exported, modified, and imported to update provisional ballot status. The first row of the file lists the column headers. The file includes the following data fields in a comma-separated-values format:

- Ballot Code
- Ballot State ("E" = exclude from results, "I" = include in results)
- Precinct Name
- Split Precinct Name



```

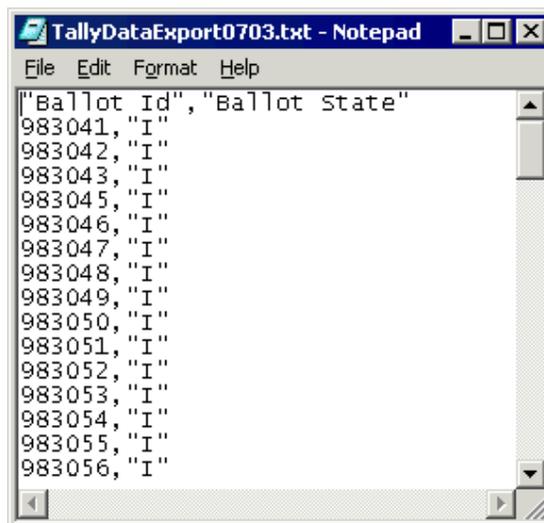
"Ballot Id","Ballot state","Precinct Name","Split Name"
983044,"E","2003","2003-B"
983064,"E","1005",""
1048627,"E","1005",""
1048639,"E","2001",""
1048662,"E","2002",""
1048693,"E","2001",""
1048698,"E","2002",""

```

Retrievable Ballot Status

The Retrievable Ballot Status export file can be used to verify early voting retrievable ballot data in an associated voter registration system, for example. This file can be exported, modified, and imported to update retrievable ballot status. The first row of the file lists the column headers. The file includes the following data fields in a comma-separated-values format:

- Ballot Code
- Ballot State ("E" = exclude from results, "I" = include in results)



```

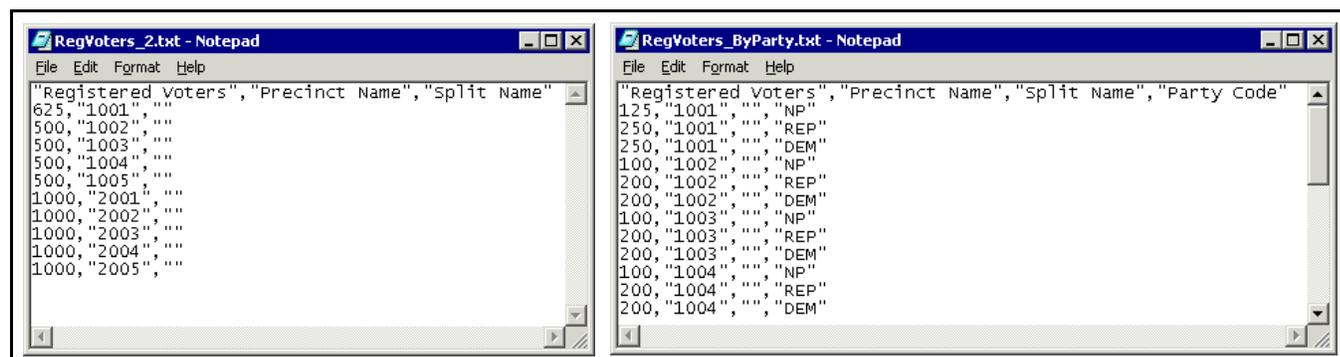
"Ballot Id","Ballot State"
983041,"I"
983042,"I"
983043,"I"
983045,"I"
983046,"I"
983047,"I"
983048,"I"
983049,"I"
983050,"I"
983051,"I"
983052,"I"
983053,"I"
983054,"I"
983055,"I"
983056,"I"

```

Registered Voters

The Registered Voters export file can be used to export registered voter data. The first row of the file lists the column headers. The file includes the following data fields in a comma-separated-values format:

