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Section I

Introduction

PRODUCT SUMMARY

The Central Management Software allows multiple medication storage devices to be managed from a central location. The software uses a network connection to communicate with devices on the local network. It allows user logs to be downloaded, aggregated across devices, and saved to a locally stored database. The software also allows remote management of device settings, such as user access permissions, bin names, and operational settings.

SYSTEM REQUIREMENTS

- The Central Management Software must run on a Windows PC

- The software requires about 30MB of storage for the program plus additional storage for the local database. The size of the database will vary depending on usage.

- The PC must have a network connection to communicate with the medication storage devices on the network.

- Any device managed by the software must also be connected to the local network.

- Continuous network connection is not necessary for the software or devices. A network connection is only needed when the software tries to communicate with the devices.

GETTING STARTED

SOFTWARE INSTALLATION

Please visit www.altus-inc.com/manuals to download the Central Management Software Installer. Double click the install file to begin the installation.

Follow the onscreen instructions to choose the installation location and options. The default installation location is the current Windows user's personal directory.

The Central Management Software may now be launched through the start menu or desktop shortcut, depending on the options chosen during the installation.
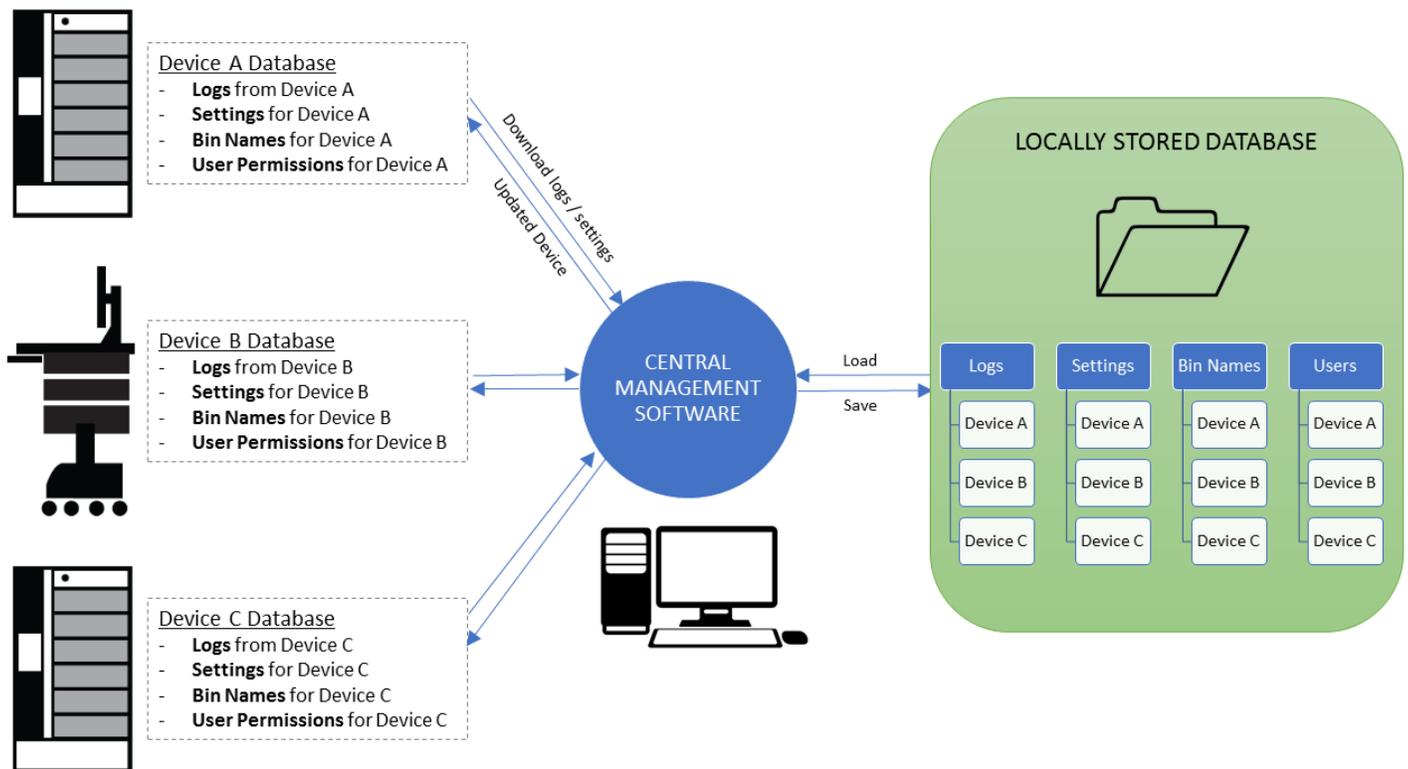
USING THIS MANUAL

We strongly recommend reading this manual in its entirety before using the software. The manual is organized into the following sections:

I. **Introduction** – The current section provides general information on the software, installation, and this manual.

II. **Overview of the Software** – This section explain how data is structured, stored and loaded in the Central Management Software and connected devices. It provides an important background for the sections that follow.

