

JACO CartCare™ Client

MANUAL 5.5

Advanced Cart Management for JACO Cart Systems

Supports:

CartCare Client Version 1.3.5.0

**Adapter Firmware Version 4.1.23
 4.1.22**

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1. *Overview*

The JACO CartCare™ Client software is designed to display battery alerts and notification onscreen. Software does not have to be installed in order for the JACO power system to work, but as an aide to help users understand battery condition.

2. *Initial Software Installation*



Remove Previously Installed Versions of the CartCare Client

If a previous version is installed, remove the installed version first.

- Ensure that the CartCare Client is not running
- If an uninstall shortcut exist in the JACOCartCareClient Folder, use it. Else, open the Control Panel and click on “Add or Remove Programs”

Plug in the CartCare Adapter USB Cable

Simply plug the cable from the CartCare USB Adapter into the attached computer’s USB port. The Windows Operating System will “discover” the Adapter and will automatically build and install the proper HID USB driver. No special driver is needed.

Install the CartCare Client

- Place the CartCare Suite CD into the CD Drive or copy the CD’s data content to a flash drive
- Open the appropriate JACOCartCareClient.MSI file depending on the operating system
- Follow the instructions to install the CartCare Client application

Uninstall the CartCare Client

- If an uninstall shortcut exist in the JACOCartCareClient Folder, use it. Else, open the Control Panel and click on “Add or Remove Programs”

3. *CartCare Client Main Display Screens*

Battery status and time remaining

After installation, a shortcut to the JACO CartCare Client application is placed in the “Startup” folder for each user. Upon restarting the computer, the main display screen shown on the left below appears on the computer’s screen.

The main screen displays the status of the power system. Status bar have its color reflecting how much capacity is left on the batteries. The status bar can be moved around to accommodate user, but can only be fixed in location by administrator privileges.



No Load – no current draws from the batteries, or battery is fully charged while left plugged in the wall outlet.

NO DATA – the USB wire is disconnected or the power system has shutdown.

Recharging – the power system is recharging.

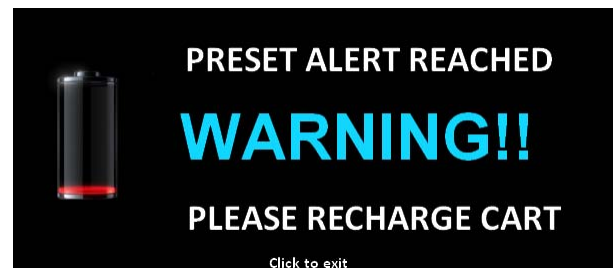
Battery Low – the capacity is less than 15%.

Replace Batt – battery needs replacement.

ERROR – no connection with the CartCare Services







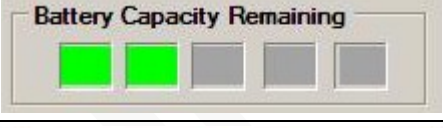
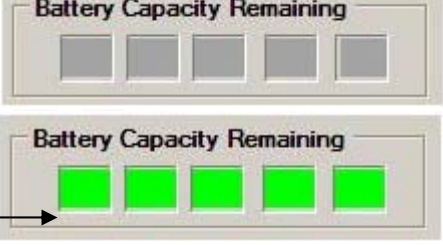

On-Screen Alerts

On-screen alerts grab user’s attention portraying the power system’s status. Each alert is unique, below are some example of alerts.



