

System Maintenance Procedures

URCVT v. 1.2.0 09-NY System Maintenance Procedures v. 1.0.0 document is solely for use in the State of New York. This document can be expanded or updated as is necessary or required. Any recommendations listed in this document should not supersede user jurisdiction procedures or other controlling governance entities.

URCVT v. 1.2.0 09-NY System Maintenance Procedures v. 1.0.0

URCVT leverages content from the jurisdictions voting system, all maintenance on equipment should be referred to your voting system vendor. All URCVT hardware is COTS. All software other than URCVT software itself is also COTS. Refer to any COTS Maintenance Manuals for maintenance procedures.

Maintenance of URCVT software: Obtain an encrypted version of the trusted build from the NYSBOE or the VSTL. Maintain that original copy in a secure, temperature- and humidity-controlled environment. Label it with the system version and hash value.

Recommended service actions to correct malfunctions or problems shall be discussed, along with personnel and expertise required to repair and maintain the system; and equipment, materials, and facilities needed for proper maintenance. This manual shall include the sections listed below.

V.2: 2.9.1.a-h Introduction

The vendor shall describe the structure and function of the equipment (and related software) for election preparation, programming, vote recording, tabulation, and reporting in sufficient detail to provide an overview of the system for maintenance and for identification of faulty hardware or software.

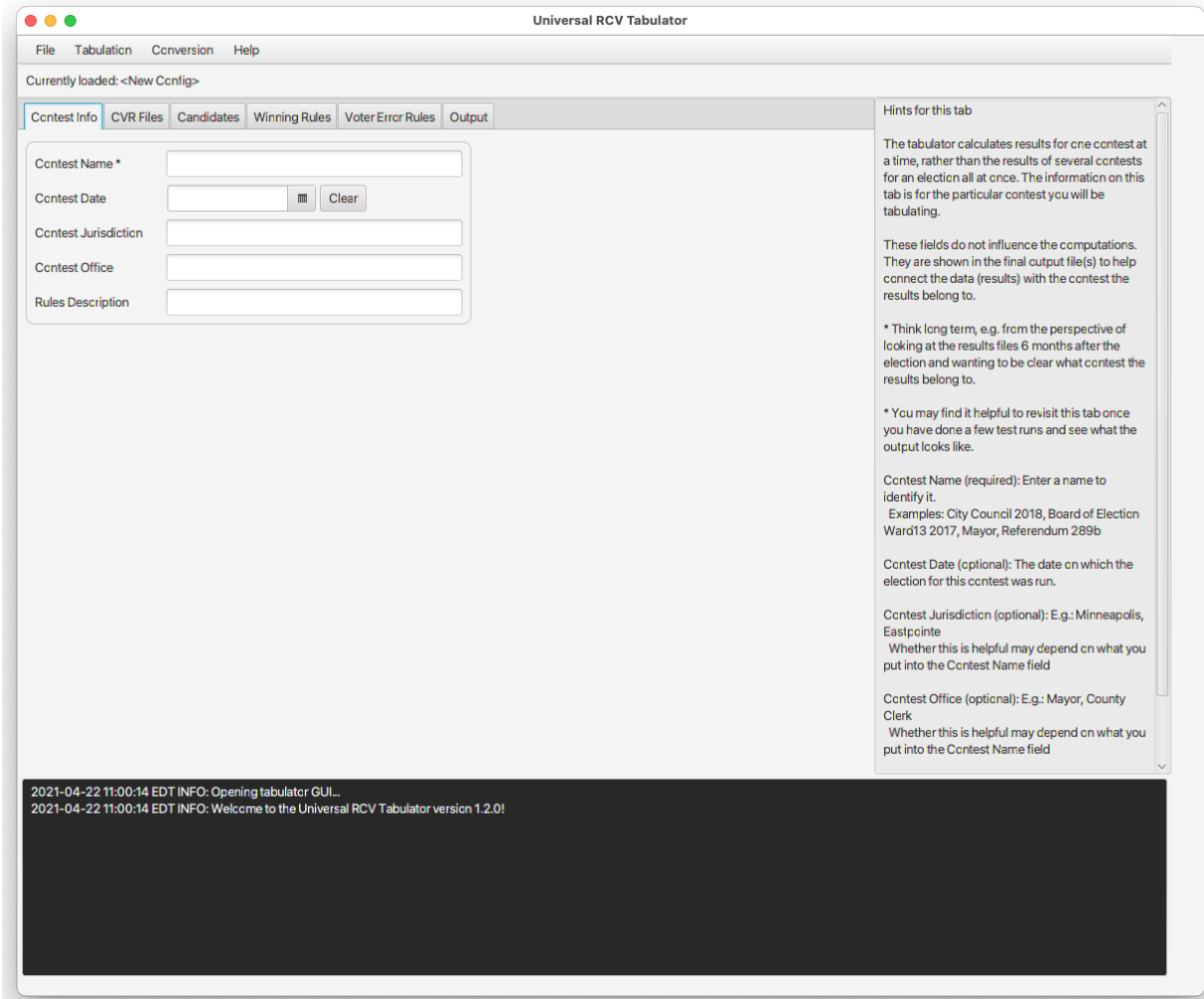
- Election preparation:
 - The software can be used to set up jurisdiction configurations according to the ranked-choice voting rules used in the jurisdiction's RCV election(s). Tabulation rules options are menu selectable using the GUI. See **URCVT v.1.2.0 300-NY Configuration File Parameters, URCVT v.1.2.0 08-NY System Operations Procedures, and URCVT v.1.2.0 11-NY L&A Testing** for more information.
- Programming
 - URCVT is not used for programming elections
- Vote Recording
 - URCVT processes RCV election data according to rules users input in configuration files. See **URCVT 1.2.0 08-NY System Operations Procedures 1.0.0** for more. If users have issues with CVR files, refer to CVR procedures from jurisdiction and any relevant procedures in **URCVT 1.2.0 08-NY System Operations Procedures 1.0.0**.
- Tabulation
 - Tabulator is used solely with a properly adjudicated CVR export files from the user jurisdiction and user jurisdiction's primary voting system vendor.
- Reporting
 - URCVT reports out summary results files in .csv and .json formats as well as an audit log in .log format. See **URCVT v1.2.0 02-NY Software Design and**