- Registered Voters
- Precinct Name
- Split Precinct Name
- Party Code (Optional)



```

"Registered voters","Precinct Name","split Name"
625,"1001", ""
500,"1002", ""
500,"1003", ""
500,"1004", ""
500,"1005", ""
1000,"2001", ""
1000,"2002", ""
1000,"2003", ""
1000,"2004", ""
1000,"2005", ""

"Registered voters","Precinct Name","split Name","Party Code"
125,"1001", "", "NP"
250,"1001", "", "REP"
250,"1001", "", "DEM"
100,"1002", "", "NP"
200,"1002", "", "REP"
200,"1002", "", "DEM"
100,"1003", "", "NP"
200,"1003", "", "REP"
200,"1003", "", "DEM"
100,"1004", "", "NP"
200,"1004", "", "DEM"
200,"1004", "", "DEM"

```

Using the Export Wizard

The following is one example of the Tally Export Wizard. Windows will vary per export type.

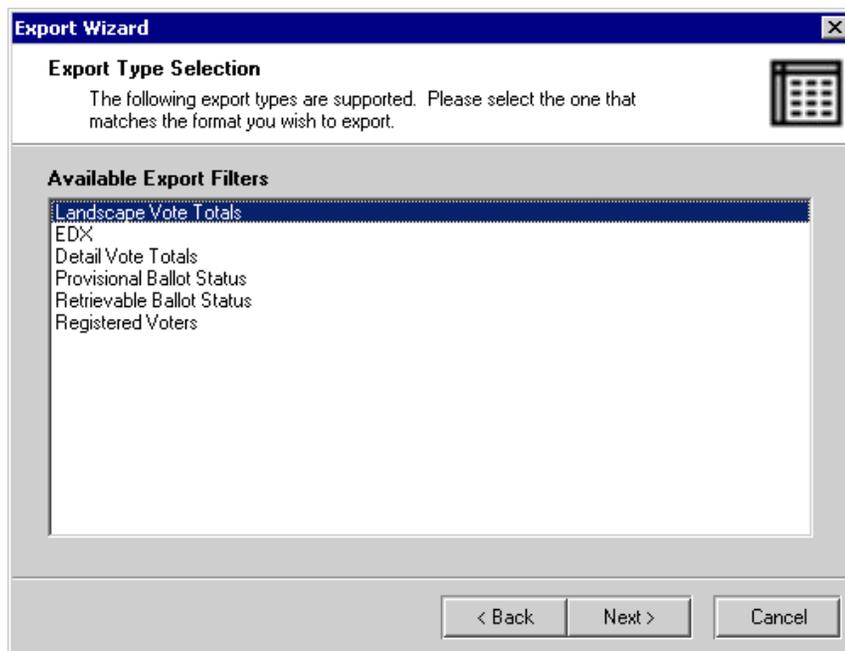
1. To access the Export Wizard, go to the **File** menu and click **Export**.



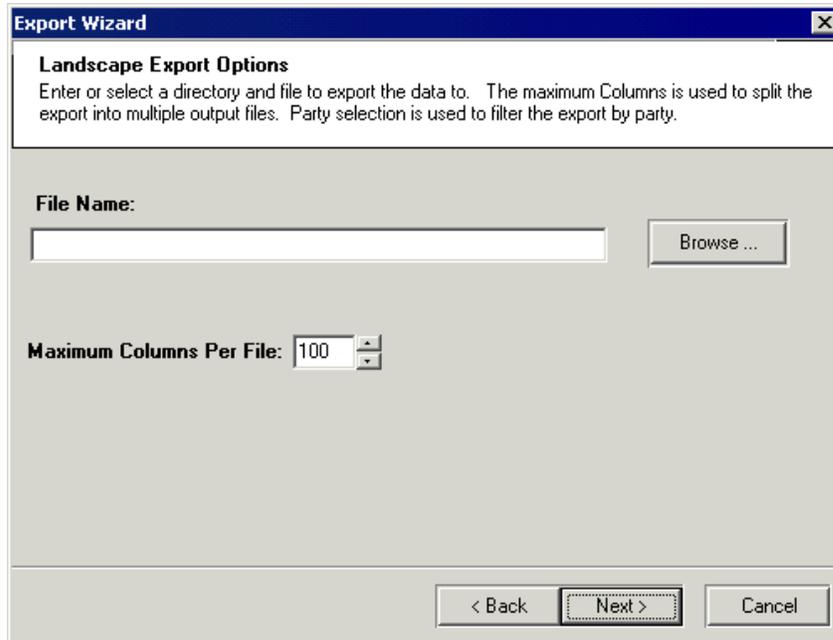
2. Click **Next**.