Battery Capacity Indicators

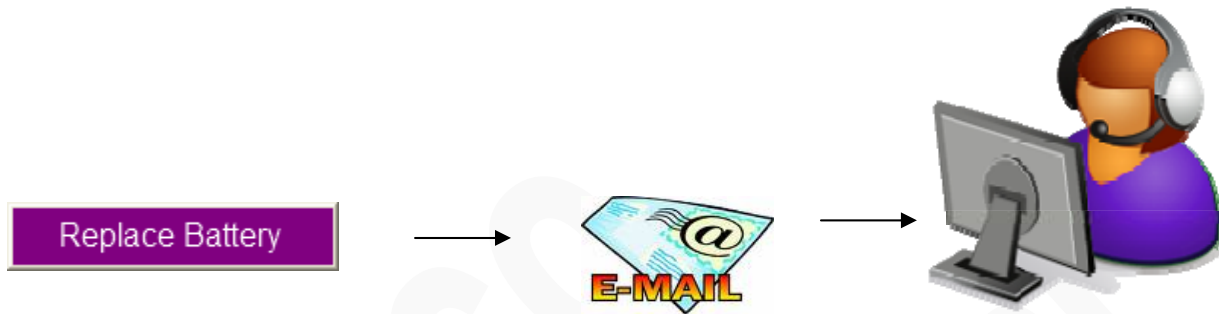
In addition to the Runtime Remaining indicator, there are other indicators that are helpful in communicating the status of the battery capacity. The table below indicates the battery capacity versus the indication of the battery capacity indicators.

Battery Capacity Range	Cart “LED” Indicator	System Tray Indicator
90% to 100% Remaining		
70% to 89% Remaining		
50% to 69% Remaining		
31% to 49% Remaining		
0% to 30% Remaining Note: LED “blinks”		

In addition, should the on-screen status bar is disabled, a “quick-glance” indication of the remaining battery capacity is shown by the color of the JACO system tray icon. The background color of the icon will change in accordance with the table above to indicate the remaining battery capacity.


Battery Replacement Indication

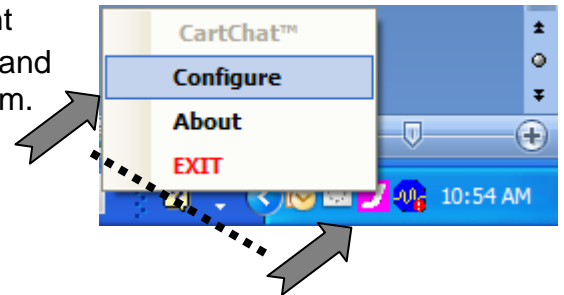
When the battery has been discharged to the equivalent of 600 “full discharge cycles”, a “Replacement batt” message will be displayed on the status bar. In addition, the CartCare Client may be configured to send an email to a recipient of choice alerting him/her of the battery replacement notification (see [Email Notifications](#)).



4. *CartCareClient Settings*

Overview

Only administrative privilege user can access the CartCareClient settings by right-clicking on the  icon in the system tray area and then placing the mouse pointer over the **Admin Setup** menu item.



The CartCare Client implements an easy to use, point-and click, graphic user interface to view/change the various application configuration parameters.

The **JACO CartCare Client Configuration** dialog box (shown below) will opened with each of the screen items showing the current value of each parameter.

e-Drawer Unlock PINs

If a cart is equipped with electronic lock drawer, the unlock PIN numbers may be changed by selecting a new PIN number from the dropdown list for PIN1 and/or PIN2. The default PINs are “D1”, “D2” (meaning number 1 and number 2 on the keyboard – not keypad)

e-Drawer Unlock Time

The amount of time the electronic lock drawer will remain unlocked. Select the desired time from the dropdown list. The cart’s default value is 3 seconds. In case of emergency, there is an auto-lock feature enabled by clicking on the Drawer Unlock message displayed onscreen.

Battery Service Start Date

A date should be entered when the battery system is first put into service and whenever the battery pack is replaced.

To enable a date change, check the small checkbox in the combo box and select a date from the drop down calendar tool.

CycleXtender™ Level

A pre-warning slide bar, when configured, alerts users to recharge power system. If a CycleXtender warning is desired, select a value from the dropdown list. The default value is “0” for “no CycleXtender warning”. The capacity selected is the capacity remaining.