III. **Using the Software** – This section explains how to configure the software and conduct specific operations, such as loading and saving data and updating devices.

IV. **Appendix** – The appendix provides additional information, such as the specific information that is stored in each database table.

Overview of the Software

DATABASES AND COMMUNICATION

Device A Database
- **Logs** from Device A
- **Settings** for Device A
- **Bin Names** for Device A
- **User Permissions** for Device A

Device B Database
- **Logs** from Device B
- **Settings** for Device B
- **Bin Names** for Device B
- **User Permissions** for Device B

Device C Database
- **Logs** from Device C
- **Settings** for Device C
- **Bin Names** for Device C
- **User Permissions** for Device C

Download logs / settings
Updated Device

CENTRAL MANAGEMENT SOFTWARE

Load
Save

LOCALLY STORED DATABASE

Logs	Settings	Bin Names	Users
Device A	Device A	Device A	Device A
Device B	Device B	Device B	Device B
Device C	Device C	Device C	Device C

COMMUNICATION

The Central Management Software runs on a PC and serves as the communication hub between connected devices and a locally stored database. The software communicates with medication storage devices through a local area connection. The locally stored database can be kept on the PC or a network folder. Each medication storage device maintains its own database.

The software can *download* logs and settings from connected devices. Once downloaded into the software, logs and settings can be *saved* to a locally stored database for future use. To view previously saved data, logs and settings can be *loaded* from the locally stored database.

Any settings that are downloaded or loaded into the Central Management Software can be used to *update* connected devices. For instance, a list of users can be loaded from the locally stored database and then used to update the users on one or more connected devices.

Establishing Communication

The PC running the software and the remote devices must be on the same local network. Review the user manual for your

device for information on connecting your device to the local network.

To establish a connection to a device, the network address for the device must be added to the device list. See "List of Devices" on page 7 for more information on establishing a network connection between the Central Management Software and your devices. It is recommended that connected devices are assigned a static IP address or preferably a unique hostname. Consult with your network administrator about networking questions.
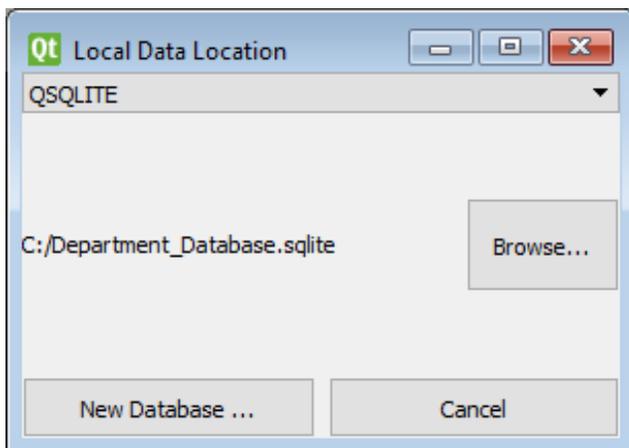
DATABASES

Locally Stored Database

A locally stored database serves as the data repository for the Central Management Software. This data file stores all information related to the Central Management Software, including the list of connected devices (see "List of Devices" on page 7).

Multiple database files can be created and used to segregate data. For instance, a separate database can be created for each department within a facility. However, only one database may be open at any time. If multiple databases are used, always ensure the desired database is open when using the software.

The "Database Location" option in the Settings menu shows the currently loaded database file (see "Database Location" on page 7). The file shown in that option will serve as the current database, from which data may be loaded or saved. The database may be stored on a network folder so that it can be backed up or made visible to other computers.

The section titled "Managing Locally Stored Data" on page 10 explains how to load and save data form the local database.

Device Databases

Each connected device maintains its own database, which is used to configure settings, determine user access permissions, and record user access logs of that device.