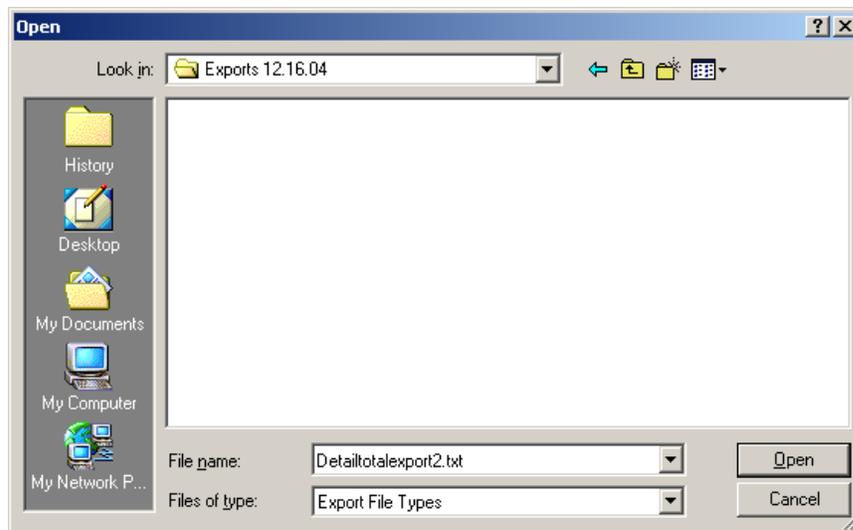
3. Select the export type and click **Next**.



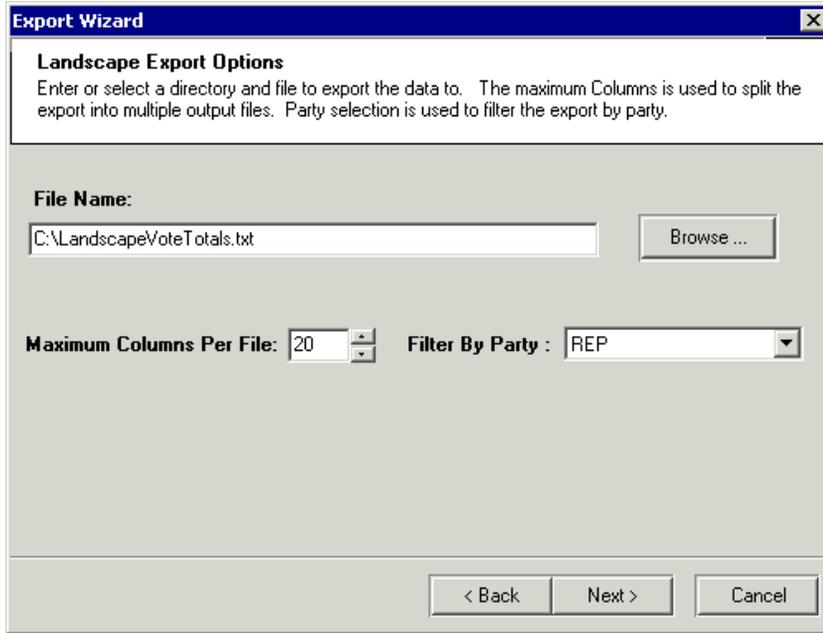
4. Select export options, as available, and click **Browse** to navigate to the location for the file.