Enter Hibernate

The software will put the computer into hibernation mode right before the power system shuts down to prevent hard shutdown. This feature is set to disable as default.

Onscreen Display

The rectangular status bar that appears when the software starts can be disabled to hide the status bar. When enabled, the status bar will appear.

Communication Port

A TCP network port used to communicate with the Fleet Manager, Services, and Web interrogator. Default port is 80. Port is rarely changed, unless other software have higher priorities and hogs the port would result a change in port for software to work properly.

Fleet Manager Servers

In order for a cart to communicate with one or more Fleet Managers, the Fleet Manager computer name must be entered into the cart's configuration file. Typically at least the first Fleet Manager name is entered at the cart itself.

Thereafter, additional Fleet Manager servers may be configured via the initial Fleet Manager by first entering the previously entered FM Server One Name and then entering up to two additional FM Server names.

NOTE: Entering a FM Server name that is incorrect will stop cart to Fleet Manager communication and may require manual re-entering of the FM Server name at the cart itself.

There are no default FM Server name values.

Email Alert Server

The CartCare Client can be setup to email notifications of a battery low condition and/or a battery replacement condition. To enable these email alerts, click their respective checkbox and input e-mail account information.

The cart's default is set to disable email notifications.

Email Notifications

The CartCare Client may be configured to provide email alerts to one or more persons when the cart shows a "Battery Low" condition and/or when a "Battery Replacement" notification is given.

In order to send email alerts, the CartCare Client software must be configured with a number of email parameters so as to allow the software to access and use the local pop/smtp email system.

The parameters are in the CartCareClient GUI settings.

Setting Name	Type of Data	Default Value	Comment
Email_Batt_Low_Enabled	bool	False	Set to True to enable Battery Low notifications
Email_Batt_Repl_Enabled	bool	False	Set to True to enable Battery Replacement notifications
Email_To_Address	string	Blank	Enter email address of intended recipients separated by a comma (e.g. IT@hospital.com, Nurse@hospital.com)
Email_UserName	string	Blank	Enter the UserName of the email account to be used for notifications
Email_Password	string	Blank	Enter the Password of the email account to be used for notifications
Email_Server	string	Blank	Enter the smtp server address of the email account to be used for notifications
Email_Port	string	25	Enter the port number (if different than port 25) of the email account to be used for notifications

Multi-Pin Mode

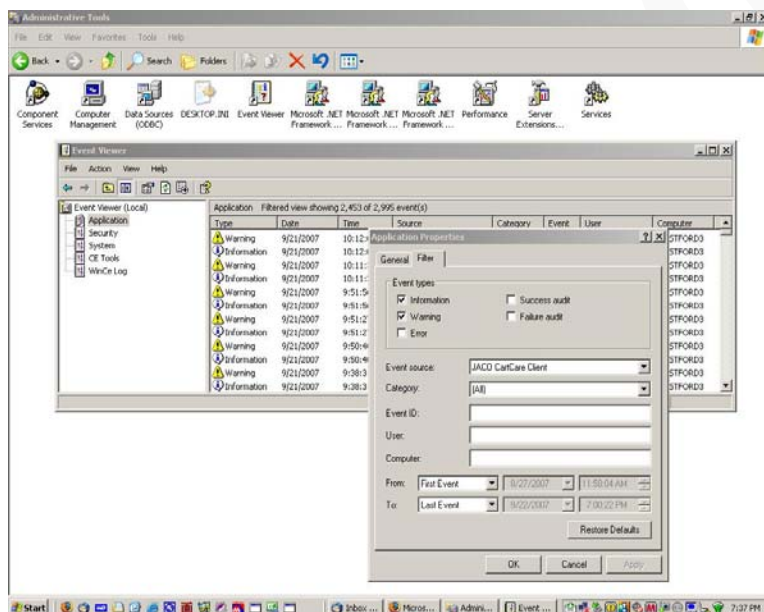
This is the advanced security option of the e-locking drawers. Choose between 2 – 6 pin modes. If default is selected, any user can open drawer with default pin. If 2 – 6 pin mode is selected, only users in the Pin database with their unique pins are able to access the e-drawer.