A device's database does not contain information about other devices. However, elements of a database can be replicated across devices through the Central Management Software. In other words, each device can be configured to operate independently (i.e. different user access, bin names, settings, etc.) or multiple devices can be configured to operate the same.

See "Managing Data Stored on Devices" on page 8 for information on downloading and updating data on connected devices.

DATA TABLES

Data that is downloaded from devices or loaded from the local database appears in windowed tables in the Central Management Software (see the examples below). Data is displayed in separate tables for each device and each data type (Settings, Logs, Users, Bins).
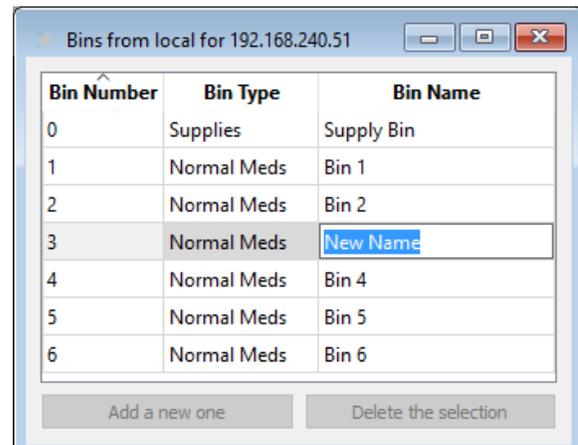
To edit a field in a table, double click on the entry you'd like to modify. Enter the new information and press "enter" on your keyboard. To save changes to the local database follow the instructions in "Saving Data to the Local Database" on page 10. To update a device with changes, follow the instructions in "Updating Devices" on page 9.
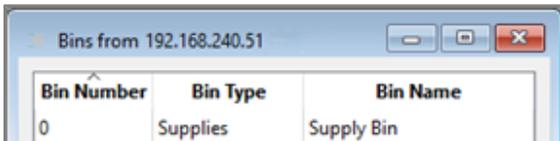
The title of each table window describes the type of data and source of the data. The title distinguishes data that is downloaded from devices and data that is loaded from the local database as shown below:

Data downloaded from a device
Title Format: *"DATA TYPE from NETWORK ADDRESS"*
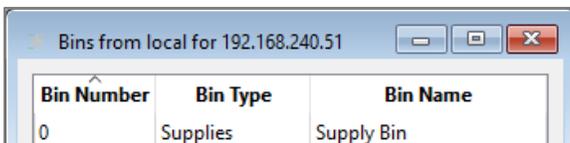Example: *"Bins from 192.168.240.51"*

Data downloaded from the local database
Title Format: *"DATA TYPE from local for NETWORK ADDRESS"*
Example: *"Bins from local for 192.168.240.51"*


THE MENU SYSTEM

The menu system provides the list of command and options in the Central Management Software. It is categorized into the following sections:
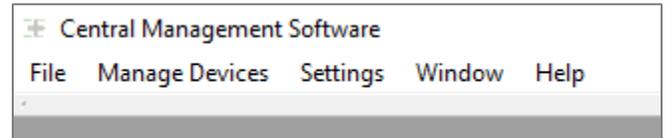
- **File** – Provides options for loading and saving data to the local database. Also provides an option for exporting data. See "Managing Locally Stored Data" on page 10.

- **Manage Devices** – Provides options for downloading data from connected devices and updating those devices with new settings. See "Managing Data Stored on Devices" on page 8.

- **Settings** – Provides options for connecting to devices and selecting a local database file. The options in this menu should be configured prior to using other options in the software. See "Configuring the Software" on page 7.

- **Window** – Provides options for organizing and navigating open windows within the program (see below).

- **Help** – Displays information about the Central Management Software.

The Window Menu

The windows menu has four options as shown below:
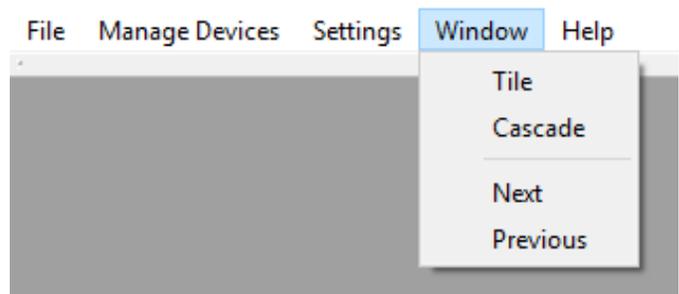
"Tile" and "Cascade" organize open windows within the program. "Tile" organizes the windows into a tiled pattern, while "Cascade" stacks the windows in a staggered pattern.