5. Name the file and click **Open**.

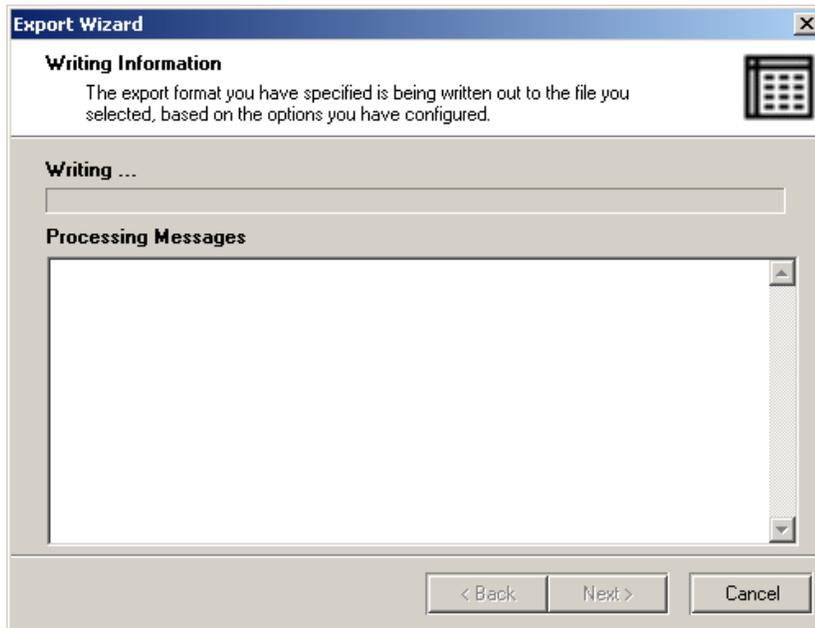


6. The filepath to the target file appears in the **Name of file to import** field. Select the **Next** button.



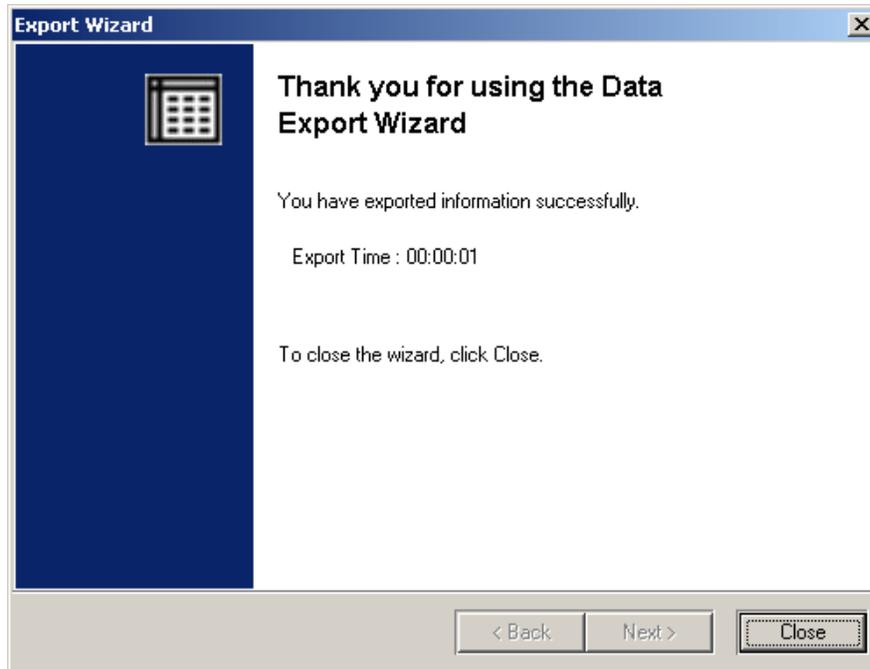
The screenshot shows the 'Export Wizard' dialog box with the title 'Landscape Export Options'. Below the title is a descriptive paragraph: 'Enter or select a directory and file to export the data to. The maximum Columns is used to split the export into multiple output files. Party selection is used to filter the export by party.' The 'File Name:' field contains the text 'C:\LandscapeVoteTotals.txt' and has a 'Browse ...' button to its right. Below this, 'Maximum Columns Per File:' is set to '20' with up/down arrows, and 'Filter By Party:' is set to 'REP' with a dropdown arrow. At the bottom are three buttons: '< Back', 'Next >', and 'Cancel'.