5. Event Logging

All events are entered into a standard Windows Event Log on the client computer. JACO CartCare Client events may be "Warnings", "Errors" or "Information". The Event Log may be filtered by application and event type. This allows easy access to only the desired information in the Event Log.

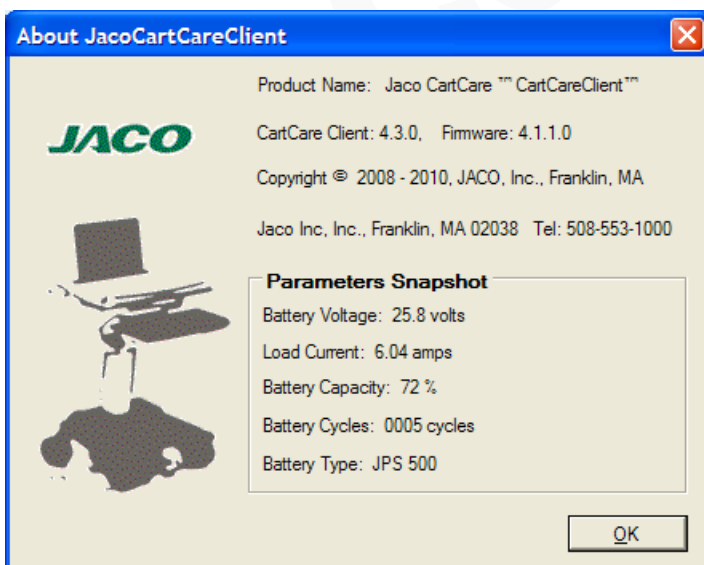
Event Logs are also accessible with a variety of third party analysis and graphing tools to help IT administrators with trend analysis, alerting and asset management.

```
eventLog.WriteEntry("Recharging", EventLogEntryType.Information, 5);
```



Event	ID
Reserved	1
Battery Critically Low	2
Switched to Laptop Power	3
Drawer Unlocked	4
Recharging Begin	5
Replace Battery Notification	6
JPower Shutting Down	7
Entering Hibernation	16
CartCare Starting Up	20
No USB Connection	21
Unable to Start Web Interrogator	22
Recharge Ended	50

6. The About Box



The **About Box** contains useful information about the JACO CartCare Client application such as:

- Software Version
- Adapter Firmware Version
- Battery info
- Company telephone number

The About Box is accessed via a right-click on the JACO icon in the taskbar and then clicking on the About item on the menu.

To dismiss the About Box dialog box, press the **OK** button.

7. *Default E-Locking Drawer Support*

The CartCare Client and USB Adapter have been enhanced to provide electronic drawer locking/unlocking support for the JACO carts and locking drawer options.

A user may select a two character/digit PIN number from any of the 10 digits and 26 alpha characters on the computer's keyboard.

In addition, the user may select a time that the drawers remain unlocked ranging from 5 seconds to 5 minutes.

A manual key override is also provided.

The unlocking PIN is entered via the computer keyboard and all drawer activity is recorded in the system's EventLog with timestamps and User Name to help comply with regulatory guidelines and Joint Commission's best practices. This software version will also capture historical access data into its very own Sqlite database. Use the JACO Sqlite Database Management tool to view the history.

The eDrawer code is entered via the computer's keyboard by first typing the Left Control Key (LCtrl) and then typing the two PIN numbers/characters as set up via the Setup Dialog box as show above.



Note: Digits 0 – 9 on the upper keyboard row of numbers is represented by “D0 – D9”. When selecting D0 to D9 do not enter the “D” to unlock the eDrawers. Just enter the numbers 0 to 9 by typing that number on the upper keyboard row of numbers.

When properly entered, a “**WARNING Meds Cover Unlocked**” notification will appear on the screen and the eDrawer(s) will unlock for the time specified in the Configuration dialog box. Times ranging from 5 seconds to 5 minutes may be selected and saved.



8. Multi-Pin E-Locking Drawer Support

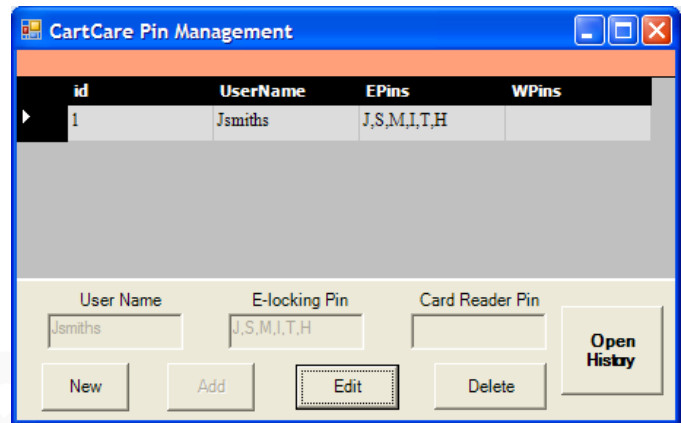
Multi-Pin E-Locking is a feature that can be selected in the configuration GUI that allows more than one pin access to the drawer. The focus of the multi-pin is drawer access security, only the person whom is logged in can access the drawer only if they are in the database pin list.

Step 1: Create the pin database.

1. Log in as Admin. Go to the JACOCartCareClient Folder and open SQLLite.exe.
2. The database(JPDB.db) is created automatically within your desired location.

Step 2: Adding a member

1. Click **New**
2. Enter a **user name** in the textbox, this is the login name. And it is **case sensitive**.
3. Next, enter the **E-locking Pin**. Each character is followed by a **comma** to separate its sequence.
4. Click **Add**, and it should be displayed onscreen.



Step 3: Running the Client

1. Run the JACOCartCareClient.exe.
2. Right-click the JACO icon in the system tray and select Configure.
3. On the bottom right is the multi-pin mode, Select the appropriate multi-pin you desire.
4. Click Save.
5. Right-click on the JACO icon and select exit.
6. Start the JACOCartCareClient, this will take in the new pins in the database.

Step 4: E-drawer Operation

1. To **OPEN** the drawer, **press and release** each button sequence as if you are typing with one finger.
2. To initiate the Pin sequence, press the left **Ctrl**(this is the Ctrl on the bottom left of the keyboard).
3. Then press the pin in sequential order. For this example if the pins were J,S,M. Press **Ctrl** then **J** then **S** then **M**.
4. If the pins were pressed in wrong, there is a ding noise indicating wrong pin sequence with volume enabled.
5. Upon success, an alert will slide up from the bottom-right of the screen as indicated below.

Step 5: E-drawer Access History

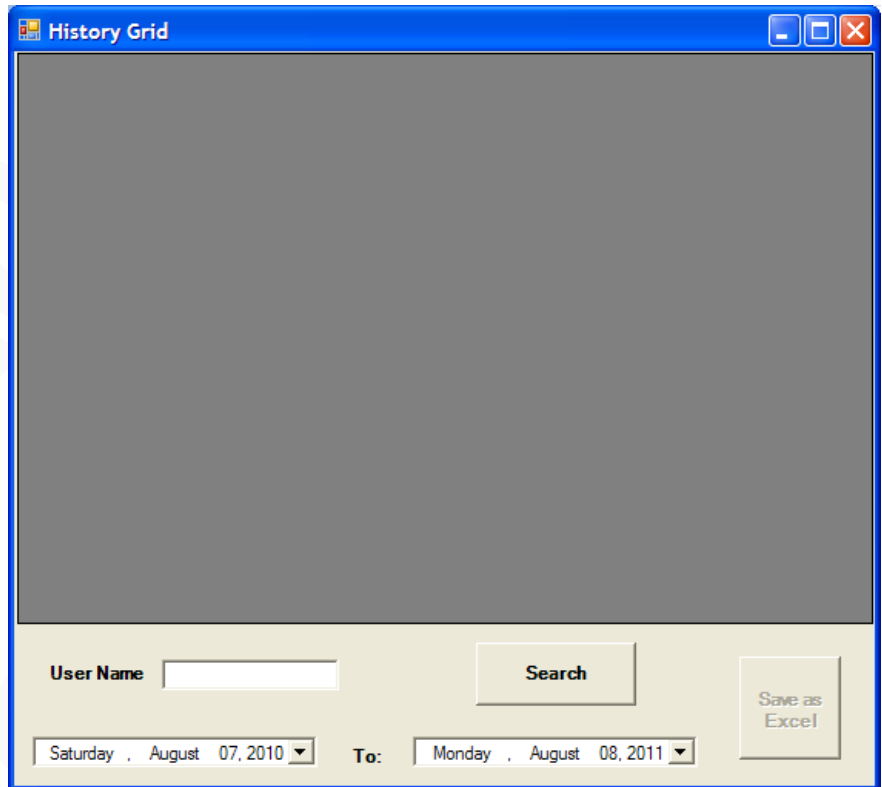
1. History database is created the instant the e-drawer was access the first time.
2. To view the History, Open the SQLLITE.exe and click History.
3. The History Grid displays the full history by selecting the beginning date to the ending date, and leave User Name blank. See below for Grid layout.

Note: Number 1 above the "Q" is entered as D1.



Step 6: Save as excel

1. The information on the History Grid can be saved as an excel file.
2. The Save as Excel button is enabled after a Search is complete.
3. To Search:
 - a. Enter the User Name(optional)
 - b. Set a Start Date
 - c. Set an End Date
 - d. Click Save as Excel
 - e. Navigate where you'd like to save.



The screenshot shows a window titled "History Grid" with a blue title bar and standard Windows window controls (minimize, maximize, close). The main area is a large, empty gray rectangle. Below this area is a control panel with a light beige background. It includes a "User Name" label followed by a text input field, a "Search" button, and a "Save as Excel" button. At the bottom, there are two date selection fields: "Saturday , August 07, 2010" and "Monday , August 08, 2011", separated by a "To:" label. A large, faint "JACO" watermark is visible across the background of the window.

9. *Trouble Shooting Guide*

Symptom	Solutions
How to disable the Status bar?	<ul style="list-style-type: none"> Right-click the client's icon in system tray and select Configure, select disable on the drop down menu for onscreen display.
Status bar always appear in front of the system clock, how do I save its position?	<ul style="list-style-type: none"> Position the status bar onscreen as desired, then right-click the JACO icon in the system tray and select Configure. Then press Save.
Why can't I access the configure menu?	<ul style="list-style-type: none"> Only administrator privilege account can access the configure menu.
Is there a pre-warning to inform users to recharge?	<ul style="list-style-type: none"> Yes, the CycleXtender level. This feature is located in the Configure settings. The dropdown menu provides a range of capacity at which the pre-warning will occur. Note: the warning remain display until it is clicked to go away.
What operating system is required?	<ul style="list-style-type: none"> Our current release is compatible with Windows XP, Vista, 7, 7e, xpe. Incompatible with Mac
What information does the software deal with?	<ul style="list-style-type: none"> The only information the software use is battery information, system clock, and http listener to communicate with the Fleet Manager.
Does the software do its own updates?	<ul style="list-style-type: none"> No, software does not communicate with outside source. The only software it communicate with is all internal two other software, which are CartCare Services and Fleet Manager to report battery status.
Where can I get the latest version?	<ul style="list-style-type: none"> Please visit our support site at www.jacoinc.com/support. Our support site is free and has information in regards to our product and support.