"Next" and "Previous" allow navigation through open windows. "Previous" will display the previously opened window and "Next" will display the next window.

Section III

Using the Software

CONFIGURING THE SOFTWARE

The Settings menu provides options for modifying the list of connected devices and selecting the local database file. It is important to properly configure these settings prior to using other functions of the software.
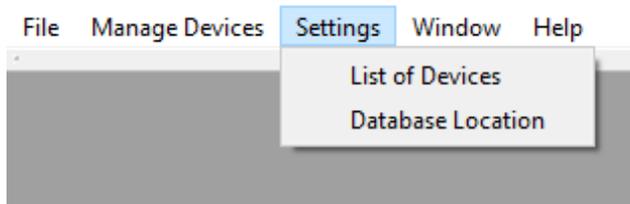
DATABASE LOCATION

Choose "Database Location" from the Settings Menu to view the location of the currently open database. You may also open another database or create a new database from this window (see instructions below). For more information on the local database system, see "Locally Stored Database" on page 4.
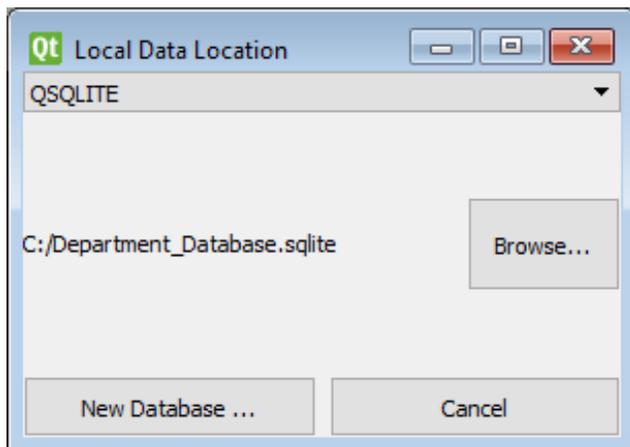
To create a new database file, press the "New Database" button. In the next dialog box, browse to the desired folder location. Enter a new database name and click "Open" to create it. Ensure that the correct database file is displayed in the Local Data Location window. The Local Data Location window may now be closed.

Open an Existing Database

To open an existing database, press the "Browse" button. In the next dialog box, browse to the database file you'd like to use. Click open. Ensure that the correct database file is displayed in the Local Data Location window. The Local Data Location window may now be closed.

LIST OF DEVICES
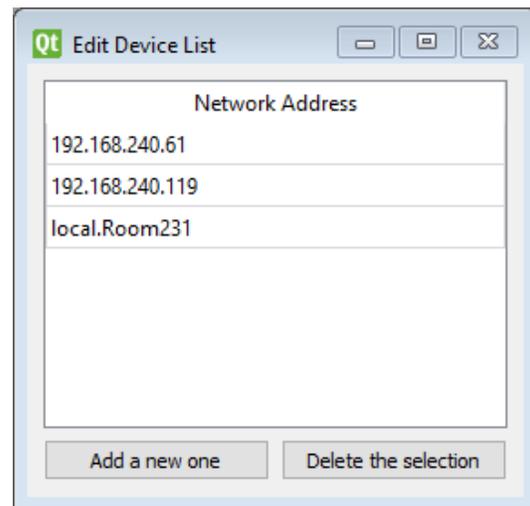
Choose "List of Devices" from the Settings menu to view and modify the list of connected devices. Each device is listed by its Network Address (IP address or hostname). For convenience, we recommend giving each device an intuitive hostname, so it can easily be identified in the list (for example "Room231" on the list above. Consult the user manual for your device to determine how to set the host name.

To add a device to the list, click "Add new one". A new entry entitled "DEFAULT" will be added. Double click on the name "DEFAULT" and type the network address of the new device. Press enter on your keyboard to complete the process.

To delete a device, select the desired network address by clicking on it. Press "Delete the selection".

Static IP and Hostname

Routers and access points often assign IP address dynamically, which means that the IP addresses on your devices could change over time. This could prevent the Central Management Software from communicating with your device if the IP address changes. ***Therefore, it is recommended that a constant network address is established for each device.*** This can be accomplished by either assigning static IP addresses to your devices or assigning a hostname for each device.

Your network administrator may be able to assign a "static IP address" to the cabinet that does not change over time. Contact your network administrator for more details.