7. The Export Wizard writes the data file, and displays any warning messages. Select the **Back**, **Next**, or **Cancel** button as directed by the wizard. If the export is successful, the Export Wizard will continue by default.



The screenshot shows the 'Export Wizard' dialog box with the title 'Writing Information'. Below the title is a descriptive paragraph: 'The export format you have specified is being written out to the file you selected, based on the options you have configured.' There is a small icon of a grid to the right of the text. Below this is a 'Writing ...' section with a progress bar. Underneath is a 'Processing Messages' section with a large empty text area and a vertical scrollbar. At the bottom are three buttons: '< Back', 'Next >', and 'Cancel'.

8. The export process is complete. Select the **Close** button.



9. Navigate to the exported file and verify that the expected data was exported.

Notes:

Appendix K: Tally Operator Steps Checklist

These are the steps for tabulating an election with the Tally application only (without Tally-Rally communications).

|  | Tally Operator Steps: |
|---|---|
| | 1. In the BOSS program, finalize the BOSS database for Tally. |
| | 2. Double-click the Tally desktop shortcut to open the application. |
| | 3. Log in to Tally as a user with Administrator permissions. |
| | 4. If you haven't already done so, set up Tally users and permission levels. |
| | 5. Create and name/describe a new Test or Election mode database in Tally by copying the finalized BOSS database or importing an existing Tally database from file. |
| | 6. Highlight the target database, and click Select to open it. |
| | 7. Set the Tally reporting options for report labeling, candidate cross-filing, and write-in reporting. |
| | 8. (Optional) Change the ballot source labels that appear on reports. |
| | 9. (Optional) Define write-in candidates and aliases, if applicable. |
| | 10. Create a Tally Zero Report ("Cumulative Report"). |
| | 10.1 Select report options available, click OK , and view the report. |
| | 11. If you haven't already done so, insert the eCM into a USB port. |
| | 12. Process MBBs. |
| | 13. Print reports. |
| | 14. For risk-reduction and archival purposes, back up the Tally database to a time-stamped folder. |
| | 15. Process Early Voting Retrievable ballots, if applicable (or import retrievable data). |
| | 16. Include or confirm exclusion of provisional ballots, if applicable (or import provisional data). |
| | 17. Parse provisional ballots, if applicable (or import provisional data). |
| | 18. Print the "Ballot Status" report for provisional ballots, if applicable. |
| | 19. Resolve votes for write-in candidates, if applicable. |
| | 19.1 Resolve write-in votes from the eSlate and Ballot Now. |
| | 19.2 Resolve write-in images and votes from the eScan. |
| | 20. Calculate vote adjustments, if applicable. |
| | 21. For risk-reduction and archival purposes, back up the Tally database to a time-stamped folder before finalizing. |