Specifications v1.0.0 for more information.

Maintenance Procedures

Preventative Maintenance Procedures

- Confirm that you are using the most recent version of the software. Confirm this by reviewing the black log box at the bottom of the Tabulator, as seen in the screenshot below. The second line of text will read “Welcome to the Universal RCV Tabulator version [version number].” Confirm that this version number matches up with the version number required of your jurisdiction. This system’s number will be version 1.2.0.
- The vendor will confirm with user jurisdiction two months prior, or as time permits, to an election in which the URCVT will be used that user jurisdiction is using the most recently certified version of the software.
- User jurisdiction must review relevant state and local laws regulating ranked-choice voting elections. Ensure that any configuration files produced in the use of URCVT conform to relevant laws. See ***URCVT 1.2.0 08-NY System Operations Procedures 1.0.0*** for more.
- User jurisdiction must review cast-vote record file formats from the voting system vendor providing CVRs for use with URCVT. All ballot adjudication must be completed prior to using CVR file(s) with the URCVT. Such review must ensure the configuration file conforms to candidate names, undervote, overvote, and other labels used in CVR files. See ***URCVT 1.2.0 08-NY System Operations Procedures 1.0.0*** for more.



V.2:2.9.2.2.a-f Corrective Maintenance Procedures

The vendor shall provide fault detection, fault isolation, correction procedures, and logic diagrams for all operational abnormalities identified by design analysis and operating experience.

The vendor shall identify specific procedures to be used in diagnosing and correcting problems in the system hardware (or user-controlled software).

- Use **URCVT v1.2.0 430-NY Universal RCV Tabulator Operator Log Messages v1.0.0** and information provided by Operator Log Box to determine if the error has a known correction.
- If no known correction, contact the vendor to review procedures already completed by the jurisdiction and propose resolution steps.

V.2:2.9.3 Maintenance Equipment

The vendor shall identify and describe any special purpose test or maintenance equipment recommended for fault isolation and diagnostic purposes.

- JUnit Jupiter 5.6.2 and JUnit Platform 1.6.2 are used for all automated testing of the Universal RCV Tabulator. More information is included in **URCVT v. 1.2.0 03-NY System Hardware Specification v. 1.0.0**.

V.2:2.9.4.1.a-f Common Standards

The vendor shall provide a complete list of approved parts and materials needed for maintenance.

- A computer conforming to the requirements laid out in **URCVT v. 1.2.0 03-NY System Hardware Specification v. 1.0.0**.
- A backup USB drive with a copy of certified voting system software retrieved from a trusted source.

V.2:2.9.6 Appendices

The vendor may provide descriptive material and data supplementing the various sections of the body of the System Maintenance Manual. The content and arrangement of appendices shall be at the discretion of the vendor. Topics recommended for amplification or treatment in the appendix include:

Glossary: A listing and brief definition of all terms that may be unfamiliar to persons not trained in either voting systems or computer maintenance;

- See **URCVT v. 1.2.0 08-NY System Operations Procedures v. 1.0.0** for all relevant terms used in the URCVT.
- See **URCVT v. 1.2.0 300-NY Configuration File Parameters v. 1.0.0** for details on all parameters in URCVT software.

References: A list of references to all vendor documents and other sources related to maintenance of the system;

- **URCVT v. 1.2.0 08-NY System Operations Procedures v. 1.0.0**
- **URCVT v. 1.2.0 03-NY System Hardware Specification v. 1.0.0**
- **URCVT v. 1.2.0 300-NY Configuration File Parameters v. 1.0.0**
- **URCVT v. 1.2.0 16-NY Hardware Hardening Procedures v.1.0.0**

Detailed Examples: Detailed scenarios that outline correct system responses to every conceivable faulty operator input.

- **URCVT v. 1.2.0 430-NY Universal RCV Tabulator Operator Log Messages 1.0.0**

Maintenance and Security Procedures: This appendix shall contain technical illustrations and schematic representations of electronic circuits unique to the system.

- No unique electronic circuits. No such illustrations are relevant.

Document Revision History

Date	Version	Description	Author
04/27/2021	1.0.0	System Maintenance Procedures	Chris Hughes