Alternatively, each device can be assigned a unique hostname that is discoverable on the network. To assign a hostname, consult the user manual for your device. Contact your network administrator to determine how to identify a device by hostname on your network.

MANAGING DATA STORED ON DEVICES

The "Manage Devices" menu provides options for downloading information from connected devices and updating devices with new information. The options are described below.
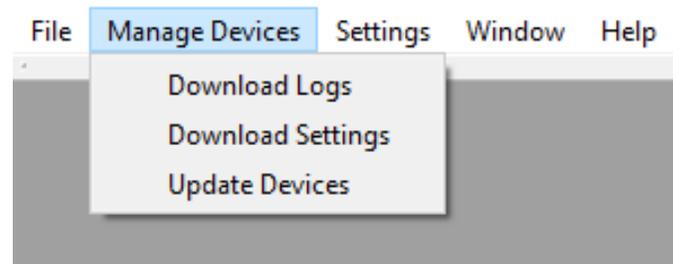
DOWNLOADING LOGS FROM DEVICES

To download logs from one or multiple devices, choose "Download Logs" from the Manage Devices Menu. A series of dialog boxes will guide you through the steps of downloading logs.

When prompted, select a device or multiple devices from which you wish to download logs. To select multiple devices, the following shortcuts may be used. This information also appears in the "Help" section of the selection dialog box.
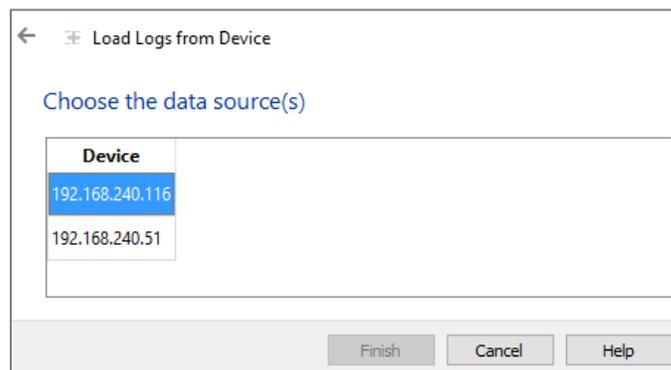
- To select all devices, press "CTRL" and "A" together on your keyboard.
- To select multiple devices, hold "CTRL" on your keyboard while selecting devices with your left mouse button. This method may also be used to deselect devices from a current selection.
- To select a range of devices, select the first device in the desired range. Next, hold "Shift" on your keyboard while clicking on the last device in the desired range.

When all of the desired devices have been selected, click finish to begin downloading the logs. A progress bar will show the progress of the download process. If multiple devices are selected, the logs will be aggregated into a single table.

See "Log Table" on page 13 for more information on user logs.

DOWNLOADING SETTINGS FROM DEVICES

Device settings are stored on each device. These settings configure behavior of each device. A specific device's settings may be downloaded for viewing, editing, or saving.

To download device settings, choose "Download Settings" from the Manage Devices Menu. A series of dialog boxes will guide you through the steps of downloading settings.

When prompted, select a device or multiple devices from which you wish to download settings. To select multiple devices, use the shortcuts described in "Downloading Logs from Devices" section on page 8. This information also appears in the "Help" section of the selection dialog box. Press "Next".
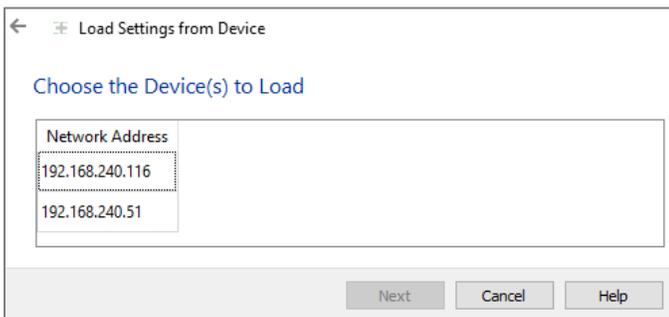
On the next screen, choose the data you wish to load. There are three options:

- **Bins** – Loads bin names and bin types
- **Settings** – Loads settings that control device operation
- **Users** – Loads a list of users and their access rights

After selecting the options you'd like, press "Finish". The selected data will be loaded into individual tables. The data in these tables may be edited as described in the "Data Tables" section on page 5.

UPDATING DEVICES

Any opened data table can be sent to a device in order to update the data on that device. For instance, when a new user is added from the Central Management Software, the user table can be updated on all devices.

WARNING: Updating a device with any particular data table will replace the existing data table on that device. For instance, if a new list of users is saved to a device, it will replace the previous list of users.

To update a device (or multiple devices), choose "Update Devices" from the Manage Devices menu. A series of dialog boxes will guide you through the steps of updating devices. When prompted, choose the data tables that you would like send to your devices. Press "Next".
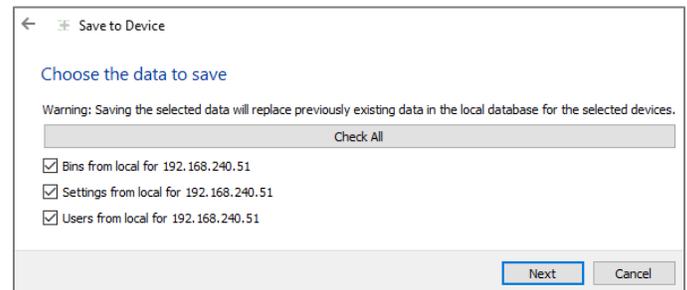

On the next screen choose the devices that you would like to update with your selected data. To select multiple devices, use the shortcuts described in "Downloading Logs from Devices" section on page 8. This information also appears in the "Help" section of the selection dialog box. Press "Finish" to complete the update process.
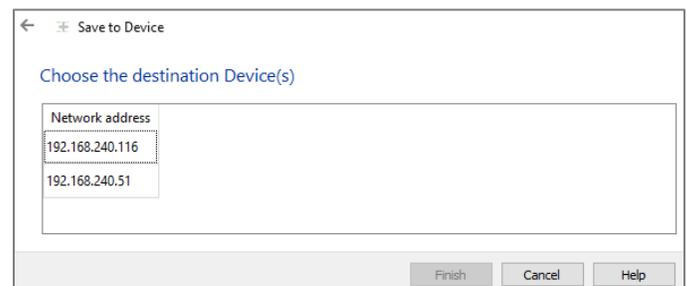
MANAGING LOCALLY STORED DATA

The File Menu provides options for managing data in the local database and exporting data to separate file. The options are described below.
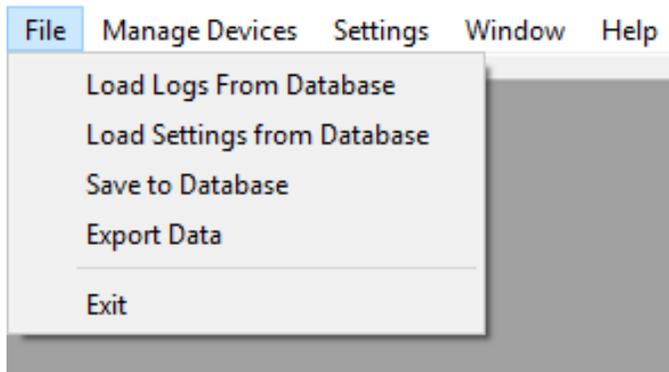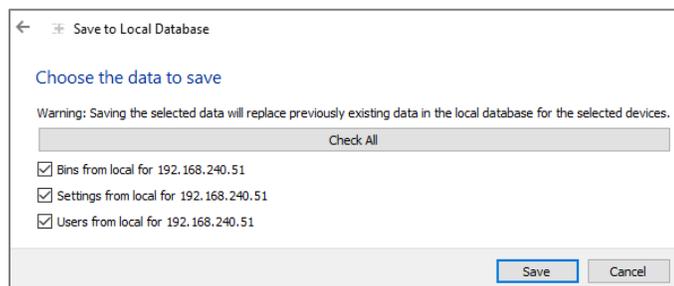

SAVING DATA TO THE LOCAL DATABASE

User logs and device settings can be saved as a backup or for future use. For instance, logs downloaded from devices can be saved for future viewing. Or a list of users can be saved to the local database to serve as the master list of users. When needed, the list can be modified and can be used to update devices (see "Updating Devices" on page 9).

WARNING: Saving a data table to the local database will replace and existing data table in the database. However, data tables saved to the local database are always separated by device name. For instance, if logs from multiple devices are saved to the local database, the logs will be separated by device in the database. Logs that already exist in the local database for any particular device will be replaced with the new logs for that device.
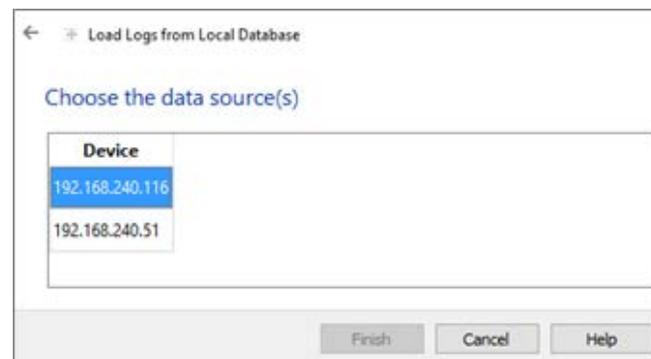
To save data to the local database, choose "Save to Database" from the File menu. A series of dialog boxes will guide you through the steps of saving data. When prompted, choose the data tables that you would like save to the local database. Press "Save" to complete the update process.

LOADING LOGS FROM THE LOCAL DATABASE

To load logs that were previously saved to the local database, choose "Load Logs From Database" in the File Menu. A series of dialog boxes will guide you through the steps of loading the logs.

When prompted, select the device logs you wish to load. To select multiple devices, use the shortcuts described in "Downloading Logs from Devices" section on page 8. This information also appears in the "Help" section of the selection dialog box. If multiple devices are selected, the logs will be aggregated into a single table.


When all of the desired devices have been selected, click finish to begin downloading the logs. A progress bar will show the progress of the download process.

See "Log Table" on page 13 for more information on user logs.

LOADING SETTINGS FROM THE LOCAL DATABASE

To load previously-saved settings from the local database, choose "Load Settings from Database" from the File Menu. A series of dialog boxes will guide you through the steps of loading settings.

When prompted, select a device or multiple devices from which you wish to download settings. To select multiple devices, use the shortcuts described in "Downloading Logs from Devices" section on page 8. This information also appears in the "Help" section of the selection dialog box. Press "Next".
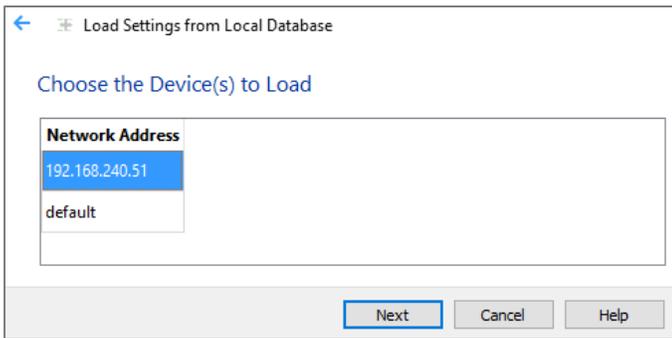
On the next screen, choose the data you wish to load. There are three options: Bins, Settings, and Users as described in "Downloading Settings from Devices" on page 9.
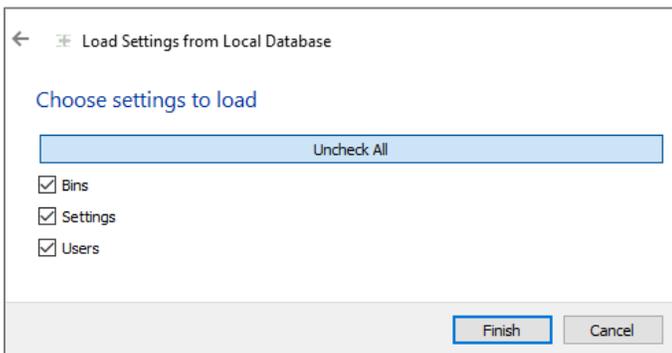

After selecting the options you'd like, press "Finish". The selected data will be loaded into individual tables. The data in these tables may be edited as described in the "Data Tables" section on page 5.

EXPORTING DATA

Opened data may be exported to a CSV (comma-separated-values) file. This function is useful for exporting data into a format that can be loaded into spreadsheets and other software programs.

To export data, choose "Export Data" from the File menu. A series of dialog boxes will guide you through the steps of exporting data. When prompted, choose the data tables that you would wish to export. Press "Next" to continue. A dialog will appear allowing you to choose the location and name for the exported file.
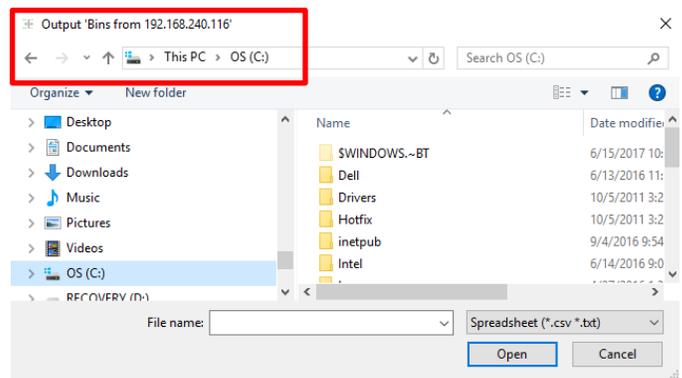
After choosing a file name and location, press "Open" to save the file.

IMPORTANT NOTE: Each data table selected will be exported into a separate file. The current table being exported is displayed in the titled block of the files selection window. This information is boxed in the above image. A detail of the information is shown below for clarity.
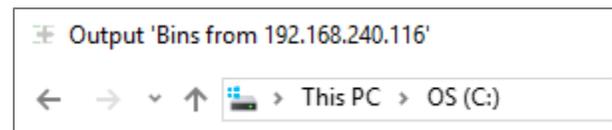
<h1 style="text-align:center">Section IV</h1>

<h1 style="text-align:center">Appendix</h1>

DATA TABLE FIELDS

This section describes the "fields" that exist in each data table type (Settings, Bins, Users and Logs). Fields are holding places for specific information as described below.

SETTINGS TABLE

The settings table includes information that controls operation of a device:

- **CanOpenAll** – Controls whether a icon appears on the device to enable all bins to be opened at once. "true" enables the button and "false" disables it.

- **Timeout** – The time in seconds before the device automatically relocks.

- **Version** – Displays the firmware version of your device. This setting is provided for reference only and cannot be changed on the device.

BINS TABLE

The bins table displays the bin number, the bin type and the bin name. Only bin type and bin name are editable. Bin number 0 is included for devices that contain supply storage areas and will only affect such devices.

Double clicking on bin type reveals a pull-down menu of options. The bin type may limit access for specific user types as explained in your device manual (see "Other Manuals and Software" on page 14).

USERS TABLE

The users table displays the users that have access to a device and includes the following columns:

- **PIN** – Unique numeric identifier and access code for a user. ***This PIN code must be kept confidential to prevent unauthorized use of a device.***

- **Name** – The unique text name for a user

- **Enabled** – Determines whether a user has access to the device. "Yes" grants user to access the cabinet. "No" disables the user and prevents access to the device.

- **User Type** – Provides selection of user type through a drop-down menu. User type will affect a user's access rights within a device as explained in your device manual (see "Other Manuals and Software" on page 14).

- **Temporary User Expires** – Sets a user to expire at a future time. Enter the desired expiration date and time in this field. After the expiration date, the user will be disabled (i.e. Enabled will be set to "No").

To add a new user, press "Add a new one". Next, edit the fields for the new user as desired. To delete a user, select the desired user and press the "Delete the selection". It is generally recommended that users are disabled rather than deleted for better record keeping.

LOG TABLE

The log table displays information regarding user access to a device. It displays who has accessed contents of the device, who has modified device settings, and who has modified user settings.

If logs are loaded from multiple devices, the logs will be aggregated into a single table and sorted by date. When an aggregated log table is saved to the local database, the logs are separated by device. This allows selection of which devices to include in a log table each time one is loaded from the local database (see "Loading Logs from the Local Database" on page 10).

The table below describes the information included in the log table.

Heading	Indicates…	Examples
Device	The device name	Shows the device name set for your device
Network Address	The network identifier for the device	IP address or hostname
User Name	Who performed the activity	User Name or "System" for automated activities (i.e. during startup).
User ID	The PIN code for the user	
Activity	What was done	- Lock / Unlock / Logout - ChUser (a user was added or modified) - ChSettings (a setting was modified)
Item	The item that was affected.	Bin Number, Cassette, or Supply Door
Description	Details of the activity	- Name of bin that was accessed - Modification made to user account - Description of setting that was changed. - Startup events and any errors
Date & Time	The date and time that the activity occurred	4/15/2017 16:53:16

OTHER MANUALS AND SOFTWARE

Please visit us at: www.altus-inc.com/manuals to download all operating and user manuals and to access the Central Management Software.