**Tally Operator Steps:**

| | |
|--------------------------|---|
| <input type="checkbox"/> | 22. After all MBBs have been processed, finalize the election in Tally. |
| <input type="checkbox"/> | 23. Print standard reports. |
| <input type="checkbox"/> | 24. Create and print custom reports by clicking the Tally Report Wizard button in the Reporting window. |
| <input type="checkbox"/> | 25. For risk-reduction and archival purposes, back up the Tally database to a time-stamped folder. |
| <input type="checkbox"/> | 26. Import data, if necessary. |
| <input type="checkbox"/> | 27. If data was imported, repeat reporting and database backup steps. |
| <input type="checkbox"/> | 28. Export data, if necessary. |
| <input type="checkbox"/> | 29. Exit Tally. |

Appendix L: Tally-Rally Integrated Steps Checklist

These are the steps for tabulating an election with the Tally application, with some election data coming from communications with Rally.

|  Tally-Rally Integrated Steps: | |
|--|---|
| | Part 1: Tally and Rally Configuration |
| | 1. In the BOSS program, finalize the BOSS database for Tally. |
| | 2. Physically set up Tally and Rally PC hardware and Windows LAN and/or modem configurations. |
| | 3. Double-click the Tally desktop shortcut to open the application. |
| | 4. Log in to Tally as a user with Administrator permissions. |
| | 5. If you haven't already done so, set up Tally users and permission levels. |
| | 6. Create and name/describe a new Test or Election mode database in Tally by copying the finalized BOSS database or importing an existing Tally database from file. |
| | 7. Highlight the target database, and click Select to open it. |
| | 8. Set the Tally reporting options for report labeling, candidate cross-filing, and write-in reporting. |
| | 9. (Optional) Change the ballot source labels that appear on reports. |
| | 10. (Optional) In Tally, define write-in candidates and aliases, if applicable. |
| | 11. In Tally, verify and enable Rally Configuration options for LAN and/or modem connections. |
| | 12. In Tally, verify certificate information. |
| | 13. Exit Tally (optional). |
| | 14. At each Rally station, open the Rally application and log in as a user with all permissions. |
| | 15. In Rally, reset the database, and then enter the station name as defined in Tally's Rally Configuration window. |
| | 16. In Rally, at stations connecting to Tally via modem, verify dial-in options. |
| | 17. In Rally, if you haven't already done so, set up the Rally station operator as a user with at least Information archiving, MBB processing/transferring, and Reporting permissions. |
| | 18. In Rally, if you haven't already done so, set up the election event Tally operator as a user with at least MBB processing/transferring permissions. |
| | 19. In Rally, verify certificate information. |
| | 20. Exit Rally. |



Tally-Rally Integrated Steps:

| Part 2: Election Day Tally-Rally Sequential Steps | |
|--|---|
| | 1. Log in to Tally as the election operator and select the target election. |
| | 2. Create a Tally “Zero Report”. |
| | 2.1 Select report options available, click OK , and view the report. |
| | 3. If you haven’t already done so, insert the eCM into a USB port. |
| | 4. Process Absentee and Early Voting MBBs. |
| | 5. Print reports. |
| | 6. For risk-reduction and archival purposes, back up the Tally database to a time-stamped folder. |
| | 7. At each Rally station, operator-level users log in. |
| | 8. In Rally, print “Zero Reports”. |
| | 9. In Tally, enable Rally stations and start remote transfer. |
| | 10. In Tally, process Election Day MBBs. |
| | 11. In Rally, process Election Day MBBs. |
| | 12. In Tally, the first connection with each Rally PC includes accepting a security certificate from Rally. Verify, and then click Yes to accept this certificate. |
| | 13. In Rally, the first connection with the Tally PC includes accepting a security certificate from Tally. Verify and click Yes to accept this certificate. |
| | 14. In Tally, verify that accepted Rally stations display “Yes” in the Trusted field of the Rally Configuration window. |
| | 15. In Tally, print reports. |
| | 16. For risk-reduction and archival purposes, back up the Tally database to a time-stamped folder. |
| | 17. In Rally, print reports. |
| | 18. In Tally, consult reports to verify that all expected Rally station MBB data has been received. |
| | 19. Exit Rally. |
| | 20. From each Rally station, transport processed MBBs and Rally reports to the counting station. |
| | 21. In Tally, after processing all MBBs, process Early Voting Retrievable ballots, if applicable (or import retrievable data). |
| | 22. Include or confirm exclusion of provisional ballots, if applicable (or import provisional data). |



Tally-Rally Integrated Steps:

| | |
|--------------------------|---|
| <input type="checkbox"/> | 23. Parse provisional ballots, if applicable (or import provisional data). |
| <input type="checkbox"/> | 24. Print the "Ballot Status" report for provisional ballots, if applicable. |
| <input type="checkbox"/> | 25. Resolve votes for write-in candidates, if applicable. |
| <input type="checkbox"/> | 25.1 Resolve write-in votes from the eSlate and Ballot Now. |
| <input type="checkbox"/> | 25.2 Resolve write-in images and votes from the eScan. |
| <input type="checkbox"/> | 26. Calculate vote adjustments, if applicable. |
| <input type="checkbox"/> | 27. For risk-reduction and archival purposes, back up the Tally database to a time-stamped folder before finalizing. |
| <input type="checkbox"/> | 28. After all MBBs have been processed, finalize the election in Tally. |
| <input type="checkbox"/> | 29. Print standard reports. |
| <input type="checkbox"/> | 30. Create and print custom reports by clicking the Tally Report Wizard button in the Reporting window. |
| <input type="checkbox"/> | 31. For risk-reduction and archival purposes, back up the Tally database to a time-stamped folder. |
| <input type="checkbox"/> | 32. Import data, if necessary. |
| <input type="checkbox"/> | 33. If data was imported, repeat reporting and database backup steps. |
| <input type="checkbox"/> | 34. Export data, if necessary. |
| <input type="checkbox"/> | 35. Exit Tally. |

Notes:

Appendix M: Best Practices for Tally-Rally Setup

| <i>LAN Setup</i> | <i>Modem Setup</i> |
|---|---|
| <input type="checkbox"/> Rally PC, Station Name , and operator User ID SHOULD be unique. | <input type="checkbox"/> Rally PC, Station Name , and operator User ID SHOULD be unique. |
| <input type="checkbox"/> All IP addresses MUST be unique. | <input type="checkbox"/> Rally PC modems SHOULD be set up to share the same IP address. |
| <input type="checkbox"/> The election event Tally operator MUST be set up in Rally as a user with at least MBB transferring/processing permissions. | <input type="checkbox"/> The election event Tally operator MUST be set up in Rally as a user with at least MBB transferring/processing permissions. |
| <input type="checkbox"/> The election event Rally operator SHOULD be set up in Rally as user with Information archiving, MBB processing/transferring, and Reporting permissions. | <input type="checkbox"/> The election event Rally operator SHOULD be set up in Rally as user with Information archiving, MBB processing/transferring, and Reporting permissions. |
| <input type="checkbox"/> Test all Tally-Rally connections before a live election event. Data does not need to be transferred in order to test connections. | <input type="checkbox"/> The election event Tally operator User ID and Password SHOULD be entered in both Tally's Rally Configuration window and Rally's Dial-in Access tab (Modem Name and Modem Password). (OR A separate and unique Modem Name and Modem Password MUST be entered in both Tally's Rally Configuration window and Rally's Dial-in Access tab.) |
| | <input type="checkbox"/> All Rally stations using modem connections MUST use the same Modem Name and Modem Password for an election. |
| | <input type="checkbox"/> The Tally PC modem and Rally PC modem connections MUST be configured to the same maximum speed (e.g., 115200 bps). |
| | <input type="checkbox"/> Test all Tally-Rally connections before a live election event. Data does not need to be transferred in order to test connections. |

Notes:

